

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of)	
CONSUMERS ENERGY COMPANY)	
For the Reconciliation of Power Supply Cost)	Case No. U-14274-R
Recovery (PSCR) Costs and Revenues)	
<u>for the Calendar Year 2005</u>)	

DIRECT TESTIMONY OF

J. RICHARD HORNBY

ON BEHALF OF

ATTORNEY GENERAL MICHAEL A. COX

October 3, 2006

1 **Q. Please state your name, position and business address.**

2 A. My name is J. Richard Hornby. I am a Senior Consultant at Synapse Energy
3 Economics, Inc, 22 Pearl Street, Cambridge, MA 02139.

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

5 A. I am testifying on behalf of Attorney General Michael A. Cox (“Attorney
6 General”).

7 **Q. Please describe Synapse Energy Economics.**

8 A. Synapse Energy Economics ("Synapse") is a research and consulting firm
9 specializing in energy and environmental issues, including electric generation,
10 transmission and distribution system reliability, market power, electricity market
11 prices, stranded costs, efficiency, renewable energy, environmental quality, and
12 nuclear power.

13 **Q. Please summarize your work experience and educational background.**

14 A. I am a consultant specializing in planning, market structure, ratemaking and gas
15 supply/fuel procurement in the electric and gas industries. Over the past twenty
16 years I have presented expert testimony and provided litigation support on these
17 issues in approximately 100 proceedings in over thirty jurisdictions in the United
18 States and Canada. Over this period my clients have included staff of public
19 utility commissions, state energy offices, consumer advocate offices and
20 marketers.

21 Prior to joining Synapse in 2006, I was a Principal with CRA International,
22 formerly Tabors Caramanis & Associates. From 1986 to 1998 I worked with the
23 Tellus Institute (formerly Energy Systems Research Group); initially as Manager
24 of the Natural Gas Program and subsequently as Director of their Energy Group.
25 Prior to 1986 I was Assistant Deputy Minister of Energy for the Province of Nova
26 Scotia.

27 I have a Master of Science in Energy Technology and Policy from the
28 Massachusetts Institute of Technology and a Bachelor of Industrial Engineering

1 from the Technical University of Nova Scotia, now merged with Dalhousie
2 University.

3 I have attached my current resume to this testimony as Attachment A.

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

5 A. Synapse was retained to assist the Attorney General in the 2005 PSCR plan
6 reconciliation case of Consumer Energy Company (“Consumers Energy”),
7 Michigan Public Service Commission Case No. U-14474-R. In particular,
8 Synapse was asked to assist in reviewing the implementation of the Resource
9 Conservation Plan (“RCP”) for the Midland Cogeneration Venture Limited
10 Partnership (“MCV”) facility at Midland, Michigan.

11 **Q. What data sources did you rely upon to prepare your testimony?**

12 A. My primary sources of data were the Reports prepared by the independent
13 evaluator for the 1st Quarter of 2005 and the 2nd through 4th Quarters of 2005
14 respectively, the Direct Testimony filed by Consumer Energy witnesses in the
15 2005 PSCR reconciliation case, and responses to information requests.

16 **Q. Did you prepare a detailed accounting audit?**

17 A. No.

18 **Q. Please summarize your conclusions.**

19 A. My conclusions are that:

- 20 • Consumers Energy has not maintained a transparent and easily verifiable
21 “audit” trail of its 2005 RCP calculations;
- 22 • the Hold Harmless Payment (HHP) credit appears reasonable based upon a
23 top down review, and
- 24 • PSCR customers do not appear to receive a fair share of the Gas Dispatch Net
25 Benefits.

1 Q. **Please summarize your recommendations.**

2 A. I recommend that the Michigan Public Service Commission should:

- 3 • require Consumers Energy to maintain the inputs to the RCP calculations, as
4 well as the calculations themselves, in an electronic database that can be
5 easily reviewed and analyzed for audit purposes; and
- 6 • revise the allocation of Gas Dispatch Net Benefits between PSCR customers,
7 Consumers Energy and MCV.

8

9 **2005 RCP Calculations**

10 Q. **Please summarize the primary purpose of your review of the 2005 RCP**
11 **calculations, and your approach to that review.**

12 A. The primary purpose of our review of the 2005 RCP calculations was to analyze
13 the 2005 HHP credits under the RCP. We used two lines of review and analysis
14 to make this determination. First, we examined the calculation of the credit.
15 Second we analyzed the credit relative to the costs Consumers Energy was
16 seeking to recover through the PSCR. The independent evaluator examined the
17 calculation of the HHP credit but did not analyze the costs that Consumers Energy
18 was seeking to recover through the PSCR.

19 Q. **Please describe how you examined the Company's calculation of the 2005**
20 **HHP credit.**

21 A. The initial steps in my examination involved reviewing the two reports prepared
22 by the independent evaluator, La Capra Associates, and the Direct Testimony
23 filed by Consumer Energy witnesses in this proceeding. As part of those reviews
24 I submitted information requests to La Capra Associates as well as to Consumers
25 Energy.

26 La Capra did not provide complete responses to a number of my requests on the
27 grounds that the information I was seeking was confidential to Consumers
28 Energy. I am advised by counsel that an acceptable protective agreement or order

1 may be reached and allow La Capra to release this information. That effort is
2 ongoing. If an agreement is executed and, as a result La Capra provides further
3 information that is relevant to my review I will file supplemental direct testimony
4 if warranted by that information.

5 Consumers Energy also did not provide complete responses to all of my requests,
6 refusing some on the grounds of confidentiality, some on the grounds of
7 relevance, and some apparently on the grounds of the burden of assembling the
8 data. In particular, we submitted several requests asking Consumers Energy to
9 provide all the analyses of the RCP, including all analyses supporting its summary
10 results. Those requests and the Company's cover responses are presented in
11 Exhibit AG-1 (JRH-1).

12 **Q. Please explain the nature of the difficulty you encountered in obtaining the**
13 **hourly inputs that Consumers Energy used to calculate the HHP credit each**
14 **day.**

15 A. In his direct testimony, at page 32, Mr. Ronk notes that under the 2005 RCP
16 Consumers replaced approximately 5 million MWh that it would have otherwise
17 acquired from MCV with "...a combination of increased generation by the
18 Company's own generators, additional purchases and fewer sales." In its RCP
19 calculations Consumers determines the sources of that replacement power, as well
20 as their quantities and prices, in each hour and then uses that data to calculate the
21 HHP credit for each day. That is the detailed data needed to fully verify the
22 accuracy of the results Consumers Energy has presented in this case.

23 In Response to request 14274R-AG-CE-59, dated June 27, the Company provided
24 the aggregate MWh replaced or mitigated in each hour and the aggregate unit and
25 absolute displacement costs in each hour. Consumers Energy did not provide the
26 quantity and unit cost of each source of replacement power underlying its
27 calculation of the aggregate displacement cost in each hour. Moreover the data
28 that Consumers Energy did provide was not in summary form by month or in a
29 readily usable electronic format.

1 During informal discussions with Consumers Energy in July we were advised that
2 it would be difficult and time consuming for Consumers to provide this data by
3 hour for each individual source of replacement power. We were surprised to hear
4 this because, according to the HHP¹ calculation procedure, Consumers Energy
5 stated it would:

6 “...save, in electronic form or otherwise, all integrated hourly data in its
7 possession that is necessary to calculate and support the amount and cost
8 of owned, controlled and purchased Resources (defined below) used or
9 available to serve its load and to make sales to other parties (collectively
10 “Cost Data”) for each day that CECO believes a Hold Harmless Payment is
11 due hereunder.”

12

13 We also understood from those conversations that Consumers could provide
14 summary data by month on the quantity and cost of replacement power used to
15 calculate the HHP credits by major source, e.g., increased generation, additional
16 purchases and fewer sales relatively quickly and easily. However, we did not
17 receive summary data by month on the quantity and cost of replacement power by
18 major source until mid-September.

19 **Q. Did you prepare any other analyses to determine if the 2005 HHP credits**
20 **were reasonable?**

21 A. Yes. We prepared an independent analysis of the HHP credits using what
22 LaCapra Associates refers to as a “top down” analysis. Consumers Energy
23 calculates the HHP credits each day by multiplying the mitigated generation on
24 that day by the difference between the weighted average unit displacement cost
25 for the day and the PPA prices per MWh that day. The quantity of generation

¹ Attachment 1 to RCA, Exhibit ___(JJD-1), Direct Testimony of Mr. Dallas, U-14031.

1 mitigated above 1100 MW is calculated separately from the quantity mitigated
2 below 1100 MW since the PPA price is higher for generation above 1100 MW.

3 In our top down analysis we analyzed various inputs used in those calculations, as
4 well as their results. Those analyses included a review of the reported mitigated
5 generation by hour as well as a comparison of the weighted average unit
6 displacement cost for Quarters 2 through 4 to the corresponding weighted average
7 market price for electricity in that period. We also compared that the weighted
8 average unit HHP credit to the weighted average unit displacement cost minus the
9 weighted average price per MWh under the PPA. Finally we compared the
10 annual average unit costs of the resources that Consumers Energy used in its RCP
11 calculations to the average annual unit costs of those resources booked to the
12 PSCR

13 **Q. Please describe the approach you followed to review the Gas Dispatch Net**
14 **Benefits.**

15 A. We reviewed the two reports prepared by the independent evaluator, the Direct
16 Testimony filed by Consumer Energy witnesses, submitted information requests
17 and reviewed the responses.

18 **Q. What are your conclusions and recommendations based upon this review.**

19 A. Based on this review my conclusions are that Consumers Energy has not
20 maintained a transparent and easily verifiable “audit” trail of its 2005 RCP
21 calculations, contrary to the commitment specified in the Hold Harmless Payment
22 procedure in the RCP. Our top down review indicates that the HHP Credit
23 appears reasonable, but the exact amount should be subjected to a detailed
24 accounting review. I recommend that the Michigan Public Service Commission
25 require Consumers Energy to maintain the inputs to the RCP calculations, as well
26 as the calculations themselves, in an electronic database that can be easily
27 reviewed and analyzed for audit purposes.

1 **Allocation Of Gas Dispatch Net Benefits**

2 **Q. Please describe the 2005 Gas Dispatch Net Benefits and their allocation.**

3 A. The Gas Dispatch Net Benefits are the total benefits from dispatching MCV based
4 upon the market price of gas minus the HHP. Those total benefits are calculated
5 by comparing MCV's cost of production (COP) if Consumers Energy had
6 dispatched the facility under the Forced, Option 2 method, in effect prior to the
7 RCP minus its actual costs of production when dispatched using the market price
8 for natural gas. Consumers Energy has calculated the 2005 Gas Dispatch Net
9 Benefits to be \$ 146.86 million.²

10 The methodology for the allocation of the Gas Dispatch Net Benefits was
11 established in Case. No. U-14031. Under that method there are a series of
12 allocations. In general, the net benefits are divided into a “forced-to-coal” portion
13 and a “coal-to-gas” portion. In the initial round of allocations the “forced to coal”
14 portion is allocated 100% to MCV. In that round an amount, up to \$5 million, is
15 taken from the “coal to gas” portion and allocated to a renewable energy fund.
16 The residual from the coal to gas portion is allocated 50% to Consumers and 50%
17 to MCV. Finally, 50% of the amount initially allocated to Consumers Energy is
18 subsequently allocated to PSCR customers. The 50% allocation to PSCR
19 customers will increase to 70% in 2006 and subsequent years.

20 The resulting allocation of the \$146.86 million according to that methodology is
21 \$76.8 million to MCV, \$32.7 million to Consumers Energy, \$32.7 million to the
22 PSCR and \$ 4.6 million to renewable energy. Those amounts are reported in
23 Exhibit A-25 (DFR-11) of the direct testimony of Mr. Ronk.

24 **Q. Please comment on the allocation of the renewable energy fund.**

25 A. In U-14031, Staff witness Devon testified regarding the allocation of Gas Net
26 Benefits. She acknowledged that the allocation to renewable resources reduces
27 the amount that could otherwise be allocated to PSCR customers. Nevertheless

² Line 19 plus line 20, Exhibit A-25 (DFR-11) in direct testimony of David Ronk.

1 the Commission decided to approve allocation of the \$5 million to renewable
2 energy resources. This allocation is a subsidy for renewable energy resources.

3 Counsel for the Attorney General has advised me that the Michigan Court of
4 Appeals ruled in an appeal from U-13843 that an analogous subsidy for renewable
5 energy resources is unlawful. The Attorney General has appealed the \$5 million
6 subsidy created in Case U-14031.

7 **Q. Please comment on the aggregate results of the current allocation
8 methodology.**

9 A. MCV and Consumers Energy receive the majority of the Gas Dispatch Net
10 Benefits under both the 2005 and 2006 allocations according to the current
11 method. This distribution is illustrated in the table below, which shows the
12 allocation of the \$146.86 million in 2005 Gas Net Benefits under both the 2005
13 and 2006 onward allocations.

14

Allocation of 2005 Gas Net Benefits				
Recipient	2005 Methodology		2006 methodology	
	\$ million	%	\$ million	%
MCV and Consumers Energy	109.51	75	96.42	66
PSCR customers	32.71	22	45.79	31
Renewable energy	4.64	3	4.64	3
Total	146.86	100	146.86	100

15

16 **Q. What are your conclusions and recommendations based upon these results.**

17 A. The results I discuss above indicate that PSCR customers do not appear to receive
18 a fair share of the Gas Dispatch Net Benefits under the existing allocation

1 methodology. At a minimum, I recommend revising the Company's allocation to
2 renewable energy from these net benefits by allocating the \$4.6 million to the
3 PSCR as an offset to PSCR expenses reported by Consumers Energy in this case.
4 I also recommend that the Michigan Public Service Commission reconsider the
5 allocation of Gas Dispatch Net Benefits between PSCR customers, Consumers
6 Energy and MCV in the 2006 PSCR reconciliation and in the 2007 PSCR plan
7 proceedings.

8 **Q. Does this complete your testimony at this time?**

9 A. Yes.