

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the rates, terms, and)
conditions for retail customers of)
THE CONSUMERS ENERGY COMPANY) Case No. U-12488
to choose an alternative electric supplier.)
_____)

**QUALIFICATIONS AND DIRECT TESTIMONY OF TIMOTHY VAIL ON BEHALF
OF ENERGY MICHIGAN, INC.**

1 Q. Please state your name and business address.

2 A. My name is Timothy E. Vail. My business address is One Manhattanville Road,
3 Purchase, New York.

4 Q. By whom are you employed and what is your present position?

5 A. I am employed by The New Power Company as Vice President in charge of Energy
6 Technology Solutions.

7 Q. Please state your educational background.

8 A. I obtained my Doctor of Jurisprudence Degree in May 1990 from the University Of
9 Houston Law Center in Houston, Texas and a Bachelor of Arts from the University of
10 Texas in 1985.

11 Q. Please describe your work experience.

12 A. I joined The New Power Co. in May 2000. I am responsible for the development,
13 advancement, and implementation of leading energy technologies targeting the residential
14 and small commercial market. Such technologies include advanced metering devices,
15 automatic load management, energy storage and distributed generation solutions.

1 From October 1995 to July 2000 I was employed by Enron Corporation. From
2 November 1999 to July 2000 I served as Vice President, Product and Service
3 Development, ResCo. I was responsible for the development and implementation of
4 non-commodity based residential products. I established the product development
5 strategy for the company that was to become The New Power Company.

6 From May 1999 to November 1999 I served as Vice President of Risk
7 Management where I developed the world's first completely integrated Internet based
8 remote building monitoring and control system. The Facilities Management and Control
9 System provides EES risk management with real time data on customer facilities
10 worldwide.

11 From June 1997 to May 1999 I served as Vice President of Energy Information
12 Services. While in that position I created EES' energy information services business. I
13 developed and created the entire information chain from meter device to Internet
14 information delivery. I invented world's first completely self contained public network
15 wireless electricity meter. The system allowed the wireless collection of energy usage
16 data from almost any continental location. I developed an automated metering system
17 that can read any meter any place, error check the information and securely deliver the
18 data to utilities and billing systems. I guided development team to become the first
19 licensed non-utility meter data provider in the State of California. The developments and
20 results were published in numerous nationwide consumer and technical journals.

21 From, October 1995 – November 1999 I served as Vice President/Director of
22 Technology Development.

23 Q. Have you previously testified?

1 A. I have filed testimony with the Ohio Public Utility Commission in Case 96-406-EL-COI
2 regarding Conjunctive Electric Service Guidelines.

3 Q. Please describe The New Power Co.

4 A. The New Power Co. (New Power) was formed by Enron Corporation to engage in the
5 sale of electricity, natural gas and other innovative services to residential and small
6 commercial customers throughout the United States. New Power offers consumers in
7 restructured markets competitive prices, flexible payment plans and billing services.
8 New Power is headquartered in Purchase, New York. As of February, New Power will
9 be providing gas service to Gas RAS customers on the Michigan Consolidated system.

10 Q. What is the purpose of your testimony?

11 A. To comment on the Consumers Energy proposed Retail Open Access Service Tariff
12 (ROA tariff) regarding the barriers in that tariff to the economical provision of Retail
13 Access Service (RAS) to residential and small commercial customers. My testimony will
14 also propose revisions to the ROA tariff which will facilitate the provision of economical
15 and innovative RAS to residential and small commercial customers.

16 **Metering Issues**

17 Q. What are your concerns regarding metering issues in the ROA tariff?

18 A. There are problems inherent in the load profiling methodology proposed by Consumers to
19 serve loads of customers without demand and energy hourly recording meters.

20 I believe that use of class average load profiles could discourage innovative
21 services. The lack of a demand metering option for small customers and required use of
22 average load profiles would tend to discourage innovative billing and energy services
23 including time-of-use pricing, load management, etc. This difficulty occurs because the

1 data necessary to track actual reductions in on-peak usage or alteration of energy use is
2 not available on a timely basis or at all which would allow energy supply to match energy
3 demand. The load profiling methodology proposed by Consumers may not produce data
4 showing that a specific group of customers, for example load served by New Power, had
5 achieved reduced energy usage which differed from other customers in that class.

6 Energy Michigan Richard Polich will discuss the problems presented by the
7 Consumers profile management charge of \$.0046 / kWh for all kWh consumed.

8 Q. What innovative services does New Power wish to offer which would require a revised
9 billing and metering system?

10 A. While plans have not been finalized, New Power believes that residential and small
11 commercial customers could be served in the future with energy which was managed at
12 the point of use through electronic devices which alter customer usage by shutting off or
13 cycling appliances within a home or small business. Use of this technology would
14 produce reduced on peak usage which in turn should lead to reduced costs for energy,
15 transmission and perhaps distribution. Additionally, New Power intends to offer certain
16 customers commodity pricing plans that reflect the daily price volatility of electricity
17 pricing. These plans demonstrate to consumers the need to conserve energy during peak
18 times. Customers who choose to reduce consumption will be rewarded with lower
19 energy bills. This price transparency will help reduce overall system demand during peak
20 periods. This reduced demand will benefit not only the consumer, but Consumers and the
21 environment as well.

22 Q. Is technology available which could economically meter time of use data and achieve
23 energy management for small customers?

1 A. Yes. I believe metering and load management equipment is available which could
2 economically monitor time of use data and accomplish load management for small
3 customers.

4 Q. Will time of use and load management options negatively impact utility revenues?

5 A. I believe the options I have discussed could enable utilities to more efficiently use their
6 existing resources. I do not believe that small customer load management or time of use
7 pricing technology would have a negative impact on utility economics. Time of use
8 pricing and load management techniques offer customers the option to reduce their use of
9 expensive on peak power delivered by a third party supplier. To the extent the third party
10 supplier's customers reduce their use of on peak power, the third party supplier can
11 correspondingly reduce its on peak power purchases necessary to serve those customers.
12 Reduced on peak use can free up scarce utility transmission or generation resources
13 during times of potential power shortages. This also may benefit the utility as a
14 purchaser of power to supply its native load. In summary, time of use and load
15 management options alter the timing and amount of power supplied by a third party
16 supplier to its RAS customers but should not have a significant impact on the revenues of
17 the Local Distribution Company.

18 Q. What are the conceptual barriers in the ROA tariff to implementing your proposal?

19 A. It is not clear that the ROA tariff load profile service offering for energy metered
20 customers contains a mechanism which allows an Alternate Electric Supplier (AES) to
21 gain credit when its customers are using energy in a more efficient way (less energy
22 consumed on peak) than other customers in the same class. As proposed, the Consumers
23 load profile program may assume all residential customers, for example, use power in the

1 same way during on peak periods. If New Power installed equipment which allowed its
2 residential customers to cut their on peak use in half and New Power reduced on peak
3 energy deliveries accordingly, the Consumers load profiling system would assess New
4 Power significant imbalance penalties for inadequate on peak energy deliveries based on
5 the assumption that the average residential customer did not reduce on peak use.
6 Basically, the Consumers load profile system may not use technology which allows AES
7 entities to show that their customers use energy more efficiently than the average of their
8 class.

9 Q. What changes in the ROA tariff are necessary to accommodate or facilitate these
10 innovative services?

11 A. One approach would be the provision of economical demand meters for residential and
12 small commercial customers which could produce time-of-use/demand data which tracks
13 reductions or alterations in customer energy use on a time-of-use basis. An alternative
14 approach, however, would be to clarify Rule 5.4 A and B to ensure that the load profiling
15 system used requires Consumers to provide a load profile specific to each (AES) which
16 specifies the hourly power deliveries to be scheduled for the next day. This load profile
17 would be developed as under the current Consumers ROA tariff Sec. 5.4 using sample
18 metering installed, monitored and maintained by the Company similar to that which the
19 utility uses for performing cost of service studies. Under the Energy Michigan proposal,
20 the AES and its associated power supplier would be in balance between supply and
21 consumption if their power deliveries match the AES specific load profile provided by
22 Consumers prior to the time of use. If New Power installed time-of-use/demand
23 management devices on its customers, the ROA tariff would be revised to ensure that

1 Consumers would be required to install sampling meters which would detect the impact
2 of load management activities for New Power customers and develop load profiles based
3 upon these assumptions. At the end of each month, as under Sec. 5.4, Consumers would
4 develop an actual load profile for each AES and differences between the scheduled power
5 deliveries pursuant to profiles provided by Consumers before use and actual load profile
6 consumption would be determined and billed as recommended by Mr. Polich.

7 Q. What is your recommendation?

8 A. If Consumers cannot provide economical time-of-use/demand meters for residential and
9 small commercial customers which would track load management activities on a time-
10 of-use basis, a second best alternative is a load profile system which would provide
11 profiles before the time of use which match the AES's specific profile of use as
12 determined by Consumers sampling meters. This profile would take into account
13 alterations in customer use achieved by the AES and end user which in turn would enable
14 the AES to reduce costs of energy, transmission capacity and ultimately system use
15 charges for long term reductions of customer demand.

16 Q. What are your recommendations regarding billing issues?

17 A. The goal of New Power is to market economical and innovative energy options to
18 residential and small commercial customers. In order to achieve favorable economics,
19 New Power will depend heavily on electronic and voice methods to interact with the
20 customer and the utility company. The economics of service to such small customers can
21 be greatly enhanced if it is clear that all business transactions with these customers may
22 be accomplished through electronic or voice means.

23 Q. Are there revisions to the ROA tariff which could facilitate this goal?

1 A. Yes. I believe a new ROA tariff section is needed which would provide for electronic
2 interaction between the AES and the Company to assure that the AES may conduct all
3 business with Consumers and the AES customers, if approved by the customer, on an
4 electronic basis including notices, contracts, credit checks and enrollment. The electronic
5 basis would include voice confirmation of contract with the AES. Also, the ROA tariff
6 should be revised to provide that valid contracts need not be written but may be verified
7 by the customer electronically with an appropriate methodology much as is provided in
8 the Consumers Gas Choice Program Rule H3A which allows AES-customer contracts to
9 be confirmed by signature, third party verification, voice recording or other form
10 approved by the Commission.

11 Q. Are there other changes to the ROA tariff which would be helpful?

12 A. Yes. We have found that customers prefer to receive one bill for energy service as
13 opposed to bills from the AES for energy and from the Company for distribution service.
14 We believe the complete billing option offered by Consumers in F7 is one option but it
15 may not be economical. An economical alternative would be for the customer to request
16 that Consumers billings for distribution service be sent to the AES for payment. The
17 AES then would pay Consumers for the customer distribution charge and bill the
18 customer directly for both energy and distribution, thus providing a single billing within
19 the current legal framework. This option seems to be contemplated by language in Rule
20 F7C which references payments made to Consumers on behalf of a customer. However, I
21 believe F7 should be revised to include a new subsection which clearly specifies this
22 option.

23 Q. Can you summarize your conclusions regarding billing issues?

1 A. Yes. In summary, I believe that the prospects for economical RAS service to residential
2 and small commercial customers can be greatly enhanced by allowing the AES to
3 interface with such customers on an electronic or voice basis accompanied by appropriate
4 consumer protections. Costs of billing can be reduced and customer confusion reduced
5 as well by ensuring that customers may designate their AES as an agent to pay RAS
6 distribution charges, thus facilitating provision of a single bill to the customer for all RAS
7 services.

8 Q. Does this conclude your testimony?

9 A. Yes.