BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Madison Gas and Electric	)	
Company for Authority to Change	)	Docket No. 3270-UR-117
Electric and Natural Gas Rates	)	

DIRECT TESTIMONY OF JONATHAN WALLACH ON BEHALF OF THE CITIZENS UTILITY BOARD OF WISCONSIN

September 8, 2010

I. Introduction and Summary

Q: Please state your name, occupation, and business address.

A: My name is Jonathan F. Wallach. I am Vice President of Resource Insight, Inc., 5 Water Street, Arlington, Massachusetts.

Q: Please summarize your professional experience.

A: I have worked as a consultant to the electric-power industry since 1981. From 1981 to 1986, I was a research associate at Energy Systems Research Group. In 1987 and 1988, I was an independent consultant. From 1989 to 1990, I was a senior analyst at Komanoff Energy Associates. I have been in my current position at Resource Insight since September of 1990.

Over the last twenty-nine years, I have advised clients on a wide range of economic, planning, and policy issues including: electric-utility restructuring; wholesale-power market design and operations; transmission pricing and policy; market valuation of generating assets and purchase contracts; power-procurement strategies; integrated resource planning; cost allocation and rate design; and energy-efficiency program design and planning.

My resume is attached as Exhibit 4.1 (JFW-1).

Q: On whose behalf are you testifying?

A: I am testifying on behalf of the Citizens Utility Board (CUB).

Q: What is the purpose of your testimony?

A: On July 26, 2010, Madison Gas and Electric Company (MGE or "the Company") filed direct testimony by Paul A. Vanderbloemen regarding the Company's proposals for incorporating market pricing in the energy rates for Rate Schedule Sp-3 and for an increase in monitored fuel costs for the 2011 test year due to uneconomic dispatch of the West Campus Cogeneration Facility (WCCF) located at the University of Wisconsin (UW or "the University"). This testimony addresses both of these proposals.

Q: Please summarize your findings and conclusions.

A: Consistent with the Commission's directives in its Final Decision in Docket No. 3270-UR-116, the Company has proposed a redesign of the Sp-3 rate structure that appropriately incorporates locational market pricing (LMP) in a revenue-neutral fashion. I therefore recommend approval of the Company's proposal.

The Company first proposed, and the Commission first approved, in Docket No. 3270-UR-116 setting Sp-3 energy rates based on LMP prices so that ratepayers would not have to compensate MGE for the revenue reduction resulting from the planned expansion of generating capacity at the University's Charter Street Heating Plant ("Charter Street"). In this proceeding, MGE has raised a new concern regarding adverse ratepayer impacts from the Charter Street overhaul, specifically that ratepayers will have to bear additional uneconomic dispatch costs at WCCF as a result of decreased steam production at Charter Street.

Ratepayers should not have to bear the cost consequences from the University's rebuild of Charter Street, whether they be due to an increase in electric generation or a decrease in steam production from the facility. I therefore recommend that the Commission adopt interim measures to ensure that ratepayers are held harmless from additional uneconomic dispatch costs during the renovation of Charter Street. I further recommend that the Company be directed to negotiate with the University a permanent solution to the long-term problem of increased uneconomic dispatch costs due to operation of the renovated facility.

II. Sp-3 Rate Design

Q: Why is the Company proposing to incorporate market-based pricing in the Sp-3 rate design?

A: The Company's proposal represents the final step in a transition to market pricing that was initiated in Docket No. 3270-UR-116. In that earlier rate proceeding, MGE first proposed incorporating LMP-based energy charges in the Sp-3 rate design, because of a concern that, under the then-current design, ratepayers would bear increased costs as a result of a planned expansion of electric generating capacity at the University's Charter Street facility. Specifically, MGE argued that the planned overhaul of Charter Street would lead to reduced sales to the University, and thus reduced revenues from the UW, under the Sp-3 tariff. The Company further argued that the reduction in revenues from the UW – priced at the cost-based Sp-3 energy rates – would exceed the savings to MGE from not having to serve those foregone sales with purchases at LMP prices. The Company therefore concluded that the planned overhaul of Charter Street would lead to an unreasonable shift of costs from the University to other ratepayers:

> … because the originally proposed energy charge exceeds the LMP cost, reduced sales to the University would cause a loss in MGE's margin revenues, which would have to be made up by other customer classes. This would cause the University to receive a subsidy from other customers for generating more electricity from its facility than is needed in the market.[1]

In order to mitigate the harm to other ratepayers, MGE proposed in Docket No. 3270-UR-116 to replace the cost-based Sp-3 energy charges with rates based on average historical LMP prices. The Company also indicated that it would be proposing a rate design based on actual market pricing in a future rate proceeding. In its Final Decision in that proceeding, the Commission approved the Company's proposal to set Sp-3 energy charges based on historical LMP prices as a "first step" in a transition to an Sp-3 rate design based on actual market prices.[2]

Q: Please describe the Company's proposal in this proceeding for exposing the University to market pricing under Rate Schedule Sp-3.

A: According to Mr. Vanderbloemen, the Company's proposal would allow the University to serve its energy requirements at market prices set by the Midwest Independent Transmission System Operator (MISO) wholesale energy market. Under the Company's proposal, the UW would have the opportunity (but not the obligation) each day to bid its expected hourly net load (i.e., total load less generation) for the following day into the day-ahead

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[1] *Direct Testimony of Paul A. Vanderbloemen on Behalf of the Applicant*, PSCW Docket No. 3270-UR-116, July 8, 2009, p. 102.

[2] *Final Decision*, PSCW Docket No. 3270-UR-116, December 22, 2009, p. 44.

energy market.[3] The University would then pay for the hourly bid load at the day-ahead market price. In addition, the UW would either pay or receive a credit at the next day's real-time market price for the positive or negative difference between the next day's actual hourly load and the previous day's day-ahead bid load. Finally, the UW would be charged for losses on the Company's system (again at energy market prices) and for other MISO administrative costs assessed on energy sales.

Q: How does MGE propose to reflect this market-pricing mechanism in the rate design for Sp-3 service?

A: The Company proposes to eliminate the currently approved fixed energy charges based on average historical LMP prices and instead flow through the actual market costs to serve the University's bid net load. Under the current rate structure for Rate Schedule Sp-3, MGE estimates energy-related revenue requirements of $19,513,447 for the 2011 test year. Under the proposed redesign for Sp-3, the Company forecasts energy revenue under market-rate pricing of $14,245,642 for the 2011 test year.[4] The Company further proposes to increase the Sp-3 on-peak demand charge to recover the $5,267,805 difference between estimated energy revenue requirements and energy market revenues.

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[3] More precisely, MGE would bid net load into the day-ahead market on the University's behalf.

[4] According to the Company's response to 2-CUB/Inter-1(c), MGE inadvertently excluded the cost of losses from its estimate of market revenues for the 2011 test year. According to the Company's response to 2-CUB/Inter-1(d), MGE will increase its estimate of market revenues by $170,948 to correct for this error when it files an update.

Q: Is the Company's proposed modification of the Sp-3 rate structure revenue-neutral?

A: Yes. The Company's proposed rate design for Rate Schedule Sp-3 and the current rate structure generate the same amount of revenues for the 2011 test year.

Q: Should the Company's proposed rate design for Rate Schedule Sp-3 be approved?

A: Yes. The proposed rate design appropriately incorporates market pricing in a revenue-neutral fashion.

III. Uneconomic Dispatch Costs

Q: Has MGE raised a new concern in this proceeding regarding the impact of the Charter Street overhaul on ratepayer costs?

A: Yes. According to Mr. Vanderbloemen, MGE anticipates that as a result of the Charter Street overhaul:

> … the UW will call for increased steam production at WCCF during the coming year, MGE will sustain increased uneconomic dispatch costs, and as a consequence MGE's fuel costs for 2011, which will be recovered from all customers, will be higher than had been projected by approximately $1,583,700.[5]

Q: How does steam production at WCCF give rise to uneconomic dispatch costs?

A: Uneconomic dispatch costs arise whenever the costs to produce steam and electricity at WCCF exceed the revenues derived from steam sales to the

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[5] *Direct Testimony of Paul A. Vanderbloemen on Behalf of Applicant*, PSCW Docket No. 3270-UR-117, July 26, 2010, p. D1.87.

University and electricity sales into the MISO energy market.[6] Thus, uneconomic dispatch costs arise at those times when the Company would not have dispatched WCCF based on economics, but does so anyway because the University has called for steam production.[7]

Q: How does the Company recover these uneconomic dispatch costs?

A: Uneconomic dispatch costs are included as part of fuel costs recovered from all ratepayers.

Q: Why does MGE anticipate that the Charter Street overhaul will increase uneconomic dispatch costs at WCCF?

A: According to Mr. Vanderbloemen, the University will require additional steam production from WCCF to compensate for lost production at Charter Street during its renovation. Increased steam nominations at WCCF will, in turn, increase the frequency and cost of uneconomic dispatch.

The Company also anticipates that the overhaul will increase steam nominations, and thus uneconomic dispatch costs, at WCCF over the long term, because steam production costs at the renovated Charter Street will exceed those at WCCF.

Q: How does MGE propose to reflect in rates the impact of the Charter Street overhaul on uneconomic dispatch costs at WCCF?

A: The Company proposes to increase its originally filed estimate of fuel costs for the 2011 test year by $1,583,700. The Company's original estimate of

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[6] Since steam sales are effectively at cost, uneconomic dispatch costs arise whenever electric production costs exceed revenues from electricity sales at the MISO market price.

[7] At those times, MGE has the option to offer a buy-out to the University in lieu of dispatching the facility. The Company includes these buy-out costs in its accounting of uneconomic dispatch costs.

fuel costs included an amount for uneconomic dispatch costs of $679,708. Consequently, MGE is proposing recovery through fuel costs of $2,263,408 for uneconomic dispatch costs for the 2011 test year.

Q: Why didn't the Company include the full amount for uneconomic dispatch costs in its original estimate of fuel costs for the 2011 test year?

A: According to Mr. Vanderbloemen, the Company and the University had been in discussions regarding the impact of the Charter Street overhaul on uneconomic dispatch costs, and had entered into an interim steam agreement which prescribed limits on the University's steam nominations. The Company's original estimate of fuel costs reflected the Company's estimate of uneconomic dispatch costs under the interim agreement.

Mr. Vanderbloemen also states that discussions between the Company and the UW have ended, because they were unable to agree on a permanent solution to the problem of the impact of the Charter Street renovation on uneconomic dispatch costs. The Company and the University therefore agreed to terminate the interim steam agreement. The Company's proposal to increase fuel costs reflects its estimate of the increase in uneconomic dispatch costs due to termination of the interim agreement.

Q: Is it reasonable for ratepayers to bear the uneconomic dispatch costs associated with the Charter Street overhaul?

A: No. It is no more reasonable for ratepayers to subsidize the University for the increase in uneconomic dispatch costs due to the Charter Street renovation than it is for ratepayers to subsidize the UW for the loss in margin revenues resulting from that renovation. As with margin revenues, the University should be responsible for the uneconomic dispatch costs arising from its overhaul of the Charter Street facility.

Q: What do you recommend with regard to the treatment of uneconomic dispatch costs associated with the Charter Street overhaul?

A: To address the near-term problem of increased uneconomic dispatch costs during the overhaul, the Commission should re-impose the nomination limits prescribed in the interim steam agreement. At the same time, the Company's request for a $1,583,700 increase to 2011 test year fuel costs should be denied.

In addition, the Commission should direct MGE to resume negotiations with the University over a permanent solution to the long-term problem of increased uneconomic dispatch costs resulting from operation of the renovated facility. In the event that such negotiations are ultimately unsuccessful, the Commission should consider permanent measures for protecting ratepayers, such as modifications to the cost allocations in the Operating and Maintenance Agreement for WCCF, imposition of steam-nomination limits, or exclusion from monitored fuel costs of uneconomic dispatch costs associated with operation of the Charter Street facility.

Q: Does this complete your direct testimony?

A: Yes.