## DSM COMPETITION: A NEW REGULATORY STRATEGY

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Competition is a major factor affecting many non-regulated businesses. In Wisconsin, competition may become a major factor in utility conservation programs, even though utilities are regulated monopolies. Wisconsin implemented a pilot energy conservation competition wherein a utility, Madison Gas and Electric Company, competed against selected competitors in the provision of conservation services. This paper will first discuss the situation that led to the competition pilot. Next, it addresses the logic of how the competition. Fourth, the lessons learned from the competition are reported including their implications for future competitions. Finally, the paper will discuss how the competition has led to an improved regulatory strategy for pursuing conservation.

#### **INTRODUCTION**

In 1988, the Public Service Commission of Wisconsin (PSCW) directed Madison Gas and Electric Company (MGE) to undertake an innovative pilot program to deliver conservation services to customers in three sectors. An energy conservation competition was held between the utility and three competitors in the rental, the small commercial and industrial, and the large commercial and industrial sectors. In each sector, both the utility and the selected competitor were given equal funding to pursue the installation of cost-effective conservation measures. Total funding for the pilot, which terminated in 1990, was approximately \$2.0 million. A formula was developed and used to convert the savings of kW, kWh, and therms of gas into a measure of performance.

## BACKGROUND

Regulatory commissions which endorse the principals of least-cost utility planning could sooner or later find themselves in a situation similar to the one in which Wisconsin implemented an energy conservation competition pilot. The PSCW staff believed that MGE was not making acceptable progress in the development and implementation of conservation programs. The symptoms which formed the basis for staff's conclusion were:

- 1. slow development and implementation of programs;
- 2. conservation staff vacancies not filled promptly;
- 3. lengthy rebate application forms for customers;
- 4. test year conservation goals not met; and
- 5. underspent budgets for conservation programs.

The PSCW staff also believed that MGE could achieve acceptable conservation program results if there was a method to motivate the utility to change from its "business as usual" approach.

Some potential solutions for motivating a utility in the conservation arena have already been tried in Wisconsin and found to be insufficient by themselves. The PSCW adopted escrow accounting to assure that the utility recovered no more and no less than its cost of providing conservation services. Escrow accounting removed a disincentive to provide conservation but was not meant as an incentive for utilities to develop and implement conservation programs. One of the earlier approaches by PSCW staff was an attempt to require the utility to hire enough personnel to provide adequate conservation services to customers. This resulted in utility rebellion and arguments over management prerogative. The next approach was to combine sufficient funding and flexibility to utility management to implement conservation programs. If program results were deemed inadequate by PSCW staff, a regulatory strategy of intense monitoring and enforcement would be initiated.

The PSCW has also tried financial incentives to motivate utilities to provide better conservation programs. The incentive approach had two major problems. First, utilities perceived that some of the incentives offered were too small to change their attitude about designing and delivering conservation services. Second, once the incentive became large enough for a utility to notice the incentive, lack of adequate measurement tools became a more predominant issue. That is, how do you measure whether the utility's performance warranted receiving the amount of money the performance incentive would provide?

Being a relatively small utility, 500 MW, with a service territory that includes the city of Madison, Wisconsin and the surrounding area, MGE was a reasonable choice to pilot the conservation competition. The utility is investor-owned and derives approximately 60% of its \$210 million annual revenues from its electric operation and 40% from natural gas distribution. Presently, MGE has an annual conservation program budget of \$5.7 million.

# COMPETITION: A POTENTIAL SOLUTION

PSCW staff developed the energy conservation competition based on its experience in regulating utility conservation programs and the following assumptions:

- 1. the utility should provide its customers least-cost services, including conservation, without unduly large financial incentives to the utility;
- 2. the utility would not make needed changes without significant additional motivation;

- 3. the utility had the potential to make significant changes if adequately motivated;
- 4. there was some truth to the utility's repeated arguments that its actions were motivated by competition;
- 5. any solution required measurement of the utility's performance; and
- 6. entities other than the franchised utility could potentially deliver conservation services to utility customers.

Based on the first assumption, it was quickly concluded that it was not in the ratepayers' best interest to provide an incentive large enough to motivate the utility. Our view was that motivating utilities through money alone was tantamount to opening up bank vaults to solve the problem of bank robbery. A search was begun for a solution that had the main components of motivation and a means for performance measurement. The PSCW could have used its legal powers to motivate the utility. However, this did not meet the need for a measurement mechanism. PSCW staff believed there was a very large conservation potential, but did not know what minimum level of achievement was acceptable.

The solution to motivation came from listening to utilities. Utilities have on numerous occasions, especially in the last several years, told the PSCW that they are motivated to keep rates low because of competition. Given the facts that MGE is a combined gas and electric utility with a limited franchised service territory and that it operates as a regulated monopoly, it was concluded that the danger from competition was not as serious as the utility claimed. If the utility was really motivated by the small amount of competition PSCW staff perceived, perhaps an artificially designed conservation competition could motivate a monopolistic utility in the same manner that competition motivates other businesses. Furthermore, the competition concept seemed to be an excellent way to measure utility performance in delivering conservation programs.

A scoring mechanism was developed to measure performance in the competition similar to the score that measures performance in an athletic contest. The score was designed to both motivate desirable performance and discourage undesirable behavior. The goal was to save utility ratepayer dollars in the long-term by implementing cost-effective conservation. The need for cost-effectiveness in the score was readily apparent to PSCW staff. There was also a need to increase the amount of conservation achieved. As a result, it was concluded that the competition score should include both the quantity of benefits achieved and a benefit/cost ratio as a measure of cost-effectiveness.

The problem of reducing the long-term costeffectiveness of conservation by pursuing only the most cost-effective conservation, sometimes referred to as "cream skimming", also needed to be addressed in the competition score. Pursuing only the most cost-effective conservation can have two impacts. First, it is costly to return at a later date to implement the remaining conservation. Second, implementing only the most cost-effective conservation may reduce the total cost-effective conservation achievable. For example, a program could offer a rebate that does not cause the customer to install measures to a maximum costeffective level. This program could cause "lost opportunities" by making the remaining efficiency gains uneconomic to achieve.

A portion of the original proposed scoring methodology was thought to at least partially address "cream skimming". Originally, the benefits portion of the score was to be measured as actual bill reductions. The logic was that actual bill reductions would not measure as much of the "cream skimming" conservation compared to conservation that included greater depth and breadth of installed measures. The difference in measurement would also be magnified because benefits appeared twice in the score, once in the quantity of benefits and once in the benefit/cost ratio, while costs appear only once. The proposed scoring methodology was bill savings times bill savings divided by costs.

MGE objected to the scoring methodology on the grounds that bill savings would not reflect the same benefits as those estimated from its least-cost planning process. In order to get the competition concept accepted as a viable approach by MGE, PSCW staff acquiesced to having benefits calculated based on engineering equations. The competition also used least-cost planning methods to estimate benefits from avoided costs.

It was necessary to develop a strategy to ensure that vendors would be willing to participate in the competition. Competitors would be assured of recovering their costs of providing conservation services up to the maximum budget allotted. This cost recovery included whatever level of profits the entity had included in its proposed charges. As a further inducement, a bonus was provided to the winner of each sector in the competition. By providing a bonus only to winners, the PSCW hoped a relatively small monetary bonus could result in more conservation being achieved as cost-effectively as possible.

The final major element needed for the energy conservation competition pilot was a practical way to implement the competition. It was impractical for the Commissioners themselves to be intimately involved in the details of the implementation. Rules needed to be more completely developed, competitors needed to be solicited and selected, rule interpretations would need to be made, and someone would be needed to enforce the rules (referee the competition). A panel was convened to administer the energy conservation competition. The panel was composed of one MGE representative, one representative from the PSCW staff and a third party selected and agreed to by both the utility and the PSCW staff representative.

## **COMPONENTS OF THE COMPETITION**

The PSCW in its findings of fact and order in Docket No. 3270-UR-102, Application of Madison Gas and Electric Company for Authority to Increase Electric and Natural Gas Rates, required that the competition for providing conservation services to customers in the large rental sector (five or more dwelling units), the small commercial and industrial sector, and the large commercial and industrial sector commence in the Fall of 1988. Budgets and other major components of the competition were specified in the order. The competition had five major objectives. First, the PSCW wanted to motivate MGE to improve its gas and electric demand-side services in terms of both the quantity and cost-effectiveness of conservation achieved. Second, there was a desire to provide an opportunity for conservation providers, other than the franchised utility, to design and implement innovative demand-side services. Third, it was important to test how cost-effectively conservation services could be delivered through various marketing strategies and providers. Fourth, it was necessary to test the usefulness of the performance score as a measure of cost-effective conservation achieved and its usefulness as a tool for pursuing a least-cost resource strategy. Fifth, the PSCW wanted to test whether the competition format was a regulatory strategy worthy of future pursuit.

An administrative panel was formed to provide oversight of the competition. It was comprised of a representative of MGE, the PSCW and an independent third party, the Tellus Institute from Boston, Massachusetts. The panel's function was to draft a Request For Proposal, select competitors and a monitor, make "day to day" administrative decisions, settle disputes among competitors and oversee the work of the monitor. All decisions of the panel were appealable directly to the Commissioners at the PSCW.

The monitor's task was to determine the appropriate energy savings calculations for conservation measures, create a data base for tracking and compiling the measures installed, perform site visits to verify and assure quality in installations, be the scorekeeper for the competition and determine the winner in each sector. Monthly reports were prepared to track the progress of each competitor and to catalogue any problems that were occurring in the installation of measures. The monitor reported directly to the administrative panel.

A Request For Proposals (RFP) was drafted and sent nationwide soliciting innovative program proposals from qualified vendors who could design and implement cost-effective conservation programs. Vendors could bid on one or more sectors. Customer information was provided with the RFP and a bidder's conference was held to answer questions from interested parties. Integrated into the solicitation for vendors was a Request For Qualifications for the purpose of identifying a pool of engineering companies interested in serving as the monitor.

There were six proposals received in the rental sector, four received in the small commercial and industrial sector and six received in the large commercial and industrial sector. The panel also received qualifications from five engineering firms that were interested in serving as the monitor. After reviewing proposals, the field of bidders was narrowed and interviews were conducted of the best proposals in each sector.

Building Resources Management Corporation (BRMC) of Oakland, California, a subsidiary of Puget Energy Services, Inc. of Bellevue, Washington, was selected in the rental sector. A&C Enercom, Inc. of Atlanta, Georgia was chosen to provide conservation services to the small commercial and industrial sector. In the large commercial and industrial sector, Honeywell, Inc. was selected to be the competitor. Morgan Systems Corporation of Brookfield, Wisconsin was awarded the position of monitor for the competition.

All of the competitors were chosen due to the uniqueness of their proposals, the potential for quality of services to customers and the likelihood of success of their marketing approach. BRMC offered a guaranteed positive cash flow to property owners for very cost-effective conservation improvements. A&C Enercom defined a strategy that included "cold calling" a large number of customers in the field and pursuing conservation measures with rebates after identifying opportunities on a customer's premises. Honeywell, Inc. merged its existing marketing strategy (guaranteed savings) with rebates provided by the funds available through the competition. In contrast, MGE offered their customers a variety of services that included a menu of rebates for a large number of technologies, "turnkey" services through trade allies and custom services through individual customer contacts. Marketing was predominantly through the mail and via trade allies.

The large rental sector was defined as buildings with five or more dwelling units. The small commercial

and industrial sector included customers who consume less than 100,000 kWh of electricity, 25,000 therms of natural gas, or 2,500 million Btus of any other fuel per year based on energy use from the last twelve months. The large commercial and industrial sector included customers who consume more than 100,000 kWh of electricity, 25,000 therms of natural gas, or 2,500 million Btus of any other fuel per year based on energy use from the last twelve months. Only the fuel types purchased from MGE were targeted for conservation in the competition.

Customers were not divided among the competitors in each sector. Competitors were free to provide conservation services to all customers within a sector. There are 2,000 customers in the rental sector, 12,000 customers in the small commercial and industrial sector and 2,000 customers in the large commercial and industrial sector.

Budgets and the duration of competition were defined for the sectors. The competitors were allocated \$280,000 each in the rental sector, \$392,500 each in the small commercial and industrial sector and \$348,500 each in the large commercial and industrial sector. Of the rental budget, 65% was to be spent on gas technologies and 35% on electric technologies. In the other two sectors, 65% of the budget was to be spent on electric technologies and 35% on gas technologies. Budgets could be reallocated by fuels after a "good faith" effort was made to expend the funds within the specified fuel. The rental competition began on February 1, 1989 and lasted for a period of one year. The competition in the other two sectors lasted nine months and began on November 1, 1988.

During the competition, competitors were required to collect information for use in engineering equations which were used in estimating energy and demand savings. Random review of projects and verification that the same engineering calculation methodologies were consistently applied by each competitor were the responsibility of the monitor. The monitor also calculated a conservation value (quantity of benefits) using an equation which converted the engineering estimates of energy and demand savings into the dollars that the utility saved over the life of each conservation measure. The total performance score was then calculated by multiplying the total conservation value times the total conservation value divided by dollars spent by each competitor. The dollars spent reflect both general administrative costs and dollars directly related to specific projects, such as labor or conservation rebates.

The conservation performance score was reported monthly to all participants of the competition pilot. At the conclusion of the conservation competition, the winner of each sector received a bonus based on the final conservation performance score, after it was adjusted to reflect the conservation measures actually installed by the customers. An adjustment was necessary because some measures (exit lights, water heater wraps, programmable thermostats, etc.), that were given to customers for free, were not installed within 90 days of the termination of the competition. The winner in each sector received as a bonus 10% of its dollars spent times the performance score of the winner divided by the performance score of the loser. The bonus was limited to a maximum of 30% of the winner's expenditure.

The final performance score resulted in a total of \$248,000 being earned as bonuses by the winning competitors. The bonuses amounted to 1.9% of the conservation value achieved during the competition. Also, winning competitors had an average benefit/ cost ratio of nine to one compared to an overall average of competitors' benefit/cost ratios of six and one-half to one. Table 1 contains more detailed results for all competitors in the energy conservation competition.

## **EVALUATION OF THE COMPETITION**

A process evaluation of the competition is presently being conducted by the Lawrence Berkeley Laboratory of Berkeley, California. There are four primary objectives of the evaluation. First, it is important to determine if the competition format is a regulatory strategy worthy of future pursuit. Second, it is critical to determine how conservation services and/or future competition pilots can be improved. The third objective is to determine the usefulness of the methodology developed for measuring the

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Competitor	Conservation Value	B/C	Performance Score	Bonus
<u>Rental</u> Madison Gas & Electric BRMC	\$2,286,299 \$ 760,035	8.2 2.7	18,668,455 2,063,046	\$ 84,000 
<u>Small Commercial/Industrial</u> Madison Gas & Electric A & C Enercom	\$3,314,450 \$1,043,944	8.4 2.7	27,988,238 2,794,167	\$117,750 
Large Commercial/Industrial Madison Gas & Electric Honeywell, Inc.	\$2,857,554 \$3,304,160	8.3 9.5	23,550,301 31,327,040	\$ 46,251
Total	\$13,566,442	6.5		\$248,001

performance of each competitor. The last objective is to compare the effectiveness of the competition to other DSM programs in both capturing and fostering conservation.

The data collection methods used in the process evaluation will include interviews, a telephone survey and a literature search. Extensive interviews will be conducted of all the competition participants and informed staff of other Wisconsin utilities. A telephone survey will be conducted to assess customer satisfaction, free riders and the perception of the competition. Finally, a literature search will be performed of non-Wisconsin programs with a focus on competitive bidding programs. Interviews of non-Wisconsin program managers will be conducted to document important DSM programs in other states. The process evaluation began in January 1990 and will conclude by July 1990.

Wisconsin Energy Conservation Corporation of Madison, Wisconsin has been selected to perform the impact evaluation for the competition. There are two specific objectives for the evaluation. The first is to determine the level of conservation achieved and its cost-effectiveness during the competition. The second objective is to compare the impact accounting methodology, engineering calculations, to actual customer bill savings, as approximated by billing analysis. The impact evaluation commenced on June 1, 1990. All analyses except those related to billing analysis will be completed by December 1990. The billing analysis portion will be completed by July 1991.

# LESSONS LEARNED

The lessons learned are the opinions of the authors. These opinions may or may not be substantiated by the evaluation of the energy conservation competition pilot. There is no doubt that the utility was motivated to win the competition. The utility aggressively changed from "business as usual" to analyzing many conservation technologies and implementing new market strategies. MGE slashed the length of its rebate application forms to a mere fraction of the pre-competition forms. The utility also aggressively courted vendors to aid its cause during the competition.

Some structural problems of the competition that emerged included the duration of the competition, the identification and selection of vendors and the contesting of some of the assumptions in the engineering calculations. It became obvious that the nine months allowed for both commercial and industrial competitions were too short. The combination of conservation program development and the necessary lead time required for many businesses to make efficiency improvements, resulted in the conclusion that a sufficient horizon for program development plus a twelve to eighteen month competition would have been more appropriate.

Vendor solicitation and selection also posed a problem. The vendor proposals were strongest in the large commercial and industrial sector. The vendor chosen for the small commercial and industrial sector adapted a proposal that was submitted in the large commercial and industrial category. Response to the RFP in the rental sector was minimal and the one proposal received was rejected. The sector was rebid after vendors who specialize in delivering conservation services to this sector were identified. It was learned that vendors responding to multiple service requests in one RFP will typically only respond in depth to their first choice, even though they are qualified to respond to more than one sector. It is also necessary to screen the potential vendor list to ensure that qualified vendors are included in all sectors.

Some assumptions used in the engineering calculations were vehemently contested by the competitors. The two most controversial technologies were lowflow showerheads and setback thermostats. Verification of low-flow showerhead installation, initial flow rates of existing showerheads, and the pre and post length of showers were the main contentious issues in the rental sector. A reasonable savings percentage for setback thermostats in commercial establishments was discussed at length. These issues lead to the conclusion that the monitor and panel need significant technical expertise in order to establish firm savings parameters early in the formulation of the competition. The parameters should be based on a conservative estimate of the potential savings for each technology and include the results of field testing, if available. This process reaffirmed that there is still much to learn about the savings potential of many technologies.

PSCW staff believes that the level of the financial bonus for winning was not the most important motivational factor in the competition. While the bonus may have affected the participants' original decisions of whether to participate and their initial game plan for pursuing conservation, the level of the bonus appeared to have little impact during the competition. The managers of the competing entities and their staff were not sure how their business would use the bonus or who would receive any benefit from the bonus if their business won the competition.

The competition showed that, if utilities are either unable or unwilling to provide conservation services to customers, there are other competent companies which can provide these services to utility customers. One vendor, who was not familiar with least-cost planning tools, was able to "gear up" in a relatively short time frame and win one sector of the competition. Furthermore, the vendor seemed appropriately interested in assuring that the needs of utility customers were met with quality service. Vendors with integrated services (products, implementation and maintenance) may be especially promising for involvement in utility conservation programs. One vendor in the competition could not make a profit from its services without attaining substantial savings for its customers. This result runs parallel to the goal of utility conservation programs.

When selecting participants, you must be aware that "what you see is not always what you get." That is, some businesses with good credentials might need to expand their staffs to participate in the competition. As a result, the people actually performing the work may be inexperienced compared to the people submitting the proposal. Adequate monitoring and direction are important to make sure activities being undertaken by competitors are reasonable and in the public interest.

The competition has served as a good quantitative "yard stick" for both measuring performance and motivating utilities not involved in the competition. PSCW staff is in the process of establishing quantitative goals for all Wisconsin utilities. It has been determined that each utility should deliver to its customers at least the same net benefits as the competition pilot achieved. The goals have been adjusted for utility size. By judging utility performance by net benefit goals, utilities now have the responsibility to set budgets that can achieve the goals. The onus of providing cost-effective conservation services in combination with mitigating the rate impacts of the programs has been shifted to the utilities. However, the excuse of a lack of resources for not meeting agreed to goals is not acceptable.

The behavior of other utilities in the state was affected by the competition. PSCW staff viewed two other utilities in the state as prime candidates for an energy conservation competition. These utilities were so adverse to the concept of conservation competition that they asked staff what they would have to do in order to avoid a competition. One utility agreed that in exchange for a chance to show improvement in its conservation services, PSCW staff would have the authority to implement a competition program at anytime it perceived acceptable progress was not being made by the utility conservation programs. This utility has reported a great increase in its delivery of conservation services and results attained from the programs. It is expected that the utility will exceed the net benefit goals established as a benchmark for performance.

The competition should be used as a tool for specific problems instead of a generic solution for all problems. A large amount of staff time would be needed to implement competition for all utilities. It would be beneficial to use the concept of competition as a positive complement to the utility's existing conservation programs, without having the utility as a major competitor. For example, a utility may have difficulty achieving conservation in a particular sector or subsector. Also, the utility may have limited expertise in a particular area. In these instances, the utility could structure a competition of non-utility conservation businesses to accomplish more than the utility could achieve on its own. Presently, Wisconsin Gas Company, the largest gas utility in the state, which serves the Milwaukee metropolitan area, is designing and implementing a modified competition for customers in its large commercial sector. The company has not provided adequate conservation services to this sector and does not have adequate internal resources to provide the necessary level of services. As a result, it recently hired a firm to structure and administer a program similar to the MGE competition.

Finally, competition could also be used to solve a problem identified in bidding schemes for demand-

side services. It is not always possible to determine if conservation resources are being obtained as cheaply as possible. Demand-side bids that are lower in cost than the alternative of providing supply by generation may not be capturing conservation at the lowest possible cost. The cost of implementing a conservation program varies with the quantity of conservation achieved by the program. There is not enough known about the relationship between program costs and the quantity of conservation achieved to determine whether more than necessary is being paid.

Competition, as a solution to the demand-side bidding problem, goes beyond having businesses compete for the right to provide services based on a fixed quantity and price. After the solicitation and selection of qualified businesses, the selected businesses should also compete during the provision of the conservation services. The concept is to have participants motivated to accomplish as much conservation as possible, without paying more than necessary. Of course, rules and guidelines will be needed to assure that only cost-effective conservation approaches are pursued.

## A NEW REGULATORY STRATEGY

In the area of demand-side management, the PSCW's main regulatory strategy continues to be the use of traditional regulation that is both fair and reasonable, in combination with new tools that are a result of the MGE competition pilot. The PSCW still believes that in exchange for providing a monopoly franchise with an opportunity to make a reasonable profit, a utility has the responsibility of providing least-cost services to meet customers' needs. It is also the responsibility of the regulatory commission to ensure an acceptable level of leastcost service is provided at a reasonable cost. In performing this regulatory responsibility, it is recognized that special tools are needed and that motivation for a utility to achieve excellence in delivering conservation services cannot come from threats alone. Two necessary regulatory tools are a method to measure acceptable performance and a practical solution if performance is found to be unacceptable.

The strategy to measure acceptable performance is to establish both quantitative and qualitative criteria which the utility is expected to meet in delivering conservation services. The quantitative criterion is currently the amount of net benefits customers receive as a result of conservation programs. This value is expressed as the net reduction in the utility revenue requirement. The level of the goal is based on the results of any recent competition and/or the results of other utilities that are achieving acceptable levels of conservation.

The results of the recent competition are important because they show what can be accomplished by a motivated business. If utility conservation achievement without competition is used as a baseline for performance, there is a potential to establish performance goals based on a group of companies that may not have been adequately motivated to pursue conservation. After a year of implementation, the results of the utility will be reviewed. PSCW staff will judge utility performance according to what level of conservation was achieved. It is also important to understand how and why the conservation was captured. This approach specifically recognizes that quantitative goals may be set too high or too low for the circumstances actually encountered by the utility in the field. It also recognizes that a utility may try to reach quantitative goals using an unacceptable method. This is the primary reason that preapproval of programs by PSCW staff is desirable. Qualitative criteria are presently being established to communicate to utilities which approaches to attaining conservation are acceptable and which are not.

Qualitative criteria can include the breadth and depth of demand-side services offered, customers and end-uses targeted by programs, marketing approaches, program design, data collection and reporting, program evaluation and changes that may result in a more effective delivery of demand-side services. The qualitative review also encompasses an investigation of how the utility attained its quantitative performance score and the reasonableness of the approach chosen. If a utility's performance is either questionable or inadequate, the PSCW staff will decide whether to recommend to the Commission that the utility be placed on probation or whether to immediately proceed to a competition. The utility may be willing to make appropriate improvements and may appear to have some capability to make improvements. In this case, probation would be recommended provided the authority was retained to implement competition anytime progress was found unacceptable.

Implementing competition for a given utility does not necessarily mean that the utility is not or can not provide acceptable conservation services. It is more of an opportunity for the utility to prove it can deliver these services. If it is believed that the utility is absolutely not capable of providing acceptable service, the utility may be unqualified to be one of the competitors.

Finally, for utilities with either acceptable or excellent performance, a small incentive defined by the utility or the PSCW may be required in order to motivate continued excellent performance. The incentives most seriously considered are financial incentives to the utility based on net benefits to its customers and/or more flexibility for carrying out programs. Oddly enough, utilities who are considered the closest to being excellent in costeffective conservation achievement do not want a financial incentive because of their concern over the rate impacts. Flexibility via less PSCW oversight of conservation programs is preferred over financial incentives.

## CONCLUSION

The PSCW staff believe that the competition was an unqualified success. MGE was motivated to provide conservation services at an unprecedented level during the competition. Other utilities in Wisconsin were motivated to increase the quantity and quality of their conservation programs because they did not want to be subjected to a competition. A method of measuring performance of conservation services was developed and implemented. Since the competition, the method has been refined to be more consistent with the methodology used in least-cost planning and has been applied to all Class A utilities in the state. Beyond being a regulatory strategy that can be applied to utilities with less than satisfactory performance, the competition adds a new component to the delivery of conservation services. It is a program design that can be implemented by a utility that desires certain expertise within a sector or lacks the resources to provide complete conservation services to some of its customers.

The energy conservation competition concept is analogous to a new regulatory medicine. It is by no means perfect and may have undesirable side-effects. However, competition is definitely better than the "lack of motivation" disease. The competition and its potential side-effects will hopefully prevent utilities from getting sick enough to need a competition. Presently, competition is being used as a regulatory tool to assure that utilities provide acceptable conservation services. PSCW staff is not convinced that competition is a long-lasting cure and recognizes that it may need to be readministered. Healthy utilities, those that achieve good conservation results, should be encouraged to maintain their efforts and to pursue excellence. This new regulatory strategy should motivate utilities beyond their current performance and add a powerful new dimension to a utility's demand-side portfolio.