



# MidAmerican Energy Company Energy Efficiency Plan

Docket Nos. 08-0107/08-0108 (Consol.)

2008 Annual Report to the Illinois Commerce Commission

May 18, 2009



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# MidAmerican Energy Company 2008 Annual Energy Efficiency Report

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STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

**MIDAMERICAN ENERGY  
COMPANY**

Petition for Waiver of 83 Ill. Admin.  
Code Sections 410.210(a)(3)(E) and  
500.330(a)(1)(B)(v)

**Docket No. 08-0107**

**Docket No. 08-0108**

Approval of the Energy Efficiency Plan

**(Consolidated)**

**MidAmerican Energy Company's 2008 Annual Energy Efficiency Report**

**May 18, 2009**



## **Executive Summary**

MidAmerican Energy Company's ("MidAmerican" or "Company") Annual Energy Efficiency Report (Report) summarizes the 2008 Energy Efficiency (EE) program results. The 2008 results are for a partial-year (June through December) and are the first results offered under the Illinois plan, which extends through 2012. The following information summarizes the participation levels and savings achieved through the various new programs offered to MidAmerican's Illinois customers as well as recaps the successes and challenges of implementing the EE programs in Illinois. The results, on their face, do not signify the success or failure of the programs. Since this report is the first year of a multi-year plan, the results reflect some of the challenges of starting new programs, especially in mid-year. Even with this caveat, MidAmerican believes setting goals and measuring results is important as it forces analysis of program offerings as well as information on where additional effort or possible course correction is needed.

### **Background**

On June 1, 2008, MidAmerican began offering EE programs to its customers in the Company's Illinois service territory pursuant to the Illinois Commerce Commission's (Commission) Order approving the EE Plan on May 21, 2008. The initial program year for this Report is June 1, 2008 through December 31, 2008. The EE programs covered for this program year were approved by the Commission and are intended to be in effect through 2012.

## Summary of Final Year-end 2008 Plan Results

**Table 1**

### Total 2008 Illinois Energy Savings

2008 Energy Savings (All Programs)	Preliminary Analysis			Variance
	2008 Goals	3/20/2009 <sup>1</sup>	Actual Data	Actual/Filed Goals
Therms <sup>2</sup>	126,642	143,493	152,484	20 %
Peak-day therms <sup>3</sup>	1,824	1,712	1,837	1 %
Kilowatthours (kWh) <sup>4</sup>	6,021,280	1,722,440	1,747,895	-71 %
Kilowatts (kW) <sup>5</sup>	14,628	7,726	7,087	-52 %
<b>Footnotes:</b>				
1 - Preliminary results filed March 20, 2009 in the Annual Energy Efficiency Reconciliation Report for 2008.				
2 - The difference in therms reported in the March 20, 2009 reconciliation report and actual results included in the 2008 annual EE report (i.e., this report) is due primarily to inadvertently not reporting the therm savings associated with the Energy Wise education kits distributed through the Low Income program.				
3 - The difference in peak-day therms reported in the March 20, 2009 reconciliation report and actual results included in the 2008 annual EE report (i.e., this report) is due primarily to inadvertently not reporting the peak-day therm savings associated with the Energy Wise education kits distributed through the Low Income program.				
4 - After the March 20 reconciliation report was filed, MidAmerican discovered an invoice for a lighting project for a nonresidential customer was paid in 2008 but the impacts (energy savings) inadvertently were not entered into MidAmerican's energy efficiency tracking system.				
5 - The preliminary analysis double-counted system losses for the nonresidential curtailment program and thus over-estimated capacity savings for the curtailment program.				

As shown above, the total 2008 savings exceeded the goal set on the natural gas side but did not meet the goals on the electric side. When individual program results are analyzed, the reasons behind the success or failure become clear. And, as stated earlier, the results are not indicative of future program success given the purpose of the different programs, ease of roll-out and preparation and education required for program participation. For example, MidAmerican was able to offer energy audits beginning on June 1 and completed 1,435 on-site home energy audits by the end of the year, exceeding the program participation goal by 292 percent. The HomeCheck audit is an introductory program and is often a customer's first experience with MidAmerican's EE programs. It represents an entry point to broader participation. The

overwhelming response to this program offering is a positive sign of program acceptance. Participation and spending were higher than expected. In addition, customer participation in small commercial energy audits also exceeded plan goals. On the other hand, while participation in the Nonresidential Equipment Program surpassed goals for participation; it fell short on electric energy and demand impacts. There were no industrial projects in the program, only commercial. While the participant count was strong, the savings per participant was small. As with the residential audit program, the higher-than-projected participation shows a pent up demand and customer acceptance of these programs.

Other programs require foundational work and longer lead times to achieve consistent results. For example, MidAmerican did not achieve projected participation levels or savings goals in its Commercial New Construction Program, Nonresidential Custom Program or the Residential New Construction Program. Relationships need to be built with trade allies and the building trades. Lower than expected participation may be attributable to the timing of the new programs, June 1, well into construction season. The program descriptions include information on MidAmerican's efforts and progress in building these relationships and educating this population. We anticipate ever-increasing participation levels as customers begin to understand the value and opportunities presented with these programs.

A good example of the need to 'look behind the numbers' is illustrated by the short-fall in projected savings in the nonresidential customer sector. Nonresidential Kilowatt hours (kWh) savings fell short of the projected goal by 91 percent in 2008. MidAmerican is currently working with a very large nonresidential customer regarding a major energy efficiency upgrade to its heating, cooling and ventilation equipment. The potential project is so large it may meet or exceed MidAmerican's nonresidential kWh, and possibly Kilowatt (kW), goals for 2009 by

itself. Review of the project is ongoing to confirm if this project, in fact, will have such a significant impact in 2009. Part of the project is expected to be completed in 2009 while the remainder of the project is expected to be completed in 2010. However, none of this work preparing for program participation was captured in the results data for 2008.

The economic downturn may have been a factor in program results. The economy weakened significantly in the second half of 2008, coincident with the roll-out of MidAmerican's programs. The economy presents a special challenge in implementing programs because of the uncertainty it engenders. Many of the programs and the expected savings were designed and projected premised on a healthy economy. However, if people are not replacing equipment or building new homes because they are uncertain of their job or business future, programs developed to encourage more efficient purchases will be challenging. Businesses and industry may be hesitant to upgrade equipment and structures if they do not know if they will be there in the future or are struggling with day-to-day expenses. In addition, natural gas prices are at new lows from the highs experienced over the past five years. Many decisions to seek an audit, install insulation or buy a new furnace were driven by increasing natural gas prices. On the other hand, the success of the audit program may demonstrate that people are eager to find out what needs to be done to capture energy savings in this challenging economy. MidAmerican will be monitoring participation and savings, as it has done in this report, to determine if the programs and the approach continue to be effective. An unknown is the impact of the stimulus dollars for energy efficiency and weatherization. Another unknown is whether Americans will take advantage of large tax credits for energy efficiency investments. These federal stimulus efforts, when coupled with MidAmerican's programs, could prove to be very attractive.

Kilowatt or capacity savings also fell short of the filed goals by a substantial margin, about 52 percent. The primary factor contributing to the kW goal shortfall was the lack of time to implement, promote and recruit additional program participants in the nonresidential load management (curtailment) program. The new Illinois programs were implemented starting June 1, 2008, which coincided with the start date for the 2008 summer peak season of June through September. There is a significant lead-time required for nonresidential customers to plan and prepare to participate in the load management program. With the June 1, 2008 start date for the new programs, MidAmerican's nonresidential customers did not have sufficient lead-time to consider participation in the 2008 curtailment program. However, even with this limitation, one new Illinois participant with a curtailable load of 250 kW was added to the program in 2008. In addition, one existing program participant increased its curtailable load by about 1,500 kW. The 2009 customer recruitment effort for the nonresidential load management program is underway. Key account managers are contacting prospective program participants in Illinois and two customers already have requested preliminary information about participation.

### **Conclusion**

MidAmerican is pleased with the progress made in energy efficiency for its Illinois customers in 2008 and looks forward to continued progress in 2009. The balance of this report includes informative narratives for each 2008 EE program.

MidAmerican's focus is to provide useful, substantive and insightful information about program successes and the challenges and barriers faced while implementing them. Our goal is to provide a better understanding of our processes and to communicate MidAmerican's serious commitment to providing excellent EE programs for customers in Illinois.

## **Residential Equipment Program**

### **Program Description**

The Residential Equipment program encourages residential customers to purchase high-efficiency space conditioning and water heating equipment in existing or new housing. The program offers incentives for the following qualifying equipment: central air conditioners, window air conditioners, air-source heat pumps, add-on heat pumps, ground-source heat pumps, desuperheater water heaters, natural gas water heaters, natural gas boilers and natural gas furnaces.

MidAmerican must deliver the end-use fuel for eligible equipment to qualify for rebates or financing. MidAmerican markets the program through a trade ally network of heating, ventilation and air conditioning vendors. All vendors selling and installing high-efficiency equipment are eligible to participate. Customers must provide proof of purchase and other relevant information.

### **2008 Activity**

#### Activity by Measure:

Central air conditioners	372
Window air conditioners	4
Desuperheaters	12
Ground-source heat pumps	12
Air-source heat pumps	19
Air-source heat pumps, cooling only	8
Add-on heat pumps	4
Natural gas furnaces	529
Natural gas water heaters	11
Natural gas boilers	3

### **Key Program Successes in 2008**

- MidAmerican was able to launch the Residential Equipment Program on June 1, 2008.
- Participation was 51 percent higher for central air conditioners compared to plan.
- Participation was 29 percent higher for natural gas furnaces compared to plan.
- The average SEER for air conditioning equipment in 2008 was 14.4.
- The average AFUE for natural gas furnaces in 2008 was 93.5.

### **Key Program Challenges in 2008**

- Due to the general slowdown in construction and the economy in the Quad Cities and around the region, there were fewer opportunities to participate in the Residential Equipment program in 2008. The participation numbers, however, hit most targets in spite of the economic slow-down.

### **Promotion**

- MidAmerican aggressively promoted natural gas energy efficiency programs to residential customers in the fall of 2008. See promotional brochure in Exhibit B.
- The Save some green<sup>®</sup>. advertising campaign targeted residential customers in newspaper, radio and television spots.
- MidAmerican promoted energy efficiency programs at the Rock Island County Fair and Bald Eagle Days and other energy efficiency promotional events.
- MidAmerican promoted the program in *At Your Service* bill inserts.
- MidAmerican updated its Web site with program information throughout the year.

### **Key Activities Planned for 2009**

- MidAmerican will continue to work closely with heating, ventilating and air conditioning dealers to promote sales of high-efficiency equipment.
- MidAmerican will continue to sponsor training and education programs for trade allies.

MidAmerican will continue to monitor trends and changes in the industry, especially equipment prices and cost-effectiveness of high-efficiency central air conditioning equipment.

### **Conclusion**

Overall, it was a good year for the Residential Equipment program. Participation for the two key measures, air conditioners and natural gas furnaces, exceeded goals. MidAmerican will try to build on this success in 2009.

## Residential Audit Program

### Program Description

This program encourages comprehensive energy efficiency improvements in existing homes built before December 31, 1997, by providing free on-site energy audits, installation of free water heating and lighting measures and incentives for insulation. The on-site audit offers unbiased information about energy efficiency improvements to the customer. During the audit, the auditor installs low-cost measures, including compact fluorescent lamps, faucet aerators, low-flow showerheads, a water heater blanket, hot water pipe insulation and a waterbed mattress pad, if applicable.

The auditor recommends insulation if needed, provides a referral for an insulation contractor if desired by the customer, provides weatherization advice and informs customers of other MidAmerican programs that may help them save energy. MidAmerican offers rebates to customers that install the recommended insulation. In addition, customers can have a programmable thermostat installed for a reasonable and partially subsidized price. HomeCheck<sup>®</sup> is the marketing name for this program.

### 2008 Activity

#### Activity by Measure:

On-site audits completed	1,435	Water heater blankets	36
Insulation projects	393	Pipe wrap	1,071
CFL lamps installed	8,273	Aerators	1,218
Multifamily CFL's installed	1,599	Programmable thermostats	63
Retail CFL lamps purchased	5,007	Waterbed mattress pads	1
Low-flow showerheads	896		

*Note:* The Annual Energy Efficiency Reconciliation Report filed on March 20, 2009, included preliminary data for key measures. MidAmerican has completed its key measure verification study and adjusted the results for insulation projects and Compact Florescent Lights (CFL's) installed. The preliminary numbers in the March 20<sup>th</sup> Report included double counting of some customers who installed insulation and the preliminary numbers did not include the CFL's installed in tenant occupied multi-family residences under residential tariffs.

### **Key Program Successes in 2008**

- MidAmerican completed 1,435 on-site home energy audits, exceeding the program participation goal (492) by 192 percent.
- MidAmerican completed 28 multifamily building audits.
- MidAmerican provided insulation rebates to 393 customers or about 30 percent of the number of on-site audits.
- Natural gas impacts, driven by strong participation and demand for insulation, exceeded plan goals by more than 80 percent.
- Almost 300 residential customers used our HomeCheck<sup>®</sup> Online energy audit.
- MidAmerican sent reminder postcards to HomeCheck<sup>®</sup> participants who were eligible for insulation and the related insulation incentives but had not yet installed insulation and/or applied for the rebate.
- In October and November 2008, MidAmerican offered a promotion of compact fluorescent light bulbs leveraging the ENERGY STAR<sup>®</sup> *Change A Light, Change The World Promotion*. MidAmerican collaborated with Illinois retailers to provide in-store instant rebates to motivate customers to purchase compact fluorescent bulbs. MidAmerican, through the program contractor, Wisconsin Energy Conservation Corporation, worked with retailers in the Illinois Quad Cities to provide an in-store instant rebate to utility customers. Eight hundred and seventy MidAmerican customers purchased an average of nearly six bulbs per customer transaction. MidAmerican customers purchased over 5,000 compact fluorescent light bulbs during the campaign.

### **Key Program Challenges in 2008**

- In 2008, customer interest was higher than anticipated due to the economic conditions, concerns about natural gas prices, and the pent up HomeCheck<sup>®</sup> demand from Illinois customers. Working closely with the program contractor, MidAmerican was able to meet its audit fulfillment target of less than four weeks throughout the year.

### **Promotion**

- MidAmerican aggressively promoted natural gas energy efficiency programs to residential customers in the fall of 2008. See promotional brochure in Exhibit B.
- The Save some green.<sup>®</sup> advertising campaign targeted residential customers in newspaper, radio and television spots.
- MidAmerican promoted energy efficiency programs at the Rock Island County Fair and Bald Eagle Days and other energy efficiency promotional events.
- MidAmerican promoted the program in At Your Service bill inserts.
- MidAmerican updated its Web site with program information throughout the year.

### **Key Activities Planned for 2009**

- MidAmerican produced a new brochure for 2009 using the Save some green.<sup>®</sup> theme.
- MidAmerican will repeat the retail sales promotion of compact fluorescent light bulbs in October and November 2009.
- MidAmerican will continue to raise customer awareness about the program through the Save some green.<sup>®</sup> advertising campaign.
- MidAmerican will continue to promote the program through *At Your Service* and the MidAmerican Web site.

### **Conclusion**

Last year was a very successful introductory year for MidAmerican's Residential Audit program. MidAmerican promoted the program effectively and managed the request volume to the satisfaction of our customers. Moreover, we conducted a retail sales promotion of compact fluorescent light bulbs in October and November 2008. These activities contributed to high customer satisfaction. HomeCheck<sup>®</sup> is one of the most successful residential energy efficiency programs offered by MidAmerican.

Demand for home audits beyond the stated goals is a positive sign of program acceptance and once begun, continuity of programs is important to success. Participation and spending were higher than expected due to a pent-up demand for audits. In 2009 and beyond, MidAmerican will build upon HomeCheck's<sup>®</sup> initial successes achieved in 2008.

## **Residential Low-Income Program**

### **Program Description**

This program primarily encourages comprehensive energy efficiency improvements in existing low-income housing by providing free energy audits and free on-site installation of heating, water heating, lighting, refrigeration and insulation measures. Project Now, Inc. (Project NOW), a community action agency serving Rock Island, Henry and Mercer counties, delivers the program by identifying qualifying households and delivering auditing and weatherization services. The Low-Income program supplements funding provided by the Department of Energy's Weatherization Assistance Program through a long-term contract with Project NOW.

The program also includes an education component for Low-Income Home Energy Assistance (LIHEAP)-eligible customers. The Cadmus Group, Inc. (Cadmus) provides support to MidAmerican for the delivery of the Energy Wise Program, the low-income education component of the program. The Energy Wise Program and workshops provides a delivery channel for energy efficiency information and products to low-income customers that are not eligible for traditional weatherization services. Project NOW recruits Energy Wise Program workshop participants through day-to-day interactions with its LIHEAP clients. Each household attending the training receives a take-home Energy Wise home savings kit with two compact fluorescent light bulbs (one 14-watt and one 18-watt), a high-efficiency showerhead, energy-efficient faucet aerators for the kitchen and bathroom, a furnace filter alarm, rope caulk, temperature cards that can be used to test the temperature in a room, refrigerator, freezer and water heater and a water-flow measurement bag. Participants fill out a survey after their training, detailing their experiences and successes with the self-installed measures at their homes.

### **2008 Project NOW Activity**

Twenty-one homes in MidAmerican's Illinois service territory participated in the program. Of these, one received only natural gas measures and 20 received combined natural gas and electric measures.

#### **Number of Households with Audits and Activity by Measure**

<u>Measure</u>	<u>Total</u>
Audits	21
Compact fluorescent bulbs	52
Programmable thermostats	2
Natural gas furnace	10
Natural gas water heater	4
Venting for furnaces or water heater	1
Refrigerator	3
Attic insulation	15
Sidewall insulation	5
Foundation/crawl space insulation	4
Band joist insulation	1
Additional insulation	1
General repairs in support of measures	15
Exterior doors	17

#### **Key Program Successes in 2008**

- MidAmerican completed negotiations with Project NOW and executed a long-term contract on July 21, 2008. The contract runs through December 31, 2012.
- The number of homes receiving weatherization services was 21.
  - Project NOW reported spending \$53,125 against MidAmerican's contract of \$55,000 in 2008 to weatherize homes in MidAmerican's Illinois service territory. As part of their total spending, Project NOW effectively utilized 96.6 percent of the funds made available to it by MidAmerican. Remaining funds will rollover and be used in 2009.
- MidAmerican provided Project NOW 100 Energy Wise home savings kits.

- Cadmus and MidAmerican jointly delivered Energy Wise Train-the-Trainer (T3) training for Project NOW on September 24, 2008 at their offices in Rock Island.

### **Key Program Challenges in 2008**

- It was challenging to negotiate the terms of the contract with Project NOW on a fast track to get the program operational as soon as possible after June 1, 2008.
- There were a number of program tracking and reporting issues that MidAmerican and Project NOW worked through together in 2008.

### **Promotion**

Project NOW handled its own promotional efforts for audits and weatherization.

MidAmerican arranged for Project NOW to attend the T3 training session. Project NOW handled its own promotion for the end-user education sessions related to the Energy Wise home savings kits.

### **Key Activities Planned for 2009**

- MidAmerican will continue to work with Project NOW on year two of our weatherization services contract. The dollar amount of the contract for 2010 is \$127,000, or about a 130 percent increase in funding over 2008.
- MidAmerican will continue to work with Project NOW to help them successfully implement the Energy Wise Program. MidAmerican will work with Project NOW to determine how many Energy Wise home savings kits will be needed in 2010.
- On April 2, 2009, MidAmerican participated in Project NOW's annual employee training meeting. MidAmerican presented two-breakout session training sessions on the Energy Wise home savings kits.

### **Conclusion**

The Low-Income program was successful in 2008. MidAmerican and Project NOW successfully negotiated and executed a long-term contract for weatherization services. Through this contract, eligible low-income customers received beneficial weatherization services. Additionally, with the Energy Wise Program, we are teaching LIHEAP-eligible customers about energy efficiency that otherwise would not have been reached through traditional weatherization services. MidAmerican is encouraged by the success of the Low-Income program in 2008 and its future prospects.

## Residential New Construction

### Program Description

The Residential New Construction program promotes energy efficiency in new home construction and educates homebuilders and new homebuyers about the advantages of building energy-efficient homes. The program encourages builders to consider energy efficiency in the initial design of new homes and provides leadership and innovation in residential new construction industry by promoting a *best practices* approach to home building. Prior to the program, builders often did not include key energy efficiency measures into new homes, such as duct sealing at each joint, foundation insulation, energy-efficient mechanical heating, cooling and water heating equipment, energy-efficient windows and higher levels of ceiling and sidewall insulation.

The results of the Residential New Construction program are critical to minimize lost opportunities since improvements made during construction pay back energy savings for the life of the home. Likewise, improvements not made during new construction can represent savings lost during the life of the home, as retrofit fixes are more costly than building it right the first time.

The builder has two options. Either the builder must complete all of the program requirements in the Builder Option Package (BOP) to receive the comprehensive rebate or they may opt for the ENERGY STAR<sup>®</sup> performance path that requires individual modeling of the home to ensure energy savings. Each new home that participates in the performance path program qualifies for an ENERGY STAR<sup>®</sup> rating as determined by the U.S. Environmental Protection Agency. ENERGY STAR<sup>®</sup> homes are at least 15 percent more efficient than homes built to the 2006 International Energy Conservation Code (IECC).

## **2008 Activity by Measure**

In 2008 there were two comprehensive ENERGY STAR<sup>®</sup> homes rebates awarded to builders.

### **Key Program Successes in 2008**

- MidAmerican was able to launch the Residential New Construction Program on June 1, 2008.
- Two homes qualified for the new construction program by meeting ENERGY STAR<sup>®</sup> guidelines.

### **Key Program Challenges in 2008**

- Due to the general slowdown in construction and the economy in the Quad Cities and around the region, there were fewer opportunities to participate in the Residential New Construction program in 2008.
- A program requirement requires homes to have acquired initial service after the program start date on June 1, 2008. There were fewer new home starts, and therefore, the Company did not meet participation targets.

### **Promotion**

- The Save some green<sup>®</sup>. advertising campaign continued to target residential customers in newspaper, radio and TV spots. See promotional brochure in Exhibit B.
- *At Your Service* bill inserts promoted the program throughout the year.
- MidAmerican distributed 2008 program materials to trade allies in June 2008, explaining the program and reinforcing Save some green<sup>®</sup>.
- MidAmerican promoted energy efficiency programs at the Rock Island County Fair and Bald Eagle Days and other energy efficiency promotional events.

- MidAmerican updated its Web site with program information throughout the year.
- MidAmerican participated in and sponsored several Quad City Home Builder functions and activities.

### **Key Activities Planned for 2009**

- MidAmerican will monitor program enrollments and recruit additional builders to meet 2009 goals.
- MidAmerican will monitor trends and changes in the industry, including federal energy tax credits and other issues that may require changes in program implementation.
- MidAmerican will continue to seek multifamily builders to participate in the program.
- MidAmerican will continue to promote the program through the Quad City Homebuilder's Association and by participation in Quad-Cities area events.

### **Conclusion**

It was a challenging year for the Residential New Construction program. In a very unpredictable housing market, participation did not ramp up as quickly as planned.

MidAmerican will continue to work with area homebuilders and encourage them to make energy-efficient choices that will lead to energy saving for many years.

## Residential Load Management Program

### Program Description

SummerSaver<sup>SM</sup> is MidAmerican's residential air conditioner load control program. SummerSaver<sup>SM</sup> is an electric program that will operate in all communities in MidAmerican's Illinois service territory. As indicated in its initial filing, during 2008, MidAmerican prepared to offer this program to eligible customers in 2009. Preparations included the following activities.

- MidAmerican recruited installation contractors to install and service load control receivers.
- MidAmerican performed tests to ensure communications through the Company's pager signal provider successfully reached all of the communities in the MidAmerican Illinois service territory. The testing insures that the Company's pager signals are capable of communicating with the load control receivers (LCRs).
- MidAmerican worked with Cannon Technologies, Inc. to make modifications to the existing communications systems to communicate with LCRs installed in the Illinois service territory.
- MidAmerican designed program information and solicitation brochures to send to eligible customers via direct mail.
- MidAmerican ran queries on its customer database to obtain a list of eligible customers.

The summer of 2009 will be the first season of operation for SummerSaver<sup>SM</sup> in Illinois. Central air conditioners and air-source heat pumps in owner-occupied single-

family homes are eligible for the program. A small LCR is installed on the siding of the house near the outside disconnect switch and compressor unit of the customer's system. The LCR operates by overriding the customer's thermostat. The compressor reacts to the load control receiver's control signal by shutting down, in the same fashion as it shuts down when the thermostat has been satisfied. Although the outdoor compressor shuts down during the control period, the indoor fan continues to operate. The circulation provided by the indoor fan helps to reduce any potential discomfort of cycling, because previously cooled indoor air continues to circulate throughout the house.

As noted above, LCR operation in Illinois requires pager communication. Pager-based load control receivers receive signals from a pager company in Des Moines, which provides coverage in MidAmerican's Illinois service territory.

### **Communities eligible for SummerSaver<sup>SM</sup> in 2009**

Andalusia	Andover	Barstow
Boden	Buffalo Prairie	Cable
Campbells Island	Carbon Cliff	Cleveland
Coal Valley	Colona	Cordova
Coyne Center	Cropper's Addition	East Moline
Edgington	Eliza	Green River
Hamlet	Hampton	Hillsdale
Illinois City	Joslin	Lynn Center
Matherville	Milan	Millersburg
Moline	Oak Grove	Ophiem
Orion	Oscos	Port Byron
Preemption	Rapids City	Reynolds
Rock Island	Sherrard	Silvis
Swedona	Taylor Ridge	Warner

### **Key Program Successes in 2008**

- As noted above, MidAmerican successfully completed program planning and implementation in 2008.
- MidAmerican arranged for implementation contractors to service and install LCRs in our Illinois service territory. These contractors will install LCRs beginning in March 2009. These same contractors will visit customers' homes to service the LCRs should customers have problems or questions with the device.
- MidAmerican conducted pager-signal testing to verify adequate coverage throughout our Illinois service territory.
- MidAmerican upgraded the software that communicates cycling commands through the paging system to have a separate group for Illinois participants. It is important to have a separate group for Illinois in case there is a need for an isolated curtailment due to operational reasons such as a weather-related event that might cause transmission constraints. However, in most cases, a curtailment event will include all participants in Iowa and Illinois.
- MidAmerican created marketing materials and promotional brochures for SummerSaver<sup>SM</sup> in Illinois.
- MidAmerican queried against our customer base to develop a mailing list for solicitation brochures for use in early 2009.

### **Key Program Challenges in 2008**

- In 2008, MidAmerican researched the pros and cons of a new LCR product from Cannon Technologies, Inc. called TrueCycle. The TrueCycle technology predicts how much the customer's air conditioner would have run during the control period if it were uncontrolled. TrueCycle then cycles that air-conditioner in a manner that guarantees an appropriate demand response. In contrast, MidAmerican's traditional LCRs cycle air conditioners in a 15

minute on and 15 minute off pattern. MidAmerican determined the best course of action was to move to the TrueCycle technology for future LCR purchases for use in Illinois.

### **Promotion**

In 2008, MidAmerican prepared to promote the program by designing the various brochures and reminder cards necessary to operate the program. Customer incentives in 2009 will be a \$40 bill credit for first-year participants and \$30 bill credits thereafter. These credits will appear on customers' October energy bills. Incentives will be pro-rated and paid by check if customers move or drop out of the program prior to September 30.

Successful promotion of SummerSaver<sup>SM</sup> will also rely on communicating with customers moving into homes with load control receivers already installed and to former participants moving into new homes without load control receivers. Customers moving into homes of former participants will receive *Welcome Home* cards, explaining the program and informing customers of their automatic enrollment. Customers will return a postage-paid card if they do not want to participate, but will not have to do anything if they want to participate in the program. Ex-participants moving to new homes without load control receivers will receive *Welcome Back* cards, reminding them of their previous participation and offering the opportunity to rejoin the program by returning the postage-paid card. The *Welcome Home* and *Welcome Back* cards will help boost new participation and minimize attrition in Illinois.

### **Key Activities Planned for 2009**

- MidAmerican will promote the program to attempt to meet our aggressive goal of 1,324 net new participants for 2009. All new installations in 2009 will incorporate TrueCycle technology.

### **Conclusion**

In 2008, MidAmerican made all necessary preparations to operate SummerSaver<sup>SM</sup> during the summer of 2009. MidAmerican looks forward to a successful year with SummerSaver<sup>SM</sup> in Illinois in 2009.

## Nonresidential Equipment Program

### Program Description

The Nonresidential Equipment program promotes the purchase of individual pieces of prescribed high-efficiency equipment by commercial, industrial and agribusiness customers in both existing and new facilities. The program addresses the replacement and first-time purchase markets for all measures and primarily the retrofit market for lighting. Participation is largely dealer-driven; that is, equipment dealers are the agents that up-sell customers to energy-efficient measures when they are in the market to buy new or replacement equipment. The program offers rebates for a wide range of lighting, heating, ventilation, air conditioning, motor and variable-speed drive and commercial kitchen equipment.

### 2008 Activity

Actual 2008 Nonresidential Equipment program activity by measure

<u>Measure</u>	<u>Commercial</u>
Small central air conditioner	2
Package terminal air conditioner/heat pump	24
Geothermal heat pumps	3
Natural gas furnaces - small	14
Natural gas boilers - small	1
Compact fluorescent lamps and fixtures	9
T-5/T-8 lighting	811
Light-emitting diode exit lights	9
Occupancy sensors	2
T-5/T-8 high-bay lighting	171

## Key Program Successes in 2008

- The program surpassed 2008 goals for participation, with participation 15 percent higher than plan goals.
- Energy-efficient lighting was a key contributor to electric impacts in 2008, driven by T-8 and T-5 high and low-bay fluorescent fixtures, and compact fluorescent lamps and fixtures. Lighting retrofits accounted for 183,659 kilowatt-hours, with related incentives of \$19,963 or 62 percent of the non-residential equipment program incentives paid. Lighting participation exceeded plan goals by 12 percent.
- Ground-source (geothermal) heat pumps contributed the majority of electric cooling savings.
- Natural gas impacts totaled 1,630 therms. Efficient natural gas boilers and furnaces drove these impacts.
- MidAmerican continued efforts to engage the support of key trade allies that facilitate delivery of this program. We continued to emphasize building relationships with key heating and cooling, lighting, mechanical and electrical contractors during 2008.
- MidAmerican provided additional resources to its website. Nonresidential equipment forms were made fillable, aiding trade allies and customers with the application process. In addition, equipment brochures could be ordered directly from the website and mailed to the trade ally for their use promoting the program to their end- use customers.
- MidAmerican conducted a trade ally meeting to interested parties in order to explain how each program worked. Brochures were made available and individual contractors were able to have one-on-one discussions with MidAmerican's Product Managers.
- Continuing program development in 2008, MidAmerican researched equipment programs offered at other utilities and organizations, including qualifying levels, rebate structures and

rebate levels. MidAmerican participated in heating and cooling, general and solid state lighting, data centers, commercial kitchens and motors/variable-speed drives committees facilitated by the Consortium for Energy Efficiency. These committees provide an opportunity for utility energy efficiency program managers to discuss program implementation, new technologies and specification development for new measures. In addition, committee participation provides a forum to see what other utilities across the country are offering for program; what works and what does not.

### **Key Program Challenges in 2008**

MidAmerican will monitor measures with low participation numbers, as the program develops to determine whether to keep these measures in the program. In general, these are measures with relatively low targets for participation and impacts, and so do not have a substantial impact on overall program performance.

- MidAmerican continued periodic communications with trade allies via e-mail messages and our Web site, Trade Ally Central.
- Keeping up with technological advances in each equipment area is an ongoing challenge for this program. Constant vigilance is required to make sure the program includes the most efficient measures and to ensure the rebate levels are appropriate.
- Even though the program exceeded its participation goals as noted above, the program achieved only 8 percent of goal for electric energy impacts and 8 percent of plan goal for electric demand impacts. The reason for this is there were no industrial projects that participated in the program, only commercial. Commercial projects are inherently smaller than industrial. The participant count was strong but the savings per participant was small. In addition, the program did not have any Motor and Generator Section of the National

Electrical Manufacturers Association (NEMA) Premium motors or variable speed drives from June 1 to December 31, 2008. However, MidAmerican expects significant participation in NEMA Premium motors and variable speed drives in 2009 and this will markedly improve results.

- With the increasing traction and success of MidAmerican's Non-Residential Energy Analysis (*EfficiencyPartners*<sup>®</sup> program), measures that may have been recorded in this nonresidential equipment program are being included in the *EfficiencyPartners*<sup>®</sup> program. The success of *EfficiencyPartners*<sup>®</sup> can have the effect of reducing participation in Nonresidential Equipment and this is a challenge.

### **Promotion**

- Promotion and advertising activity was channeled through the trade allies that deliver the program. New brochures developed in the spring of 2008 were distributed starting June 1, 2008. See promotional brochures in Exhibit B. Individual meetings were held throughout the year with key trade allies, contacts by MidAmerican's Key Account Managers to end-use customers as well as participation in trade shows and conferences.
- The Consortium for Energy Efficiency (CEE) has an initiative called Motor Decisions Matter (MDM) promoting efficient motor systems. In November 2008, a regional event was held in Moline promoting life-cycle strategies for efficient motor systems. Speakers from MDM, Electrical Apparatus & Service Association (EASA), General Electric and MidAmerican presented information to trade allies, contractors and end-use customers. The regional event was a success getting people interested in efficient motor and variable speed drive systems.

### **Key Activities Planned for 2009**

MidAmerican will:

- Monitor changes in federal energy efficiency standards and developments related to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007.
- Maintain consistency between this program and the Residential Equipment program where appropriate. Any changes in residential-size (single-phase) qualifying equipment or rebate levels also will be made to the same size equipment in the nonresidential program.
- Continue to keep up with technology changes in the lighting market and evaluate addition of high-lumen, lower wattage T-8 lamps and/or fixtures or other new lighting technologies to the program. Solid state lighting as light emitting diodes (LEDs) are finding their way to the marketplace beyond traffic signals, particularly in refrigerated case and recessed can lighting.
- Add additional commercial kitchen equipment items to the program to make inroads in another high-potential nonresidential equipment market segment. MidAmerican is working with ENERGY STAR<sup>®</sup> on several co-branding initiatives.
- **Monitor the 2009 economic stimulus package funding expected for city governments. Opportunities may exist for motor replacement and the installation of variable speed drives at fresh water and wastewater treatment facilities.**

## **Conclusion**

The Nonresidential Equipment program exceeded participation goals, but fell short of electric impact savings and incentive payment goals set forth in MidAmerican's plan for 2008. MidAmerican will monitor the results of this program to detect any solid trends that may develop and will address those trends appropriately in the future. Since the success of this program depends primarily on the efforts of trade allies, MidAmerican will continue to foster productive relationships with these contractors to ensure the program's goals are met.

## Nonresidential Custom Program

### Program Description

The Nonresidential Custom program provides customers with financial incentives for individual high-efficiency measures that do not fit neatly into other nonresidential programs. The program targets equipment and systems in both new and existing buildings as well as manufacturing processes. The program is generally customer-driven, although for certain measures key trade allies also are important for program promotion and delivery. Custom-like projects are also reported under other nonresidential programs, including the Small Commercial Energy Audit and Nonresidential Energy Analysis programs.

The program is marketed as the Nonresidential Custom Systems program.

### 2008 Activity

A summary of Custom program activity during 2008 follows.

	<u>Commercial</u>	<u>Industrial</u>
Customer project applications received	4	0
Number pre-approved for rebates	4	0
Number not eligible	0	0
Projects completed	0	0

### Program Successes in 2008

While the participation goal was not met in 2008:

- the four applications received for pre-approval were all approved, but
- none of the four proposed projects were implemented in 2008. One of the projects was installed in the first quarter 2009.

## **Key Program Challenges in 2008**

- The frequency of contacts with trade allies was insufficient to meet and exceed program goals for 2008.
- A lack of in-depth follow-up with customers who did not implement pre-approved projects. The usual lag time from pre-approval through project implementation is often six months to a year or longer. Contacts and offers of assistance, such as in selecting contractors, may facilitate quicker and greater numbers of projects being installed.
- The general economic slowdown may have had an impact on customers' ability to make energy efficiency investments.

## **Promotion**

The program is generally promoted through MidAmerican's network of key account managers working with large customers and through the network of trade allies including local engineering firms, mechanical contractors, electrical contractors and controls contractors who specify non-standard equipment and systems for customers.

- Key account managers' 2008 activities to promote the program to large customers and to provide customer support included:
  - Delivering 2008 energy efficiency program materials and explaining the program to MidAmerican's largest Illinois customers (see promotional brochure in Exhibit B),
  - Tracking customer expansion plans for existing buildings, renovations and equipment replacements/upgrades,

- Reinforcing the benefits of energy efficiency improvements in general and the benefits of the Custom Systems program,
- Assisting customers with the program application process.
- Trade ally activities included the following:
  - Conducting a trade ally orientation meeting in Moline, Illinois to discuss the energy efficiency programs, including the Custom program and answering questions about the Custom Systems program process,
  - Conducting one-on-one meetings with engineering firms and mechanical, electrical and controls contractors, and
  - Distributing 2008 program brochures to mechanical, electrical and controls contractors.
- Developing a Web page for the program including important program information for customers and trade allies.

### **Key Activities Planned for 2009**

#### **Trade Ally Network**

During 2009, MidAmerican will improve relationships with trade allies to meet or exceed 2009 program goals. Action items in 2009 include:

- Maintaining and enhancing contacts with key mechanical, electrical and controls contractors and others in the Quad Cities area who may impact program results,
- Sponsoring and/or conducting training workshops and seminars and

- Participating in and/or co-sponsoring trade organization seminars, annual conventions, regular meetings and member publications.

### **Customer Follow-Up**

MidAmerican will increase its efforts to follow-up with customers who did not implement projects that were pre-approved.. MidAmerican's key account managers will increase efforts to identify reasons and/or barriers keeping customers from pursuing pre-approved Custom Systems' projects.

If appropriate, MidAmerican will conduct surveys and/or focus groups will be considered to obtained additional customer feedback regarding projects not implemented.

### **Conclusion**

The Nonresidential Custom program was slow to gain traction during 2008. The four projects pre-approved in 2008 position the program to get on track for accomplishing the entire five-year Plan goals. However, increased emphasis on trade ally relationships and technical assistance to customers and their contractors during project development will be emphasized with the goals to attain more and better custom projects. These activities, along with continued trade ally and other promotional activities planned for 2009 should result in improved results during the latter stages of 2009 and into 2010.

## Small Commercial Energy Audit Program

### Program Description

The Small Commercial Energy Audit program provides comprehensive services to small business customers, including energy audits, installation of energy-saving measures during the audits, and recommendations and financial incentives to help customers implement energy-saving projects. The recommendations primarily target inefficient lighting and insulation in existing buildings. During the audit, the auditor installs low-cost, energy-saving measures, including compact fluorescent lamps, light emitting diode (LED) exit retrofit kits and lamps, faucet aerators, low-flow shower heads, occupancy sensors, water pipe insulation and refrigerated vending machine controls.

Audits are performed by two program contractors, A-TEC Energy and The Energy Group. The program targets small building owners, property managers and tenants and is marketed under the name BusinessCheck<sup>®</sup>.

### 2008 Activity

Small Commercial Energy Audit program activity follows.

	<u>Small Business</u>
Energy audits completed during 2008	84
Direct installed measures (during energy audits)	828
Follow-up measures installed by customers following energy audits during 2008	352

*Note: Program activity includes audits and installed energy saving measures from audits of small business and multifamily buildings under nonresidential tariffs. The above numbers vary from activity reported in MidAmerican's March 20, 2009 Annual Energy Efficiency Reconciliation Report, especially in the area of direct installed measures put in each apartment unit during the audits. Multifamily audit costs were reported in the Reconciliation Report while activity numbers were inadvertently excluded.*

### **Key Program Successes in 2008**

- Actual customer participation in small commercial energy audits, acceptance of no cost energy-saving measures during the audit and customer installation of follow-up measures recommended by audits exceeded filed goals:
  - Energy audits exceed Plan goals by 200 percent.
  - Measures installed during audits exceeded the Plan by almost 200 percent.
  - Measures, such as high-efficient lighting and insulation, installed by customers following the audits exceeded the Plan by about 140 percent.
- Actual electric energy savings and peak demand reductions exceeded the filed Plan by 431 percent and 275 percent, respectively, while actual natural gas savings fell short of the Plan goals.
- Nine customers completed recommended T-8 fluorescent lighting upgrades and in the process replaced inefficient bulbs in 347 fixtures; one customer installed high-efficiency electric heating as recommended during the energy audit.
- One multifamily owner completed recommended insulation upgrade projects in four of its properties.

### **Key Program Challenges in 2008**

- The general economic slowdown seems to have had an impact on small businesses ability to finance energy efficiency projects.
- Although actual audits completed in 2008 exceeded plan targets, natural gas savings and gas demand reductions were below plan targets. MidAmerican will continue to work closely with

trade allies to increase the number of high efficiency heating and other gas-driven equipment into commercial buildings.

### **Promotion**

The program is promoted primarily by newsletter announcements inserted with customer bills and direct mail campaigns. The promotion strategy included:

- Expanding the Save some Green.® energy efficiency advertising campaign to target Illinois Quad Cities Area customers. See promotional brochure in Exhibit B.
- Conducting a trade ally orientation meeting in Moline, Illinois to discuss the energy efficiency programs, including the Small Commercial Energy Audit Program, and to answer questions about how the program will work.
- Developing a Web page for the program with relevant program information for customers and their contractors to participate.
- Developing informational brochures to market the program to customers and key trade allies.
- Promoting the program in MidAmerican's *At Your Service* newsletter inserted in customer bills.
- Emphasizing promotion of the program to lighting and insulation contractors to encourage their promotion of the program to customers as a no-cost, value-added way for customers to get advice on ways to cut their energy costs and improve the value of their businesses, and
- Distributing program information at community, customer, and trade groups and associations' events throughout each year.

### **Key Activities Planned for 2009**

- Implement enhanced energy-savings approaches and procedures to achieve increased energy efficiency results consistent with the Plan for 2008-2012.
- Strengthen and implement new procedures for follow-up with program participants who did not implement recommended projects to determine the reasons and increase the number of implemented projects.
- Increase trade ally activities, especially with insulation and lighting installers.
- Continue reviewing the list of measures that are installed by our auditors and add or delete measures as appropriate, including adding new low-cost, sector-specific measures to the program.
- Promote the program as described above and continue to seek additional marketing approaches appropriate to this program.
- Continue improving communications between program implementation contractors and MidAmerican through joint meetings.

### **Conclusion**

In 2008, MidAmerican focused on awareness of the program in our Illinois service territory. These efforts were successful, as evidenced by actual participation exceeding our Plan goals, especially for electric measures. MidAmerican is pleased with the overall performance of the Small Commercial Energy Audit Program during 2008. In 2009 and later years of the plan, attention will focus on enhancing program delivery and customer follow-up.

## Nonresidential Energy Analysis Program

### Program Description

The program promotes the analysis and implementation of comprehensive energy efficiency improvements in large, existing commercial, governmental and institutional buildings, industrial facilities, and manufacturing processes. These strategies use a whole-building/whole-process approach to save energy, reduce peak demand, save operating costs, and bring facilities to an energy performance level that exceeds their original design. MidAmerican provides customers expert consultation and a wide range of technical assistance services..

The program is marketed under the name *EfficiencyPartners*<sup>®</sup>. As the name suggests, MidAmerican wants to form a committed partnership with customers and their contractors in developing and implementing a long-term, holistic approach to energy efficiency and energy management. MidAmerican uses a program contractor, Nexant, Inc., for program and project management services.

### 2008 Activities

Nonresidential Energy Analysis Program activity during 2008 follows:

	<u>Commercial</u>	<u>Industrial</u>
• Enrolled applicants in program	6	8
• Signed Energy Efficiency Action Plans	0	2
• Number of implemented projects	0	0

### Key Program Successes in 2008

- Achieved early awareness of the program as evidenced by enrollment and facility-wide energy assessments of 14 customer facilities, or 233 percent of the 2008 Energy Efficiency Plan goal of six enrollments.
- Identified 72 energy saving projects in the 14 facilities; if all recommended energy efficiency improvements are implemented annual electric energy savings would be six times the 5-year EE Plan goals and natural gas savings would be seven times the goals.
- Negotiated two Energy Efficiency Action Plans in 2008; customers committed to implementing 22 projects that would result in annual energy savings of about 8.6 MWh and 280,000 therms. (An additional four Energy Efficiency Action Plans were negotiated with 2008 participants during the first quarter of 2009.)

### **Key Program Challenges in 2008**

- While the initial customer response has been good – 14 participating facilities owned by 10 customers, the nature and size of a few of the proposed projects, if pursued to completion, may substantially exceed the Plan budget and annual energy savings goals. About 90 percent of the budget and energy savings are attributed to one industrial customer with five enrolled facilities. One industrial customer has agreed, or in some cases tentatively agreed, to multiple actions in several facilities that would account for more than ninety percent of the total 2008 recommended actions. If implemented, the fourteen participant facilities would result in greater than expected rebate incentives being earned by these Illinois customers.

### **Promotion**

The program, while available to all large MidAmerican customers, is primarily targeted to key account customers through MidAmerican's network of key account managers and more

generally through engineering companies serving large businesses throughout MidAmerican's Illinois service territory. Activities to promote the program included:

- The Save some green.<sup>®</sup> energy efficiency advertising campaign was expanded to target Illinois Quad Cities area customers. See promotional brochure in Exhibit B.
- A Web page was developed for the program with relevant program information necessary for customers and their contractors to participate in the program including links to downloadable forms to facilitate program participation.
- Informational brochures were developed to market the program to customers and key trade allies and customers.
- A trade ally orientation meeting was conducted in Moline, Illinois to discuss the energy efficiency programs, including this program, and to answer questions about the how the program will work.
- MidAmerican key account managers delivered energy efficiency materials to key account customers and explained the program's energy saving potential and other advantages.
- The benefits of the program were described to key trade allies at professional association meetings and during one-on-one meetings from June 1 through year-end 2008, especially to engineering professionals who design and specify commercial and industrial systems for customers.

### **Key Activities Planned for 2009**

In 2009 MidAmerican will:

- Pursue implementation of customer energy improvements under existing customer energy efficiency action plans signed in 2008 and encourage other customers to establish energy efficiency action plans during 2009.
- Continue to promote the program aggressively, as described above, toward development and implementation of energy efficiency action plans.
- Continue to improve program screening techniques to assure only customers with sincere interest and resources necessary to pursue a holistic approach to energy efficiency in their facilities are enrolled in the program.
- Develop and use special reports to track and report customer performance and adherence to energy efficiency action plan milestone activities and timeframes.
- Refresh the program Web page to reflect program enhancements.
- Continue to benchmark customer energy use and energy management practices against similar customers in the industry and encourage commercial, governmental, and institutional customers to pursue the U.S. Environmental Protection Agency's (EPA's) high-performance building designation, ENERGY STAR<sup>®</sup> FOR BUILDINGS.
- Continue to emphasize and monitor the effectiveness of nontraditional program activities, such as use of energy management assessment tools: e.g., the EPA's energy benchmarking tools and ENERGY STAR's building labeling program, the U.S. Green Building Council's Leadership in Energy and Environmental Design for Existing Buildings program, federal and state tax credit programs, and retro-commissioning and/or other detailed studies regarding energy-efficient buildings or systems.

## **Conclusion**

In 2008, the program got off to a good start, significantly exceeded its goals. The program attracted several large commercial and industrial customers interested in a holistic facility approach to long-term energy efficiency and energy cost savings. The program did not appear to have been as impacted by the economic slowdown as some other nonresidential programs, perhaps because improvements to existing facilities may be viewed as a better, less costly and more prudent option than new construction and complete building renovations.

In 2009, MidAmerican will enhance program implementation, reporting, and tracking to reach full potential of the program.

## Commercial New Construction Program

### Program Description

The Commercial New Construction (CNC) program promotes the design and construction of high-efficiency commercial buildings. The program also is used for energy design for building conversions and major renovations of existing buildings. The objective of the program is to commit building owners and developers to significant energy savings during the design of new building construction or existing building modifications rather than later when energy-saving options are more costly to install. The program is delivered through the assistance of a program contractor, The Weidt Group, who provides energy design assistance, project management and project completion verification.

### 2008 Activity

Actual 2008 activity follows:

Number of new comprehensive project starts	3
Number of large building projects	2
Number of small building projects	1
Status of projects	
Number active	1
Number completed	0
Number temporarily suspended	2
Number cancelled	0

*Note: A typical comprehensive new construction project covers 18 to 24 months or longer from initial design through completion of construction and may cross over three or more calendar years, depending upon the project.*

*Large projects are generally greater than or equal to 50,000 square feet in size; small projects are generally less than 50,000 square feet.*

### Key Program Successes in 2008

- Achieved early awareness of the program in Illinois as evidenced in three program enrollments and one prospect that was subsequently put on hold due to the economic downturn.
- Projected energy and capacity savings for one of the three enrolled buildings may exceed our 2009 and/or 2010 energy savings goals if completed on schedule. Analysis of the project is on-going.

### **Key Program Challenges in 2008**

- Due to a general slowdown in the construction industry and the economy in the Quad Cities area:
  - there were two fewer project enrollments in the program than were targeted,
  - two of the three enrolled projects were put on hold before the end of the calendar year,
  - only one project enrolled in the program during 2008 is still active and
  - the prospective project also was put on hold in early 2009.

### **Promotion**

The program is generally promoted through the Quad Cities area building design community to large customers and building developers through MidAmerican's network of key account managers and trade allies. Activities to promote the program included:

- Expanded MidAmerican's Save some green.® energy efficiency advertising campaign to target Illinois Quad Cities area customers. See promotional brochure in Exhibit B.

- Conducted a trade ally orientation meeting in Moline, Illinois to discuss the energy efficiency programs, including the CNC program, and answer questions about the how the programs work.
- Participated in ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc.) Mississippi Valley Chapter functions and informed membership of the Illinois energy efficiency programs, including the CNC program.
- MidAmerican key account managers delivered 2008 Illinois energy efficiency program materials to key accounts, explained the programs, including the CNC program, and inquired about customers' current and future new construction and expansion plans.
- Tracked customer plans for new building and expansion projects.

#### **Key Planned Activities for 2009**

- Monitor program enrollment and recruit additional design professionals and commercial builders to meet goals for 2009 and beyond.
- Monitor commercial building trends and new/enhanced technologies, tax credit programs, Illinois energy code changes and other issues that may require changes in program implementation.
- Incorporate, as appropriate, the U.S. Green Buildings Council's Leadership in Energy and Environmental Design program, the U.S. Environmental Protection Agency's ENERGY STAR<sup>®</sup> and other national, state or local building certification programs into commercial building projects in MidAmerican's service territory, as desired by building developers and owners.
- Expand efforts to promote the program as described above, including:

- Continue to develop and nurture relationships with trade allies, especially developers and designers of small buildings,
- Continue existing trade ally activities with architects, engineers and design-to-build contractors with activities similar to 2008, and
- Update program marketing brochure for the 2009 program year and distribute to the network of architects, engineers and design-to-build firms.

### **Conclusion**

The short, seven month program year and economic slowdown in the Quad Cities area made this a challenging year to launch this and other new nonresidential energy efficiency programs in Illinois. Participation in this program began very well but tapered off with two of the three initial enrollments entering a delayed planning and implementation state. However, each of the initial project developers have expressed their desire to go forward with their projects once the economic uncertainties are resolved.

MidAmerican will track these projects and future projects closely and will work with commercial building designers and builders and encourage them to incorporate energy-efficient designs into projects that will save energy for many years.

## Nonresidential Load Management

### Program Description

This program, marketed as the Curtailment program, provides large nonresidential customers with financial incentives to reduce electricity use during MidAmerican's system peak hours. Customers use one or more of three strategies to reduce demand by at least 250 kilowatts when signaled to do so by MidAmerican:

- 1) Shed load completely, without replacement,
- 2) Shift load to nonpeak periods and/or
- 3) Generate power on-site to replace the curtailed power.

Nonresidential Load Management is a mature program, as MidAmerican and its predecessors have offered it for many years to a limited number of Illinois customers prior to the launch of Energy Efficiency programs. Most customers have participated for multiple years, prior to the launch of energy efficiency programs in MidAmerican's Illinois service territory.

MidAmerican's Nonresidential Load Management program contractually obligates participants to drop an agreed-upon amount of electric load when signaled by MidAmerican in exchange for a financial incentive. Clear guidelines and requirements for participation are provided in tariffs specifying notice requirements, number of curtailments and other program procedures. Curtailment requests are limited to a maximum of 16 per season (June through September) with a maximum duration of six hours per event. Participants are offered one-year contracts.

MidAmerican provides information to customers regarding curtailments, curtailment strategies and analysis of load data through the Company's network of key account managers and a Web site. Participants also are offered the use of MidAmerican's Curtailment Manager, an

Internet-based software system that provides notice of curtailment events, allows monitoring of performance in near-real time, and includes access to data and energy analysis modules on a year-round basis to help customers actively manage energy use. Each participant's performance is evaluated at the end of the curtailment season. Incentives then are paid to those participants who met contractual requirements.

## 2008 Activity

	<u>2008 Performance</u>
2007 Total Contract Impact	4,500
New Contracts	1
New Contracts Impact (kW)	250
Renewed Contracts	2
Renewed Contracts Net Impact (kW)	500
Contracts Amended	1
Contracts Amended Impact (kW)	1,525
Net Program Impact Change (kW)	2,275
Total Participants	4
Total Contract Impact (kW)	6,775
Total Contract Incentives	\$240,510.88

## Key Program Successes in 2008

- There were no curtailment events during the 2008 season. The program averages three events per season (since inception).
- The Curtailment program participation increased marginally in 2008, with one new participants and 250 kilowatts of new load. Overall, there was a net gain of one participant with a net increase of 2,275 kilowatts of peak demand due to changes in returning participants' loads. This program fell short of plan goals by 49 percent in contract impact (kilowatts of demand) and in participation by 33 percent. New participation was difficult to

attain since the program officially began June 1, 2008, coinciding with the start of the curtailment season, leaving little time to enroll new participants for a full season's participation.

- Two expiring contracts were renewed, totaling 2,000 kilowatts of the program's total curtailable load.
- Key account managers play a key role in marketing and recruiting new participants and retaining prior participants in the program.
- One additional program participant was enrolled for access to the Curtailment Manager system, bringing the total to three out of four total participants. MidAmerican believes that the increase in participants being monitored in near-real time during curtailment events will continue to increase the realization rate, or ratio of actual curtailed load to contract curtailable load, of the program.

## **Key Program Challenges in 2008**

- In a normal annual program cycle, recruitment and enrollment for participation in the Nonresidential Load Management program begins in the first quarter of the year, allowing ample time to introduce the program and explain its requirements and benefits. The mid-year 2008 program launch date short-circuited the normal recruitment and enrollment processes for the Nonresidential Load Management program under the new Energy Efficiency plan, resulting in only a small increase in participation and curtailable load. With a full annual program cycle in 2009, we anticipate increasing participation and contract curtailable load for the 2009 curtailment season.

## **Promotion**

- Promotional materials were developed for program marketing purposes. Marketing for this program is limited primarily to direct contact with MidAmerican's key account managers and Web site traffic. See promotional brochure in Exhibit B.

## **Key Activities Planned for 2009**

- Expiring contracts total three for 2009, representing almost 4 megawatts of curtailable load for the 2009 season. These contracts are expected to renew.
- MidAmerican continues to enroll new and existing participants for access to the Curtailment Manager system in an effort to improve the program's realization rate.

## **Conclusion**

MidAmerican looks forward to a successful curtailment season in 2009 with additional participants and an increase in curtailable load. MidAmerican also will continue working with its software vendor, Itron, Inc., to optimize the Curtailment Manager system and improve the realization rate of the program.

**MidAmerican Energy Company**  
**Actual & Planned Expenditures, Energy & Capacity Savings & Participation**  
**Illinois**  
**Year to Date - December 2008**

Program Name	Expenditures			Therms			Peak Therms			Participants/Units		
	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan
Residential Audit	\$258,000.00	\$434,401.08	168.37%	50,085	90,323	180.34%	579	985	170.12%	771	1,726	223.87%
Residential Equipment	\$217,000.00	\$219,200.29	101.01%	35,596	42,949	120.66%	516	632	122.48%	465	525	112.90%
Low Income	\$64,000.00	\$51,813.47	80.96%	2,982	10,587	355.03%	32	133	415.63%	53	71	133.96%
Small Commercial Energy Audit	\$52,000.00	\$48,571.13	93.41%	10,814	6,103	56.44%	215	32	14.88%	357	683	191.32%
Nonresidential Energy Analysis	\$8,000.00	\$8,543.34	106.79%	0	0	N/A	0	0	N/A	3	3	191.32%
Nonresidential Equipment	\$22,000.00	\$16,276.99	73.99%	7,324	1,631	22.27%	165	42	25.45%	46	15	32.61%
Nonresidential Custom	\$43,000.00	\$16,258.62	37.81%	15,354	0	0.00%	249	0	0.00%	20	0	0.00%
Commercial New Construction	\$20,000.00	\$6,594.03	32.97%	0	0	N/A	0	0	N/A	5	0	0.00%
Residential New Construction	\$121,000.00	\$35,737.18	29.53%	4,487	891	19.86%	68	13	19.12%	8	2	25.00%
<b>Total</b>	<b>\$805,000.00</b>	<b>\$837,396.13</b>	<b>104.02%</b>	<b>126,642</b>	<b>152,484</b>	<b>120.41%</b>	<b>1,824</b>	<b>1,837</b>	<b>100.71%</b>	<b>1,728</b>	<b>3,025</b>	<b>175.06%</b>

**MidAmerican Energy Company**  
**Actual & Planned Expenditures, Energy & Capacity Savings & Participation**  
**Illinois**  
**Year to Date - December 2008**

Program Name	Expenditures			kWh			kW			Participants/Units		
	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan	Plan 2008	Actual 2008	% of Plan
Residential Equipment	\$171,000.00	\$211,610.53	123.75%	241,227	224,295	92.98%	83	115	138.55%	310	425	137.10%
Commercial New Construction	\$124,000.00	\$25,628.86	20.67%	0	0	N/A	0	0	N/A	5	0	0.00%
Nonresidential Equipment	\$146,000.00	\$97,328.15	66.66%	3,576,477	278,330	7.78%	680	57	8.38%	854	1,034	121.08%
Residential New Construction	\$68,000.00	\$14,249.54	20.96%	36,874	3,566	9.67%	26	5	19.23%	8	2	25.00%
Residential Audit	\$153,000.00	\$201,444.76	131.66%	1,748,163	1,111,128	63.56%	416	320	76.92%	26,085	5,099	19.55%
Small Commercial Energy Audit	\$35,000.00	\$54,743.84	156.41%	15,832	83,997	530.55%	4	15	375.00%	95	592	623.16%
Nonresidential Energy Analysis	\$68,000.00	\$76,921.11	113.12%	0	0	N/A	0	0	N/A	3	6	200.00%
Nonresidential Custom	\$44,000.00	\$12,176.32	27.67%	42,977	0	0.00%	6	0	0.00%	12	0	0.00%
Residential Load Management	\$122,000.00	\$17,857.71	14.64%	0	0	N/A	0	0	N/A	0	0	N/A
Nonresidential Load Management (1)	\$652,000.00	\$338,503.03	51.92%	349,227	0	0.00%	13,412	6,562	48.93%	6	4	66.67%
Low Income	\$29,000.00	\$14,423.32	49.74%	10,503	46,579	443.48%	1	13	1300.00%	50	70	140.00%
<b>Total</b>	<b>\$1,612,000.00</b>	<b>\$1,064,887.17</b>	<b>66.06%</b>	<b>6,021,280</b>	<b>1,747,895</b>	<b>29.03%</b>	<b>14,628</b>	<b>7,087</b>	<b>48.45%</b>	<b>27,428</b>	<b>7,232</b>	<b>26.37%</b>

(1) Realized

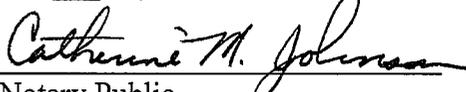
**VERIFICATION**

STATE OF IOWA            )  
  ) SS  
COUNTY OF SCOTT        )

I, Fredrick A. Leuthauser, being first duly sworn on oath, hereby state that I am Manager, Energy Efficiency for MidAmerican Energy Company and verify that the 2008 Annual Energy Efficiency Reconciliation Report and 2008 Annual Report along with associated documents comprise MidAmerican Energy Company's Incremental Costs included in the annual energy efficiency reconciliation statement for the year 2008 and represent the reasonable and prudent costs collected under the Energy Efficiency Cost Recovery rider and the Company's Energy Efficiency Program costs for 2008.

  
Fredrick A. Leuthauser

Subscribed and sworn to before me  
this 7<sup>th</sup> day of December 7, 2010.

  
Notary Public

