

MIDAMERICAN EXHIBIT NO. 1.0



MIDAMERICAN ENERGY COMPANY
ENERGY EFFICIENCY PLAN FILING FOR

Illinois

ILLINOIS COMMERCE COMMISSION

FEBRUARY 13, 2008



MidAmerican Energy Company

Energy Efficiency Plan

Table of Contents

Section	Page
A. Introduction	A1-1
B. Residential Programs	
<i>Residential Equipment Program</i>	B1-1
<i>Residential Audit Program</i>	B2-1
<i>Residential Low Income Program</i>	B3-1
<i>Residential New Construction Program</i>	B4-1
<i>Residential Load Management Program</i>	B5-1
C. Nonresidential Programs	
<i>Nonresidential Equipment Program</i>	C1-1
<i>Nonresidential Custom Program</i>	C2-1
<i>Small Commercial Audit Program</i>	C3-1
<i>Nonresidential Energy Analysis Program</i>	C4-1
<i>Commercial New Construction Program</i>	C5-1
<i>Nonresidential Load Management Program</i>	C6-1
D. Support Functions	
<i>Monitoring and Evaluation Plan</i>	D1-1
<i>Accounting Plan</i>	D2-1
<i>Implementation Guidelines</i>	D3-1

Executive Summary

The following pages describe a set of programs which MidAmerican Energy Company (MidAmerican or the Company) proposes to offer to its electric and natural gas customers in Illinois. These programs are being filed in accordance with the conditions set forth in 220 ILCS 5/8-408, and as such, the programs described here are intended to be the same as or comparable to the energy efficiency programs that MidAmerican has offered its customers in Iowa for over 16 years. MidAmerican is pleased to offer these services in Illinois and looks forward to helping customers take advantage of the programs to lower energy costs, improve business competitiveness and help the environment.

1. Overview of Programs

MidAmerican has designed a comprehensive set of programs to meet customers' varied needs. Table 1 summarizes the programs, as well as program marketing names and target markets (by fuel). The programs offer services to:

- Electric and natural gas customers,
- Residential, commercial, industrial and government customers,
- Large and small customers,
- Homeowners, commercial building owners and tenants,
- Customers in existing and new buildings and
- Customers buying individual pieces of equipment and customers pursuing more comprehensive energy efficiency solutions.

Table 1
Summary of Illinois Programs

Program	Marketing Name (where applicable)	Fuel	
		Natural Gas	Electric
Residential			
Residential Equipment		✓	✓
Residential Energy Audit	HomeCheck®	✓	✓
Low Income		✓	✓
Residential New Construction	New Homes	✓	✓
Residential Load Management	SummerSaver SM		✓
Nonresidential			
Nonresidential Equipment		✓	✓
Nonresidential Custom	Custom Systems	✓	✓
Small Commercial Energy Audit	BusinessCheck®	✓	✓
Nonresidential Energy Analysis		✓	✓
Commercial New Construction		✓	✓
Nonresidential Load Management	Curtailement		✓

Residential programs include:

Residential Equipment program, which provides rebates to encourage customers to purchase high-efficiency space conditioning and water heating equipment.

Residential Audit program (or HomeCheck), which provides free online and on-site energy audits, direct installation of simple energy efficiency measures, insulation rebates and also coordinates MidAmerican’s participation in the national *Change a Light, Change the World* retail sales campaign for compact fluorescent lamps.

Residential Low-Income program, which utilizes the Project NOW Community Action Agency to provide free energy audits and free installation of lighting, water heating and insulation measures for low-income customers qualifying for the federal Weatherization Assistance Program.

Residential New Construction program (or New Homes), which provides financial incentives to builders implementing comprehensive or prescriptive energy efficiency strategies in new homes.

Residential Load Management program (or SummerSaver), which provides financial incentives to customers who allow MidAmerican to cycle off their central air conditioning on summer peak days.

Nonresidential programs include:

Nonresidential Equipment program, which provides rebates to encourage customers to purchase efficient heating, cooling, lighting, motor and commercial kitchen equipment.

Nonresidential Custom program (or Custom Systems), which provides financial incentives for individual projects (as opposed to comprehensive efficiency strategies targeting entire facilities) not defined in MidAmerican's Nonresidential Equipment program.

Small Commercial Audit program (or BusinessCheck), which serves small business customers by providing energy audits (online and on-site), direct installation of simple energy efficiency measures and rebates for more extensive projects.

Nonresidential Energy Analysis program, which provides a free walk-through audit, a free business-process assessment, cost-sharing for comprehensive energy analysis and financial incentives to implement comprehensive energy efficiency upgrades in large, existing commercial buildings as well as industrial facilities and processes.

Commercial New Construction program, which provides financial incentives to builders and developers implementing comprehensive energy efficiency strategies in new building construction and major renovations to existing structures.

Nonresidential Load Management program (or Curtailment), which provides financial incentives to large customers who commit to curtailing load on summer peak days.

2. Estimated Program Budgets

Table 2 lists estimated program budgets for the years 2008 to 2012. MidAmerican proposes investing over \$20 million in these programs over the five-year period, including:

- Almost \$7 million on natural gas programs and over \$13 million on electric programs and
- Almost \$10 million on residential programs and over \$10 million on nonresidential programs.

Accounting systems will ensure that costs for providing the programs are recovered from appropriate customers: electric program costs from electric customers and natural gas program costs from natural gas customers; residential program costs from residential customers and nonresidential program costs from nonresidential customers.

Table 3 lists estimated implementation costs by functional category, including incentives paid directly to program participants as well as support services, such as administration and advertising, necessary to deliver programs. About three-quarters of the costs provide direct benefits to customers for energy efficiency measures, either through incentive payments or through equipment and installation costs MidAmerican incurs directly to operate electric load management programs.

**Table 2
Estimated Budgets by Program (\$000)**

	Natural Gas						Electric						Total					
	2008	2009	2010	2011	2012	5-year Total	2008	2009	2010	2011	2012	5-year Total	2008	2009	2010	2011	2012	5-year Total
Residential																		
Residential Equipment	\$217	\$370	\$434	\$443	\$452	\$1,916	\$171	\$293	\$343	\$350	\$358	\$1,515	\$388	\$663	\$777	\$793	\$810	\$3,431
Residential Energy Audit	\$258	\$381	\$363	\$369	\$377	\$1,748	\$153	\$177	\$181	\$184	\$188	\$883	\$411	\$558	\$544	\$553	\$565	\$2,631
Low Income Weatherization	\$64	\$115	\$118	\$120	\$125	\$542	\$29	\$56	\$57	\$60	\$60	\$262	\$93	\$171	\$175	\$180	\$185	\$804
Residential New Construction	\$121	\$158	\$199	\$151	\$153	\$782	\$68	\$90	\$113	\$115	\$117	\$503	\$189	\$248	\$312	\$266	\$270	\$1,285
Residential Load Management	\$0	\$0	\$0	\$0	\$0	\$0	\$122	\$424	\$364	\$342	\$364	\$1,616	\$122	\$424	\$364	\$342	\$364	\$1,616
Total Residential	\$660	\$1,024	\$1,114	\$1,083	\$1,107	\$4,988	\$543	\$1,040	\$1,058	\$1,051	\$1,087	\$4,779	\$1,203	\$2,064	\$2,172	\$2,134	\$2,194	\$9,767
Nonresidential																		
Nonresidential Equipment	\$22	\$37	\$44	\$45	\$46	\$194	\$146	\$244	\$276	\$281	\$288	\$1,235	\$168	\$281	\$320	\$326	\$334	\$1,429
Nonresidential Custom	\$43	\$88	\$112	\$116	\$119	\$478	\$44	\$65	\$67	\$68	\$69	\$313	\$87	\$153	\$179	\$184	\$188	\$791
Small Commercial Energy Audit	\$52	\$77	\$108	\$111	\$113	\$461	\$35	\$43	\$47	\$50	\$54	\$229	\$87	\$120	\$155	\$161	\$167	\$690
Nonresidential Energy Analysis	\$8	\$17	\$29	\$42	\$49	\$145	\$68	\$105	\$137	\$170	\$190	\$670	\$76	\$122	\$166	\$212	\$239	\$815
Commercial New Construction	\$20	\$28	\$78	\$127	\$130	\$383	\$124	\$179	\$359	\$499	\$510	\$1,671	\$144	\$207	\$437	\$626	\$640	\$2,054
Nonresidential Load Management	\$0	\$0	\$0	\$0	\$0	\$0	\$652	\$925	\$1,010	\$1,032	\$1,055	\$4,674	\$652	\$925	\$1,010	\$1,032	\$1,055	\$4,674
Total Nonresidential	\$145	\$247	\$371	\$441	\$457	\$1,661	\$1,069	\$1,561	\$1,896	\$2,100	\$2,166	\$8,792	\$1,214	\$1,808	\$2,267	\$2,541	\$2,623	\$10,453
Total																		
Total	\$805	\$1,271	\$1,485	\$1,524	\$1,564	\$6,649	\$1,612	\$2,601	\$2,954	\$3,151	\$3,253	\$13,571	\$2,417	\$3,872	\$4,439	\$4,675	\$4,817	\$20,220

**Table 3
Estimated Budgets by Function (\$000)**

	Natural Gas						Electric						Total					
	2008	2009	2010	2011	2012	5-Year Total	2008	2009	2010	2011	2012	5-Year Total	2008	2009	2010	2011	2012	5-Year Total
Planning & Design	\$88	\$90	\$92	\$80	\$81	\$431	\$185	\$192	\$197	\$201	\$206	\$981	\$273	\$282	\$289	\$281	\$287	\$1,412
Administration	\$162	\$168	\$171	\$160	\$163	\$824	\$271	\$277	\$282	\$290	\$296	\$1,416	\$433	\$445	\$453	\$450	\$459	\$2,240
Advertising & Promotion	\$99	\$101	\$105	\$92	\$96	\$493	\$188	\$191	\$196	\$199	\$203	\$977	\$287	\$292	\$301	\$291	\$299	\$1,470
Incentives	\$397	\$834	\$1,039	\$1,122	\$1,153	\$4,545	\$837	\$1,535	\$1,953	\$2,172	\$2,251	\$8,748	\$1,234	\$2,369	\$2,992	\$3,294	\$3,404	\$13,293
Monitoring & Evaluation	\$24	\$25	\$25	\$25	\$25	\$124	\$85	\$86	\$88	\$91	\$96	\$446	\$109	\$111	\$113	\$116	\$121	\$570
Equipment	\$35	\$53	\$53	\$45	\$46	\$232	\$46	\$229	\$176	\$151	\$152	\$754	\$81	\$282	\$229	\$196	\$198	\$986
Installation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$91	\$62	\$48	\$49	\$250	\$0	\$91	\$62	\$48	\$49	\$250
Total Budget	\$805	\$1,271	\$1,485	\$1,524	\$1,564	\$6,649	\$1,612	\$2,601	\$2,954	\$3,151	\$3,253	\$13,571	\$2,417	\$3,872	\$4,439	\$4,675	\$4,817	\$20,220

3. Estimated Energy and Demand Savings

As a result of the investments in program implementation, MidAmerican expects to help customers install over 200,000 energy efficiency measures in homes and businesses by 2012. These measures will reduce MidAmerican's annual energy requirements by over 1.5 million therms of natural gas and over 69 million kilowatt-hours of electricity (see Table 4). In addition, the measures will reduce MidAmerican's electric peak demand by over 39 megawatts. If MidAmerican is authorized to continue offering these programs after 2012, the cumulative savings will continue to grow.

Table 4
Cumulative Energy and Demand Savings

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	6,021,280	18,163,945	34,101,174	51,651,111	69,419,052
Peak Demand (kW)	14,628	25,097	31,131	35,266	39,406
Natural Gas Impacts					
Annual Energy (therms)	126,642	393,130	753,946	1,156,034	1,561,007
Peak-Day Demand (therms)	1,824	5,733	11,035	16,815	22,669

* June-December

4. Organization of the Report

The remainder of the report provides additional details on the programs and their expected results. After this introduction, the report includes the following sections:

- Section B describes the residential programs.
- Section C describes the nonresidential programs.
- Section D describes support services required to deliver the programs, including a monitoring and evaluation plan, an accounting plan and implementation guidelines.

Residential Equipment Program

1. Program Description

This program promotes the purchase of high-efficiency equipment by residential customers in new and existing homes. The program provides customers with rebates to offset the higher purchase cost of efficient equipment, and information on the features and benefits of efficient equipment. Targeted equipment includes air conditioners, heat pumps, natural gas furnaces, natural gas boilers and water heaters. The program is delivered in partnership with a network of heating, ventilation and air conditioning (HVAC) contractors and administered by a program contractor.

2. Operations

This program is dealer-driven; that is, it relies on equipment dealers to promote the program, help customers understand the features and benefits of high-efficiency equipment and help customers fill out program applications. Customers are welcome to participate in the program on their own, but most dealers will become well versed in the program and will help customers navigate the program process.

The program is fairly streamlined. Key steps in program participation include:

- Completing the program application,
- Ensuring that equipment meets program qualifications,
- Processing rebate checks for qualified equipment and
- Verifying equipment installation for a sample of participants.

The program contractor provides a range of support services to manage the program, including processing applications, tracking program data, answering questions from dealers and

customers, verifying equipment installations and coordinating rebate distribution with MidAmerican's accounts payable department.

MidAmerican staff and contractors also provide additional support in the form of research on and development of new measures, promotion and monitoring and evaluation.

3. Value Proposition

Customers participating in the program receive three main benefits:

- *Saving money* in the short term through rebates and in the long term through lower utility bills;
- *Increased comfort* in homes with new high-efficiency products and
- *Helping out*, by reducing energy use, which decreases the environmental impact and need for new power plants.

4. Customer Targets

This program targets residential customers and landlords of residential customers in existing housing who purchase equipment promoted through the program. The program targets customers replacing existing equipment, but also is available to customers purchasing equipment for the first time, as well as customers in new construction who are not interested in participating in the comprehensive new construction program.

The program will be available throughout MidAmerican's Illinois service territory. However, the equipment must be fueled by natural gas and/or electricity delivered by MidAmerican.

Landlords installing larger equipment for master-metered multifamily buildings may use available nonresidential programs for technical and financial assistance.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment	Natural Gas Equipment
Customer Class	Building on residential electric rate	Building on residential gas rate
Customer Status	Residential customers; Landlords of customers	Residential customers; Landlords of customers
Building Type	Single-family; Multifamily (served by residential rate); Mobile home	Single-family; Multifamily (served by residential rate); Mobile home
Building Vintage	New or existing construction	New or existing construction
Geography	Installed in MidAmerican Illinois electric territory	Installed in MidAmerican Illinois gas territory

5. Trade Ally Targets

Any business selling or installing qualified equipment within MidAmerican’s Illinois service territory may participate in the program. The following types of trade allies are predominant:

- HVAC dealers,
- Plumbers and
- Large retail outlets (such as *Lowe’s* and *Home Depot*).

6. Eligible Measures

Attachment B1-1 provides the rebate schedule MidAmerican anticipates will be used for this program. This is similar to MidAmerican’s 2008 Iowa Residential Equipment program schedule. However, MidAmerican performs an annual review of qualifying equipment and may adjust measures and eligibility levels in the future as market conditions change.

7. Financial Incentives

The program provides rebates, on a per-device basis, to program participants installing qualifying equipment. For some equipment, the rebate will be a fixed amount per device while,

for other equipment, the rebate will increase with increasing equipment efficiency. MidAmerican expects the financial incentives for the Illinois program to follow the schedule provided in Attachment B1-1. However, MidAmerican performs an annual review of qualifying equipment and may adjust measures and rebate levels in the future as market conditions change.

8. Promotion

This program will rely primarily on point-of-sale dealer information to promote the program. MidAmerican will develop a brochure outlining the program's features, benefits, eligibility requirements and financial incentives, provide copies to targeted trade allies via the Company's Web site, direct mail and/or trade ally meetings. In addition, MidAmerican will highlight the program in bill inserts provided to all residential customers and conduct limited newspaper and other advertising

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	75,464	75,588	75,728	75,873	76,017
Natural Gas	60,474	60,498	60,548	60,616	60,686
Electric Measures					
Central Air Conditioners	247	525	632	632	632
Air-Source Heat Pumps	10	22	26	26	26
Geothermal Heat Pumps	13	27	32	32	32
Geothermal Ground Loops	13	27	32	32	32
Desuperheater Water Heaters	15	32	38	38	38
Room Air Conditioners	12	25	30	30	30
Natural Gas Measures					
Natural Gas Boilers	3	6	7	7	7
Natural Gas Furnaces	410	870	1,048	1,048	1,048
Natural Gas Water Heaters	52	111	134	134	134

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	241,227	744,732	1,344,205	1,943,679	2,543,152
Peak Demand (kW)	83	256	461	667	873
Natural Gas Impacts					
Annual Energy (therms)	35,596	111,061	201,921	292,781	383,641
Peak-Day Demand (therms)	516	1,611	2,928	4,246	5,563

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$14,000	\$15,000	\$15,000	\$15,000	\$16,000
Administration	\$26,000	\$26,000	\$27,000	\$27,000	\$28,000
Advertising & Promotion	\$20,000	\$20,000	\$21,000	\$21,000	\$21,000
Customer Incentives	\$101,000	\$218,000	\$266,000	\$272,000	\$278,000
Monitoring & Evaluation	\$4,000	\$4,000	\$4,000	\$5,000	\$5,000
Equipment	\$6,000	\$10,000	\$10,000	\$10,000	\$10,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$171,000	\$293,000	\$343,000	\$350,000	\$358,000
Natural Gas Budget					
Planning & Design	\$18,000	\$19,000	\$19,000	\$20,000	\$20,000
Administration	\$38,000	\$40,000	\$41,000	\$41,000	\$42,000
Advertising & Promotion	\$24,000	\$24,000	\$25,000	\$25,000	\$26,000
Customer Incentives	\$124,000	\$270,000	\$332,000	\$340,000	\$347,000
Monitoring & Evaluation	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Equipment	\$8,000	\$12,000	\$12,000	\$12,000	\$12,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$217,000	\$370,000	\$434,000	\$443,000	\$452,000
Total Budget					
Planning & Design	\$32,000	\$34,000	\$34,000	\$35,000	\$36,000
Administration	\$64,000	\$66,000	\$68,000	\$68,000	\$70,000
Advertising & Promotion	\$44,000	\$44,000	\$46,000	\$46,000	\$47,000
Customer Incentives	\$225,000	\$488,000	\$598,000	\$612,000	\$625,000
Monitoring & Evaluation	\$9,000	\$9,000	\$9,000	\$10,000	\$10,000
Equipment	\$14,000	\$22,000	\$22,000	\$22,000	\$22,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$388,000	\$663,000	\$777,000	\$793,000	\$810,000

Attachment B1-1

2008 Residential Equipment Rebate Schedule

Natural Gas Furnace Rebates

AFUE	REBATE AMOUNT
92%	\$250
93%	\$275
94%	\$300
95%	\$325
96%	\$350 (max. rebate)

Natural Gas Boiler Rebates

AFUE	REBATE AMOUNT
85-89.9%	\$100
90%	\$200
91%	\$250
92%	\$300
93%	\$350
94%	\$400 (max. rebate)

Air Conditioner Rebates

SEER	REBATE AMOUNT
14	\$200
15	\$300
16	\$400 (max. rebate)

Rebate Schedule

EQUIPMENT TYPE	ENERGY EFFICIENCY RATING	REBATE AMOUNT	TERMS AND CONDITIONS
Natural Gas Furnaces	92% AFUE or greater	\$250 + (\$25 x (AFUE-92))	Incentives calculated in increments of .1 AFUE; Maximum rebate \$350
Natural Gas Boilers	85 - 89.9% AFUE 90% or greater	85 - 89.9% - \$100 90% or greater: \$200 + (\$50 x (AFUE-90))	Incentives calculated in increments of .1 AFUE; Maximum rebate \$400
Natural Gas Water Heaters	<40 gal: 0.64 EF or greater 40-59 gal: 0.62 EF or greater >=60 gal: 0.85 TE or greater	\$50	EF: Energy Factor TE: Thermal Efficiency Tankless water heaters are not eligible.
Window Air Conditioners 5,000-7,999 BTU 8,000-13,999 BTU 14,000-19,999 BTU >=20,000 BTU	ENERGY STAR® EER >=10.7 EER >=10.8 EER >=10.7 EER >=9.4 EER	\$50	Must be ENERGY STAR-rated
Central Air Conditioners	14 SEER or greater >=11.5 EER	\$200 + (\$100 x (SEER-14)); Max \$400 \$100 (bonus if >=11.5 EER)	Must install a new matched condenser & coil; Incentives calculated in increments of .1 SEER; EER: Energy Efficiency Rating
Air-to-Air and Add-On Heat Pumps	>=14 SEER and >=8.5 HSPF >=11.5 EER	\$400 + (\$100 x (SEER-14)); Max \$600 \$100 (bonus if >=11.5 EER)	Minimum 18,000 Btuh/unit; Incentives calculated in increments of .1 SEER HSPF: Heating Seasonal Performance Factor EER: Energy Efficiency Rating
	>=14 SEER and <8.5 HSPF >=11.5 EER	\$200 + (\$100 x (SEER-14)); Max \$400 \$100 (bonus if >=11.5 EER)	
Ground-Source Heat Pumps			Rebates are per home and not per heat pump. Rebates are for single-family homes only; please call for rebate information on multifamily homes.
New Systems Closed loop Open system Replacement Equipment GSHP Desuperheaters	3.3 COP and 14.1 EER 3.6 COP and 16.2 EER 3.3 COP and 14.1 EER	\$2000/home \$1000/home \$1000/home \$100/home	Equipment and new ground loop installation only

All units must be rated by the Air Conditioning and Refrigeration Institute or the Gas Appliance Manufacturers Association.

PARTICIPATION GUIDELINES

Participating in the EnergyAdvantage® Residential Equipment program is easy. After installing qualifying equipment, simply submit a completed Equipment Rebate Application and detailed invoice to MidAmerican for approval. Your heating and cooling dealer has a supply of Equipment Rebate Applications and will participate in its completion. Your application must be postmarked by Jan. 31, 2009. Equipment included in the EnergyAdvantage New Homes program comprehensive incentive is not eligible for additional incentives in the Residential Equipment program. For more information, please call 800-894-9599.

DISCLAIMER: MidAmerican does not guarantee that installation and operation of energy-efficient equipment will result in reduced usage or in cost savings. The manner in which a customer uses and maintains energy-efficient equipment affects potential cost savings. MidAmerican makes no warranties, expressed or implied, with respect to any equipment purchased or installed, including, but not limited to, any warranty of merchantability or fitness for a particular purpose. In no event shall MidAmerican be held liable for any incidental or consequential damages or injuries resulting from defective equipment or installation. MidAmerican reserves the right to cancel or change these programs at any time. MidAmerican's acceptance of this application does not guarantee payment of rebate or acceptance of financing.



800-894-9599

www.MIDAMERICANENERGY.com/ee



Residential Audit Program

1. Program Description

This program encourages comprehensive efficiency improvements in existing homes by providing free online and on-site energy audits, installation of simple energy efficiency measures and financial incentives for insulation improvements. The program also coordinates with the annual *Change a Light, Change the World* campaign sponsored by the U.S. Environmental Protection Agency to encourage installation of compact fluorescent lamps (CFLs). The program is delivered through three program contractors and a network of insulation installers and is marketed as HomeCheck[®].

2. Operations

This program is delivered primarily by the audit contractor, who provides on-site audits, installs low-cost efficiency measures, specifies and verifies building shell measures, maintains inventory of low-cost measures, maintains a network of insulation installers, coordinates rebate distribution with MidAmerican's accounts payable department and provides program tracking.

The program also relies on two additional program contractors to deliver specific program components. One contractor provides the online audit functionality, which is available to all MidAmerican customers on MidAmerican's Web site. Another contractor manages the participation in the *Change a Light* campaign, coordinating with retailers selling CFLs as well as the fulfillment houses responsible for managing rebate coupons.

Key steps of the on-site audit component include:

- Scheduling and completing an on-site audit, during which the auditor evaluates efficiency opportunities, directly installs key low-cost measures and helps customers determine appropriate next steps,
- Coordinating, where appropriate, with an installer for insulation measures,
- Processing insulation rebate applications and
- Verifying insulation installation for a sample of participants.

The program also offers an online energy audit tool to give customers an opportunity to evaluate their own energy usage and opportunities for efficiency improvements. Customers using the online tool also can request an on-site audit by completing a simple Web form.

3. Value Proposition

Customers participating in the program receive the following benefits:

- ***Trustworthy energy efficiency advice*** from comprehensive online and in-person energy audits.
- ***Immediate savings*** through direct installation of low-cost lighting, water heating and other measures, as well as through CFLs purchased through the *Change a Light* campaign.
- ***Significant long term savings, increased comfort and increased housing values*** through building shell improvements.
- ***Lower hassle***, by relying on the program contractor to schedule audits, identify and install efficiency measures, coordinate insulation contractors and maintain quality control.

4. Customer Targets

This program targets residential customers (and landlords) in existing housing that is at least 10 years old and whose heating fuel is delivered by MidAmerican. Customers in rental housing must have approval from building owners to participate in the program.

When multifamily buildings receive at least some service on nonresidential tariffs – either because the building is master-metered or because common areas and building systems are served on nonresidential tariffs – customers receive services in coordination with the Small Commercial Audit program (BusinessCheck[®]).

All electric customers are eligible for the *Change a Light* campaign. All electric and natural gas customers are eligible for the online audit.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Online Audit	On-Site Audit	Low-Cost Measures	Insulation Rebate	Lighting Campaign
Customer Class	Residential rates	Residential rates	Residential rates	Residential rates	Residential rates
Customer Status	Homeowners; Landlords	Homeowners; Landlords	Homeowners; Landlords	Homeowners; Landlords	Customers
Building Type	Single-family; Multifamily; Mobile home	Single-family; Multifamily	Single-family; Multifamily	Single-family; Multifamily	Single-family; Multifamily; Mobile home
Building Vintage	All	At least 10 years old	At least 10 years old	At least 10 years old	All
Heating Utility	All	MidAmerican	MidAmerican*	MidAmerican*	N/A
Cooling Utility	All	N/A	N/A	MidAmerican*	N/A
Geography	All	Illinois	Illinois	Illinois	Illinois
Other	N/A	N/A	N/A	Pre-qualified during on-site audit	N/A

* MidAmerican may coordinate with other utilities to deliver program to customers served by multiple utilities.

5. Trade Ally Targets

Key trade allies for this program include:

- Insulation contractors and
- Retailers participating in the *Change a Light* campaign.

All insulation contractors (or customers themselves) are eligible to install approved building shell measures. However, MidAmerican will maintain a list of preferred insulation contractors who meet MidAmerican’s quality-control requirements and will provide MidAmerican customers with pre-specified prices (that the auditor can quote during the audit). Customers relying on contractors that are not on MidAmerican’s preferred list receive incentives based on the pricing offered by the preferred contractors; however, incentives will not exceed

customers' actual costs. MidAmerican also performs a higher percentage of quality-control verifications for contractors not on the preferred list.

Also, customers can work with other contractors to install additional measures recommended in the online or on-site audits that are not eligible for financial incentives.

6. Eligible Measures

During the on-site audit, the auditor may install the following measures:

- Water heater insulation blanket,
- Water heater pipe insulation,
- Faucet aerators,
- Low-flow showerheads,
- Water bed mattress pads,
- Programmable thermostats and
- Compact fluorescent lamps.

MidAmerican also will provide financial incentives to customers adding appropriate levels of insulation to ceilings, walls, foundations and band joists.

The *Change a Light* campaign also encourages customers to purchase CFLs from participating retail outlets.

7. Financial Incentives

The program offers participants three types of cost subsidies to lower or eliminate market barriers related to the high cost of energy-efficient equipment.

- **Full subsidies** are offered for lighting and water heating measures directly installed during the audit. The strategy here is to fully overcome market barriers concerning cost and perceived quality.

- **Partial subsidies** are offered for programmable thermostats directly installed during the audit. In these cases, the customer pays MidAmerican only a portion of the full cost of qualifying measures. This strategy requires a shared customer investment to help ensure that customers will utilize the measures to fully realize efficiency benefits.
- **Rebates** will be offered for some qualifying measures, such as insulation and CFLs purchased through the *Change a Light* campaign. Insulation rebates representing a portion of the total installed cost will be sent by MidAmerican to the homeowner (following installation verification, if appropriate). The strategy is to lower costs to a level likely to motivate customers to follow through with the recommendations. Rebates for *Change a Light* will be defined for qualifying equipment and be available through point-of-sale rebate coupons to offset a portion of the purchase costs.

MidAmerican anticipates setting insulation rebates at 70 percent of qualified installation costs, capped at a total of \$600 per household for any combination of ceiling, sidewall, crawl space and band joist insulation projects. MidAmerican also plans to offer households a separate insulation rebate for foundation insulation projects at 70 percent of qualified installation costs capped at a total of \$600. Rebates for *Change a Light* are expected to average \$1.50 per lamp, and will be supplemented by an additional rebate of 50 cents per lamp from lighting manufacturers. MidAmerican performs an annual review of qualifying equipment and may adjust measures and rebate levels in the future as market conditions change.

8. Promotion

MidAmerican will rely primarily on bill inserts and press releases to promote the audit program. MidAmerican also will target homebuyers by including promotional materials in welcome packages the Company sends to new customers as part of a broader promotional

campaign. MidAmerican also will train its call center associates to recommend use of the online or on-site audits as strategies for customers calling with high-bill concerns.

If necessary to spur demand, MidAmerican also will target direct mail marketing to likely participants, including customers living in homes at least 10 years old and customers with high heating or air conditioning bills.

The *Change a Light* campaign will be promoted through Web sites, bill inserts and newspaper and magazine advertisements.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	74,625	74,625	74,625	74,625	74,625
Natural Gas	59,802	59,802	59,802	59,802	59,802
Electric Measures					
Audits (Electric Heat Homes)	10	17	17	17	17
Insulation (Air Conditioned Homes)	6	10	9	9	9
Change-A-Light CFLs	26,069	26,069	26,069	26,069	26,069
Natural Gas Measures					
Audits (Gas Heat Homes)	482	826	826	826	826
Insulation (Gas Heat Homes)	289	496	413	413	413

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

Table 3
Cumulative Energy Savings

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	1,748,163	3,721,978	5,695,625	7,669,272	9,642,919
Peak Demand (kW)	416	885	1,355	1,824	2,294
Natural Gas Impacts					
Annual Energy (therms)	50,085	136,021	212,867	289,713	366,559
Peak-Day Demand (therms)	578	1,570	2,457	3,344	4,231

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$10,000	\$10,000	\$11,000	\$11,000	\$11,000
Administration	\$37,000	\$38,000	\$38,000	\$39,000	\$39,000
Advertising & Promotion	\$27,000	\$27,000	\$28,000	\$28,000	\$29,000
Customer Incentives	\$72,000	\$93,000	\$95,000	\$97,000	\$100,000
Monitoring & Evaluation	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Equipment	\$4,000	\$6,000	\$6,000	\$6,000	\$6,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$153,000	\$177,000	\$181,000	\$184,000	\$188,000
Natural Gas Budget					
Planning & Design	\$19,000	\$19,000	\$20,000	\$20,000	\$20,000
Administration	\$45,000	\$46,000	\$47,000	\$48,000	\$49,000
Advertising & Promotion	\$28,000	\$29,000	\$30,000	\$30,000	\$31,000
Customer Incentives	\$155,000	\$272,000	\$251,000	\$256,000	\$262,000
Monitoring & Evaluation	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Equipment	\$7,000	\$11,000	\$11,000	\$11,000	\$11,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$258,000	\$381,000	\$363,000	\$369,000	\$377,000
Total Budget					
Planning & Design	\$29,000	\$29,000	\$31,000	\$31,000	\$31,000
Administration	\$82,000	\$84,000	\$85,000	\$87,000	\$88,000
Advertising & Promotion	\$55,000	\$56,000	\$58,000	\$58,000	\$60,000
Customer Incentives	\$227,000	\$365,000	\$346,000	\$353,000	\$362,000
Monitoring & Evaluation	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Equipment	\$11,000	\$17,000	\$17,000	\$17,000	\$17,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$411,000	\$558,000	\$544,000	\$553,000	\$565,000

Residential Low-Income Program

1. Program Description

This program encourages comprehensive energy efficiency improvements in existing low-income housing. The program is designed to provide funding to the local community action agency, Project NOW, Inc. to supplement its existing efforts to deliver the federally-funded Weatherization Assistance Program (WAP) within MidAmerican's Illinois service territory.

2. Operations

The program is designed to work through Project NOW's existing housing services system, which qualifies households and delivers services. Eligibility for weatherization services in owner-occupied homes provided by Project NOW is determined by family size and household income in accordance with federal guidelines. Renters who meet income guidelines also are eligible for weatherization assistance if the landlord agrees to the program terms. Highest priority for weatherization services are given to households with high energy bills in relation to income, the elderly, persons with disabilities and households with children. MidAmerican will work with Project NOW to define energy efficiency measures to be qualified and installed through the program with supplemental utility funding. Project NOW will provide free energy audits to identify appropriate measures as well as free on-site installation of measures that address building shell, water heating and lighting.

MidAmerican and Project NOW also will deliver the Energy Wise program to low-income customers not eligible for audit and installation services. Energy Wise participants receive energy efficiency education as well as a kit that includes energy efficiency measures that can be directly installed by participants in their homes.

Project NOW will take the following key steps to manage program participation including:

- Promoting the program,
- Qualifying customers for participation,
- Identifying appropriate cost-effective energy efficiency measures,
- Administering and managing the installation of qualifying measures,
- Participating in Energy Wise “train-the-trainer” sessions,
- Providing Energy Wise education and kits to qualifying customers,
- Providing program data to the Company within the applicable timeframe and
- Cooperating with program evaluation efforts.

3. Value Proposition

Customers participating in the low-income program receive the following main benefits:

- *Immediate savings* through the direct installation of low-cost lighting and water heating measures.
- *Significant savings, increased comfort* and *increased housing values* through building shell improvements.
- *Trustworthy energy efficiency advice* from agencies with no vested interest in selling the customer any specific products.

4. Customer Targets

To participate in the program, households must satisfy the following criteria:

- Qualify for income and other guidelines of Illinois’ WAP,
- Receive delivery of primary heating fuel from the Company and
- Reside in Illinois.

5. Trade Ally Targets

Beyond Project NOW and its equipment suppliers, no additional trade allies support the program.

6. Eligible Measures

MidAmerican will work with Project NOW to define a set of cost-effective energy efficiency measures to address through the program's audit and installation component. At this point, MidAmerican expects measures to include insulation, compact fluorescent lamps and water heating measures (low-flow showerheads, faucet aerators and pipe and tank insulation).

The Energy Wise kits include compact fluorescent lamps, low-flow showerheads and aerators, and furnace fan whistles.

7. Financial Incentives

Table 1 outlines the schedule that MidAmerican uses in its Iowa program to reimburse community action agencies for qualified measures. MidAmerican will work with Project NOW to develop a similar schedule for the Illinois program. However, MidAmerican performs an annual review of qualifying equipment and rebate levels and may adjust measures and reimbursement levels in the future as market conditions change.

MidAmerican's intent is to cover 100 percent of the costs required to install eligible measures and also to cover the administrative costs required by Project NOW to operate the program. MidAmerican will require reporting and documentation of weatherized homes so that energy savings can be tracked and recorded.

MidAmerican will provide Energy Wise kits at no cost to Project NOW for distribution to eligible customers.

**Table 1
Reimbursement Limits for Weatherization Measures**

Measure	Minimum Efficiency Level and Performance Criteria (if applicable)	Reimbursement Limit
Low-Flow Showerheads	2.5 GPM	\$10
Faucet Aerators	1.5 GPM Brass with chrome finish	\$3
Pipe Insulation	Rigid 0.5" foam with 0.75" diameter	\$3
Compact Fluorescent Lamps	5 to 30 watts ENERGY STAR®-labeled	\$7 each
Circleline Compact Fluorescent Lights	30 watts ENERGY STAR-labeled	\$10 each
Programmable Thermostat	ENERGY STAR-labeled	\$50 each
High-Efficiency Furnace	92+% AFUE in single-family homes; 90+% AFUE in mobile homes	\$2,500
Natural Gas Water Heater	0.62 EF	\$600
Electric Water Heater	Where no natural gas service or it is not feasible to install gas water heater 0.89 EF	\$600
Venting for Furnaces or Water Heaters		\$150 each
Refrigerator	Replacement is indicated based on Baseload Appliance Rating Tool (BART) test; ENERGY STAR-labeled	\$600
Freezer	Replacement is indicated by BART test; Manual defrost	\$400
Insulation Measures*	Includes wall, attic, floor or foundation, and band joist insulation or a combination thereof	\$2,500
General Repairs	In support of successful application of efficiency measures	\$300

* Project NOW may request a waiver from the Company when the size of the home requires additional insulation to achieve the required goal.

8. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
LIHEAP Customers	1,549	1,549	1,549	1,549	1,549
Electric Measures**					
Electric Customers	9	32	32	32	32
Energy Wise Kits (Customers)	41	71	71	71	71
Natural Gas Measures**					
Natural Gas Customers	10	33	33	33	33
Energy Wise Kits (Customers)	43	73	73	73	73
Total Households	10	33	33	33	33
Total Energy Wise Kits	43	73	73	73	73

* June-December

** Number of natural gas or electric customers participating in program. Most customers will have both natural gas and electric service.

9. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	10,503	46,219	81,935	117,651	152,849
Peak Demand (kW)	1	7	12	17	22
Natural Gas Impacts					
Annual Energy (therms)	2,982	12,877	22,772	32,667	42,562
Peak-Day Demand (therms)	32	139	246	353	460

* June-December

10. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$1,000	\$1,000	\$1,000	\$2,000	\$2,000
Administration	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Advertising & Promotion	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Customer Incentives	\$21,000	\$48,000	\$49,000	\$51,000	\$51,000
Monitoring & Evaluation	\$0	\$0	\$0	\$0	\$0
Equipment	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$29,000	\$56,000	\$57,000	\$60,000	\$60,000
Natural Gas Budget					
Planning & Design	\$7,000	\$7,000	\$7,000	\$8,000	\$9,000
Administration	\$15,000	\$16,000	\$16,000	\$16,000	\$17,000
Advertising & Promotion	\$4,000	\$4,000	\$4,000	\$4,000	\$5,000
Customer Incentives	\$35,000	\$84,000	\$87,000	\$88,000	\$90,000
Monitoring & Evaluation	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Equipment	\$2,000	\$3,000	\$3,000	\$3,000	\$3,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$64,000	\$115,000	\$118,000	\$120,000	\$125,000
Total Budget					
Planning & Design	\$8,000	\$8,000	\$8,000	\$10,000	\$11,000
Administration	\$20,000	\$21,000	\$21,000	\$21,000	\$22,000
Advertising & Promotion	\$5,000	\$5,000	\$5,000	\$5,000	\$6,000
Customer Incentives	\$56,000	\$132,000	\$136,000	\$139,000	\$141,000
Monitoring & Evaluation	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Equipment	\$3,000	\$4,000	\$4,000	\$4,000	\$4,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$93,000	\$171,000	\$175,000	\$180,000	\$185,000

Residential New Construction Program

1. Program Description

This program promotes the construction of energy-efficient new housing, addressing both the building shell and the equipment used inside the building. The program provides builders with financial incentives to offset the higher cost of energy-efficient construction and equipment. In addition, the program provides homeowners with energy-efficient new home certificates, which are recognized by the real estate community as evidence that the buildings are highly energy efficient.

The program is delivered through a program contractor, supported by a trade ally network of home builders and building inspectors. The program is marketed as the EnergyAdvantage[®] New Homes program.

2. Operations

The program has two tracks for certification: an EnergyAdvantage track defined by MidAmerican and an ENERGY STAR[®] track tied to the U.S. Environmental Protection Agency (EPA) program. Builders choosing the EnergyAdvantage track follow a prescriptive builder option package (BOP) of specific energy-efficient shell and equipment measures. Builders choosing the ENERGY STAR track work within the framework of the nationally accredited Home Energy Rating System (HERS) to receive a qualifying HERS score.

The program is delivered principally through key developers and building contractors. Rebates are provided directly to builders, who are responsible for completing program applications. Many builders pass rebates along to home buyers in the form of lower home purchase costs.

Builders also are responsible for promoting the program, using the New Homes certification and other MidAmerican support to help differentiate energy-efficient homes in the broader housing market. Builders also work with home buyers to help them understand the features and benefits of high-efficiency construction and equipment.

Key steps in program participation include:

- Meeting program specifications, by following the prescriptive BOP for the EnergyAdvantage track or the HERS rating process for the ENERGY STAR track,
- Filling out program applications,
- Working with MidAmerican to verify compliance with program specifications by using MidAmerican's verification contractor for the EnergyAdvantage track or by gaining HERS certification for the ENERGY STAR track,
- Providing home buyers with MidAmerican New Homes certification and
- Processing rebate checks, which are provided to the home builder.

The program contractor provides a range of support functions to manage the program, including processing applications, tracking program data, answering questions from builders and equipment subcontractors, certifying EnergyAdvantage participants and coordinating rebate distribution with MidAmerican's accounts payable department.

MidAmerican staff and additional contractors also provide additional support in the form of research and development into new measures, promotion and monitoring and evaluation.

3. Value Proposition

Customers participating in the program receive the following benefits:

- ***Financial construction incentive*** to reduce the cost and payback of energy efficiency measures installed by the owner or developer,

- ***Lower monthly energy bills*** due to the higher level of energy efficiency in the home,
- ***Potential higher resale value*** of the home due to MidAmerican energy-efficient certification,
- ***MidAmerican energy-efficient home certification*** and endorsement of measures installed through the program,
- ***Independent verification*** by MidAmerican that selected measures were installed correctly by the subcontractor and
- ***Increased comfort*** due to energy-efficient features.

4. Customer Targets

The program targets building contractors, developers and future owners of residential homes. The program has been designed to accommodate different building types, including single-family homes, multifamily buildings and manufactured homes, as well as different development approaches including production developers, custom builders and speculative developers.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Comprehensive Homes	Natural Gas Comprehensive Homes
Customer Class	Customers served under all residential electric rates are eligible for electric measures	Customers served under natural gas residential rates are eligible for natural gas measures
Customer Status	Homeowners and developers	Homeowners and developers
Building Type	Single-family homes (conventional and custom); Townhomes (slab on grade construction); Manufactured homes; Multi-family homes	Single-family homes (conventional and custom); Townhomes (slab on grade construction); Manufactured homes; Multi-family homes
Building Vintage	New construction	New construction
Geography	Installed in MidAmerican Illinois electric territory	Installed in MidAmerican Illinois gas territory

5. Trade Ally Targets

The program relies on the following trade allies, among others, for program delivery:

- Home builders,
- Home energy raters,
- Real estate firms and
- Real estate developers.

The builder’s role is to construct the home to comply with MidAmerican’s prescriptive BOP requirements or to meet the HERS requirements. The role of real estate firms is to educate and demonstrate to home purchasers the additional value and benefits created by MidAmerican energy-efficient home certification, such as reduced energy bills, increased comfort and higher property values. Real estate developers build subdivisions of single-family homes and townhome developments that comply with MidAmerican’s program requirements.

Builders also work with additional subcontractors responsible for installing the shell measures (e.g., insulation, windows) and equipment measures (e.g., air conditioners, furnaces, water heaters, lighting) necessary to meet program requirements.

The manufactured home component relies on modular home manufacturers for program delivery. They support the program in two ways: producing manufactured homes to comply with MidAmerican's energy-efficient manufactured home requirements and educating customers on the added benefits and value of a MidAmerican energy-efficient certified manufactured home over a conventional manufactured home.

6. Eligible Measures

Attachment B4-1 provides a copy of the rebate schedule MidAmerican anticipates will be used for this program. The rebate schedule defines the measures required to meet MidAmerican's prescriptive BOP for EnergyAdvantage certification in the program as well as the HERS requirements to obtain the ENERGY STAR certification. Measures covered in the BOP address insulation, ducts, windows, doors, infiltration, HVAC equipment, water heating equipment and appliances. Builders choosing the ENERGY STAR track address similar building systems, equipment and measures, but are allowed to make trade offs among systems (e.g., installing more wall insulation but less attic insulation).

MidAmerican expects the BOP and HERS requirements for the Illinois program to address measures listed in Attachment B4-1. MidAmerican will work with builders and public officials to ensure that Illinois requirements reflect local market conditions. MidAmerican also performs an annual review of qualifying equipment to ensure program requirements evolve to meet changing market conditions.

7. Financial Incentives

The program offers lump-sum financial incentives upon successful completion of construction and verification by MidAmerican. Incentives are paid on a per-home basis, payable upon successful completion and verification that the home construction complies with program requirements. Incentives vary based on whether MidAmerican provides utility delivery service for the heating system, cooling system or both systems. In addition, there is a separate incentive structure for customers installing geothermal heat pumps.

MidAmerican expects the financial incentives for the Illinois program to be similar to those provided in Attachment B4-1. However, to the extent that program eligibility requirements change to match local market conditions, financial incentives also may change. In addition, MidAmerican performs an annual review of qualifying equipment so that rebate levels can evolve to meet changing market conditions.

8. Promotion

This program will rely on direct contacts with builders, developers and trade associations to promote the program, including direct mailings, personal visits and attendance at home shows and other industry events. MidAmerican will develop a brochure outlining the program's features, benefits, eligibility requirements and financial incentives, and send copies to builders and other targeted trade allies. In addition, MidAmerican will highlight the program in bill inserts provided to all residential customers and conduct limited newspaper and other advertising.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	72	124	140	145	144
Natural Gas	14	24	50	68	70
Electric Measures					
Electric Heat Homes	1	4	7	7	7
AC Homes	7	23	45	45	45
Natural Gas Measures					
Natural Gas Heat Homes	8	29	58	58	58

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	36,874	173,321	432,149	690,977	949,806
Peak Demand (kW)	26	124	310	495	681
Natural Gas Impacts					
Annual Energy (therms)	4,487	20,061	51,033	82,005	112,978
Peak-Day Demand (therms)	68	302	769	1,236	1,702

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$18,000	\$18,000	\$19,000	\$19,000	\$19,000
Administration	\$15,000	\$16,000	\$16,000	\$16,000	\$16,000
Advertising & Promotion	\$20,000	\$20,000	\$21,000	\$21,000	\$22,000
Customer Incentives	\$6,000	\$23,000	\$44,000	\$45,000	\$46,000
Monitoring & Evaluation	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Equipment	\$7,000	\$11,000	\$11,000	\$12,000	\$12,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$68,000	\$90,000	\$113,000	\$115,000	\$117,000
Natural Gas Budget					
Planning & Design	\$30,000	\$31,000	\$32,000	\$18,000	\$18,000
Administration	\$30,000	\$31,000	\$32,000	\$18,000	\$18,000
Advertising & Promotion	\$34,000	\$35,000	\$35,000	\$22,000	\$23,000
Customer Incentives	\$10,000	\$37,000	\$76,000	\$78,000	\$79,000
Monitoring & Evaluation	\$4,000	\$4,000	\$4,000	\$3,000	\$3,000
Equipment	\$13,000	\$20,000	\$20,000	\$12,000	\$12,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$121,000	\$158,000	\$199,000	\$151,000	\$153,000
Total Budget					
Planning & Design	\$48,000	\$49,000	\$51,000	\$37,000	\$37,000
Administration	\$45,000	\$47,000	\$48,000	\$34,000	\$34,000
Advertising & Promotion	\$54,000	\$55,000	\$56,000	\$43,000	\$45,000
Customer Incentives	\$16,000	\$60,000	\$120,000	\$123,000	\$125,000
Monitoring & Evaluation	\$6,000	\$6,000	\$6,000	\$5,000	\$5,000
Equipment	\$20,000	\$31,000	\$31,000	\$24,000	\$24,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$189,000	\$248,000	\$312,000	\$266,000	\$270,000

Attachment B4-1

2008 Residential New Construction Rebate Schedule



2008 ENERGY ADVANTAGE® NEW HOMES PROGRAM

Feature	Equipment	2008 MidAmerican BOP
Cooling	Right-sized	Properly sized, recommend using ACCA Manual J or equivalent calculation
	Electric, forced-air, central air conditioners	14 SEER or greater
	Electric, forced-air, air-source heat pumps	14 SEER or greater
	Electric, ground-source heat pumps (closed loop)	14.1 EER or greater
	Electric, ground-source heat pumps (open loop)	16.2 EER or greater
Heating	Right-sized	Properly sized, recommend using ACCA Manual J or equivalent calculation
	Natural gas, forced-air furnace	92 AFUE or greater
	Natural gas, boiler	90 AFUE or greater
	Electric, forced-air, air-source heat pumps	8.5 HSPF or greater
	Electric, ground-source heat pumps (closed loop)	3.3 COP or greater
	Electric, ground-source heat pumps (open loop)	3.6 COP or greater
Thermostat	Clock programmable thermostat	Setback with two or more temperature settings
Ductwork	Sheetmetal ducts Sheetmetal joints	R-8 or greater insulation in unconditioned spaces Duct sealing at each joint using mastic and/or UL 181 approved tapes, such as metal-backed tape
	All low-pressure supply and return ducts Leakage	Duct sealing at each joint using mastic and/or UL 181 approved tapes, such as metal-backed tape 6% or less to unconditioned spaces
Infiltration	Natural air exchanges per hour (NACH)	0.45 or less NACH
	Mechanical ventilation	Strongly recommended if NACH is 0.31 or less
	Heat-recovery ventilator (HRV)	Optional
Insulation	Ceiling, insulation only	R-49 or greater
	Wood frame wall	R-19 or greater, or R-13 + 5
	Mass frame wall	R-15
	Floor, above unheated space	R-30 or greater
	Basement wall, insulation covering entire basement walls	R-10/13 or greater, basement does not need to be finished
	Basement, band/rim joist	R-19 or greater
	Slab	R-10 or greater under edge, back 4 feet
Crawl space	R-10 or greater - R-13 or greater cavity	
Windows	ENERGY STAR-qualified windows or better for the northern climate zone	.35 U-factor or less
	Windows rated by the National Fenestration Rating Council (NFRC)	Must have NFRC window stickers
	Maximum window area	18% or less of conditioned floor area
Doors		R-5 or greater
Water Heaters	Natural gas, up to 60 gallons	0.62 EF or greater
	Natural gas, 60 - 80 gallons	0.85 thermal efficiency or greater
	Electric	0.93 EF or greater
ENERGY STAR® Products	ENERGY STAR-qualified appliances, hardwired light fixtures, ceiling fans equipped with lighting fixtures, and/or ventilation fans (not including heating and cooling or windows)	Must have five installed ENERGY STAR-fixtures or appliances and supply documentation for each.

Questions? Please call 800-894-9599.

SEE REVERSE SIDE FOR INCENTIVES.

2008 ENERGYADVANTAGE® NEW HOMES PROGRAM REBATE LEVELS

Builders have two options to qualify for EnergyAdvantage rebates.

Option 1 - EnergyAdvantage New Homes Program Specifications

This program option is available to new, unoccupied single-family homes in the Illinois service areas of MidAmerican Energy using energy provided directly by MidAmerican. For multifamily units, please call in advance for specifications.

Builder must meet all requirements on reverse side, with no exceptions.

<u>EnergyAdvantage Home</u>	<u>Rebate</u>
MidAmerican gas and electric	\$ 1,500
MidAmerican gas heat only	\$ 1,000
MidAmerican cooling only	\$ 500
Ground-source heat pump homes	\$ 1,000 plus additional rebate per the 2008 Residential Equipment rebate schedule

Rebate amounts will be prorated for homes less than 1,800 sf.

Program eligibility expires for homes not verified by March 31, 2009. After this time homes must meet 2009 New Homes specifications.

Option 2 - ENERGY STAR®-Labeled Home

This program option is available to new, single-family homes in the Illinois service areas of MidAmerican Energy using energy provided directly by MidAmerican. For multifamily units, please call in advance for specifications.

Builder must provide certification from a RESNET-certified HERS rater showing the home meets or exceeds ENERGY STAR standards.

Specifications are available at www.energystar.gov.

<u>ENERGY STAR-Labeled Home</u>	<u>Rebate</u>
MidAmerican gas and electric	\$ 1,750
MidAmerican gas heat only	\$ 1,250
MidAmerican cooling only	\$ 500
Ground-source heat pump homes	\$ 1,000 plus additional rebate per the 2008 Residential Equipment rebate schedule

Rebate amounts will be prorated for homes less than 1,800 sf.

Questions? Please call 800-894-9599.
www.midamericanenergy.com/newhomes



Residential Load Management Program

1. Program Description

This program provides financial incentives to residential customers taking bundled electric service from MidAmerican in exchange for allowing MidAmerican to control their central air conditioning on hot summer days when the Company is experiencing a system peak demand or when operational conditions require use of the program. The program is promoted as SummerSaverSM. MidAmerican will begin preparation for offering this program during 2008, but will not begin program operation until 2009.

2. Operations

Participants agree to allow MidAmerican to control their equipment during summer months (June through September) of each year. MidAmerican installs a load control receiver (LCR) on participants' houses near the outside disconnect switches and air conditioning compressors. MidAmerican activates the LCRs through a network of pager and FM radio signals (although in Illinois, all customers will be enrolled in the pager network). LCRs operate by overriding customers' thermostats, shutting down the outdoor compressor, but allowing the indoor furnace fan to continue circulating previously cooled indoor air.

MidAmerican cycles equipment using a 50 percent strategy; that is, compressors are allowed to run in a pattern of 15-minutes on and 15-minutes off during the cycling period. MidAmerican's cycling periods run from 2 to 7 p.m., with randomized start times to minimize impacts on local distribution systems. Actual start time can vary between 2 and 2:30 p.m., with corresponding end times between 7 and 7:30 p.m. MidAmerican's cycling strategy may change depending on changes in available technologies for LCRs.

Cycling events have typically occurred up to 15 times per season, although no contractual provisions limit the number of annual events. The average number of events per year in recent history is eight.

The program is delivered by energy efficiency staff and an administrative program contractor. Energy efficiency staff set incentive levels, develop marketing materials and coordinate communication among the internal and external staff involved in the program. The program contractor manages customer enrollment and mailings, maintains a network of LCR installers, answers customer questions using a dedicated toll-free phone line, tracks program data, operates program software and hardware systems, and helps coordinate incentive distribution with MidAmerican's billing and accounts payable departments.

Key steps in program participation include:

- Soliciting new program participants through direct mailings to targeted customers,
- Enrolling new participants,
- Coordinating installation of LCRs,
- Managing cycling events during the summer season,
- Servicing and maintaining installed LCRs,
- Processing incentive bill credits through the billing system,
- Informing participants about program operations through targeted mailings and the Company Web site,
- Processing customers leaving the program, including removing LCRs (if necessary) and paying partial credits via check and
- Sending targeted mailings to current participants that move into new homes and also to customers moving into the homes of previous participants.

3. Value Proposition

Customers participating in this program receive three main benefits:

- **Financial benefits** in the form of an annual bill credit that reward them for participation,
- **Information** in a variety of forms, including clear rules specifying cycling conditions, cycling end-times and other program procedures and enrollment materials, and
- **Helping out**, by reducing peak energy use, associated environmental impacts and the need to build new power plants.

4. Customer Targets

All MidAmerican Illinois residential electric customers living in owner-occupied, single-family homes that have and use central air conditioning and take bundled electric service from MidAmerican are eligible for the program. Certain models of central air conditioners are not compatible with the LCR technology and therefore cannot participate. Customers with geothermal heat pumps are not eligible for the program.

In mailings soliciting new participants MidAmerican targets the following customers:

- Customers with significant summer electricity purchases indicating central air conditioning,
- Customers moving into homes previously enrolled in the program and
- Customers previously enrolled in the program moving to new homes in MidAmerican's service territory.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Customers
Customer Class	Residential bundled rates
Customer Status	Homeowners
Building Type	Single-family; Owner-occupied
Building Vintage	All ages
Geography	All Illinois customers
Equipment Required	Must have central air conditioner or air-source heat pump

5. Trade Ally Targets

MidAmerican’s program contractor maintains a network of heating, cooling and electrical contractors responsible for installing, servicing and removing LCRs on customers’ homes. In addition, trade allies providing HVAC maintenance services and those selling HVAC equipment also can influence customers’ decisions to participate in the program.

6. Eligible Measures

Beyond the control and communications hardware owned and maintained by MidAmerican, no additional measures are involved in this program. To participate in the program, customers must have a working central air conditioner or air-source heat pump. An outside disconnect switch located near the compressor also is required. If the customer does not have a disconnect switch, program electrical contractors will install one at no charge.

7. Financial Incentives

The incentive strategy is to provide customers with an incentive high enough to encourage ongoing participation, but low enough to prevent spending more than is necessary to attain results. Incentives for full-season participants are paid by bill credits on the customers’ utility bills at the completion of the cooling season.

MidAmerican anticipates paying first-year participants a \$40 end-of-season bill credit and recurring participants a \$30 bill credit. Participants leaving the program prior to September 30 would receive pro-rated incentives sent via checks. These incentives are similar to those paid by MidAmerican in its Iowa program. However, MidAmerican performs an annual review of qualifying equipment and may adjust rebate levels in the future as market conditions change.

8. Promotion

This program relies primarily on direct mailings to recruit and retain program participants. MidAmerican will send a targeted mailing to customers with summer electric usage high enough to indicate cooling equipment. The mailing will explain the program features and benefits and provide customers with simple actions to take to enroll in the program.

Once the program has recruited initial participants, additional mailings will be sent to maintain and increase participation levels.

- All participants receive a *Don't Forget* brochure in the spring reminding them about the program and providing them with a review of program operations as well as a toll-free phone number for any program questions.
- A *Welcome Home* card is sent to customers that move into a home with an LCR already installed. The card will inform the new customers that they are automatically enrolled in the program unless they indicate otherwise.
- A *Welcome Back* card is sent to past program participants that move into new MidAmerican electric homes in order to recruit them to join the program in their new homes.

Education will largely be accomplished through the Company Web site, direct mail and utility bill inserts. Education will address recruitment of new participants as well as operational

information (e.g., status of control days) to help existing participants. In addition, participants in the HomeCheck[®] energy audit program are provided with information and encouraged by energy auditors to participate in the program.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric Single-Family Households with CAC	44,000	44,000	44,000	44,000	44,000
Electric Measures					
LCRs Installed	-	1,324	2,169	2,780	3,377

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	-	20,125	32,509	41,084	49,212
Peak Demand (kW)	-	1,127	1,820	2,300	2,755

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$23,000	\$23,000	\$24,000	\$24,000	\$25,000
Administration	\$61,000	\$62,000	\$63,000	\$65,000	\$66,000
Advertising & Promotion	\$30,000	\$31,000	\$31,000	\$32,000	\$33,000
Customer Incentives	\$0	\$53,000	\$74,000	\$90,000	\$108,000
Monitoring & Evaluation	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Equipment	\$0	\$156,000	\$102,000	\$75,000	\$75,000
Installation	\$0	\$91,000	\$62,000	\$48,000	\$49,000
Electric Total	\$122,000	\$424,000	\$364,000	\$342,000	\$364,000

Nonresidential Equipment Program

1. Program Description

This program promotes the purchase of predefined high-efficiency equipment by commercial and industrial customers in both existing and new facilities. The program targets replacement and first-time purchases, but also is available to customers making retrofit installations. Participation is largely dealer-driven; that is, equipment dealers that help customers in the market buy new equipment understand the program as well as the features and benefits of eligible equipment.

MidAmerican promotes the program to both dealers and customers using four separate sales brochures: Heating and Cooling Equipment program, Lighting Equipment program, Motors and Variable-Speed Drives program and Commercial Kitchen Equipment program.

2. Operations

The program relies primarily on the equipment dealers selling nonresidential heating, ventilation, air conditioning (HVAC) equipment, lighting, motors, drives and commercial kitchen equipment to deliver the program to MidAmerican customers. The dealers promote the program, help customers understand the features and benefits of high-efficiency equipment, help customers select high-efficiency equipment and help customers fill out program applications. Customers are welcome to participate in the program on their own, but most dealers will become versed in the program and will help customers navigate the application process.

Key steps in program participation include:

- Ensuring equipment eligibility,
- Completing the program application,

- Processing rebate checks for qualified equipment and
- Verifying proper equipment installation for a sample of participants.

The program also employs a program contractor to provide a range of support functions, including processing applications, tracking program data, answering questions from dealers and customers, verifying equipment installations and coordinating rebate distribution with MidAmerican's accounts payable department. A second program contractor provides additional verification services.

3. Value Proposition

Customers participating in the program receive three main benefits:

- ***Saving money*** in the short term through rebates and in the long term through lower utility bills,
- ***Improving their businesses*** by providing more comfortable, productive environments, and
- ***Contributing*** by reducing energy use, associated environmental impacts and the need to build new power plants.

4. Customer Targets

The program targets nonresidential customers as well as building owners and property managers representing nonresidential facilities. The current program targets customers replacing existing equipment but also is available to customers:

- Purchasing equipment for the first time,
- Retrofitting functioning systems to upgrade to higher efficiency and
- Building new facilities, but who are not interested in participating in the comprehensive new construction program.

The program will be available throughout MidAmerican’s Illinois service territory. However, electric equipment must be installed in buildings for which MidAmerican delivers the electricity and natural gas equipment must be installed in buildings for which MidAmerican directly delivers the natural gas.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential electric rates	Nonresidential gas rates
Customer Status	Customer building or business owners; Landlords of customers	Customer building or business owners; Landlords of customers
Business Type	All	All
Building Type	All	All
Building Vintage	Existing and new construction	Existing and new construction
Geography	Installed in MidAmerican Illinois electric territory	Installed in MidAmerican Illinois gas territory
Size	All	All

5. Trade Ally Targets

Any business selling or installing qualifying equipment within MidAmerican’s service territory may participate in the program. The following types of trade allies are predominant:

- Lighting dealers,
- HVAC and plumbing contractors,
- Mechanical contractors,
- Electrical contractors,
- Motor and variable-speed drive dealers,
- Boiler and water heater suppliers and
- Commercial kitchen equipment suppliers.

6. Eligible Measures

The program covers a wide range of electric and natural gas equipment. Attachments C1-1 through C1-4 provide the four rebate schedules MidAmerican anticipates will be used for this program. These are similar to MidAmerican's 2008 Iowa Nonresidential Equipment program schedules. However, MidAmerican performs an annual review of qualifying equipment and may adjust measures and eligibility requirements in the future as market conditions change.

7. Financial Incentives

The program provides rebates to program participants installing qualifying equipment. Rebates are defined in units appropriate to each measure. Most rebates are defined per device, but others are defined per unit of equipment size (e.g., per Btu of heating capacity for large boilers). For some equipment, rebates also increase with increasing equipment efficiency. Attachments C1-1 through C1-4 show the rebates MidAmerican expects to pay in the Illinois Nonresidential Equipment program. However, MidAmerican performs an annual review of qualifying equipment and their associated rebate levels and may adjust rebates and measures in the future, as market conditions change.

8. Promotion

The program will rely primarily on equipment dealers to promote the program. MidAmerican will develop a brochure that outlines the program's features, benefits, eligibility requirements and financial incentives, and will provide copies to targeted trade allies via the Company's Web site, direct mail and/or trade ally meetings. In addition, MidAmerican will highlight the program on its Web site and in customer newsletters provided to all nonresidential customers, and will utilize limited newspaper and other advertising.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	9,272	9,322	9,371	9,419	9,464
Natural Gas	5,141	5,156	5,170	5,184	5,197
Electric Measures					
HVAC					
Air Conditioners	2	5	6	6	6
Heat Pumps	1	2	2	2	2
Chillers	-	-	-	-	-
Thermostats	-	1	1	1	1
Desuperheater Water Heaters	-	-	-	-	-
Lighting					
Compact Fluorescent Lamps	242	515	620	620	620
Compact Fluorescent Fixtures	36	77	93	93	93
T-5/T-8 Fluorescent Fixtures	340	721	869	869	869
Metal Halide Lamps	83	176	212	212	212
Occupancy Sensors	1	2	2	2	2
Exit Lights	10	22	26	26	26
High-Bay Fluorescent Fixtures	117	248	299	299	299
Motors					
Efficient Motors	17	36	43	43	43
Adjustable-Speed Drives	5	12	14	14	14
Natural Gas Measures					
Natural Gas Furnaces	38	80	96	96	96
Natural Gas Boilers	4	8	10	10	10
Thermostats	4	8	10	10	10

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

Table 3
Cumulative Energy and Demand Savings

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	3,576,477	12,062,245	21,988,432	31,914,618	41,840,804
Peak Demand (kW)	679	2,290	4,174	6,058	7,942
Natural Gas Impacts					
Annual Energy (therms)	7,324	22,374	40,785	59,196	77,607
Peak-Day Demand (therms)	165	504	918	1,332	1,746

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$24,000	\$25,000	\$25,000	\$26,000	\$26,000
Administration	\$19,000	\$20,000	\$20,000	\$20,000	\$21,000
Advertising & Promotion	\$23,000	\$23,000	\$24,000	\$24,000	\$25,000
Customer Incentives	\$65,000	\$155,000	\$186,000	\$190,000	\$194,000
Monitoring & Evaluation	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Equipment	\$9,000	\$15,000	\$15,000	\$15,000	\$16,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$146,000	\$244,000	\$276,000	\$281,000	\$288,000
Natural Gas Budget					
Planning & Design	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Administration	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Advertising & Promotion	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Customer Incentives	\$13,000	\$28,000	\$35,000	\$36,000	\$37,000
Monitoring & Evaluation	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Equipment	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$22,000	\$37,000	\$44,000	\$45,000	\$46,000
Total Budget					
Planning & Design	\$26,000	\$27,000	\$27,000	\$28,000	\$28,000
Administration	\$23,000	\$24,000	\$24,000	\$24,000	\$25,000
Advertising & Promotion	\$24,000	\$24,000	\$25,000	\$25,000	\$26,000
Customer Incentives	\$78,000	\$183,000	\$221,000	\$226,000	\$231,000
Monitoring & Evaluation	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Equipment	\$10,000	\$16,000	\$16,000	\$16,000	\$17,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$168,000	\$281,000	\$320,000	\$326,000	\$334,000

Attachment C1-1

2008 Nonresidential Equipment Rebate Schedule

HVAC Measures

2008 ELIGIBLE HEATING AND COOLING EQUIPMENT (NONRESIDENTIAL)

EQUIPMENT TYPE	EQUIPMENT CODE	MINIMUM COOLING EFFICIENCY ¹	MINIMUM HEATING EFFICIENCY ¹	REBATES
Air Conditioners				
Air-Cooled				
<65 MBtuh – Single Phase	010	14.0 SEER		$\$200 + (\$100 \times (\text{SEER} - 14.0))$ Maximum rebate \$400
<65 MBtuh – Three Phase	244	14.0 SEER		$\$100 + (\$100 \times (\text{SEER} - 14.0))$ Maximum rebate \$400
≥ 65 and <135 MBtuh	011	11.0 EER		$(\$50 \times (\text{EER} - 10.9)) \times \text{tons}$
≥ 135 and < 240 MBtuh	011	10.8 EER		$(\$50 \times (\text{EER} - 10.7)) \times \text{tons}$
≥ 240 and < 760 MBtuh	011	10.0 EER		$(\$50 \times (\text{EER} - 9.9)) \times \text{tons}$
≥ 760 MBtuh	011	9.7 EER		$(\$50 \times (\text{EER} - 9.6)) \times \text{tons}$
Water-Cooled				
<65 MBtuh	003	12.6 EER		$(\$50 \times (\text{EER} - 12.5)) \times \text{tons}$
≥ 65 and <135 MBtuh	003	12.1 EER		$(\$50 \times (\text{EER} - 12.0)) \times \text{tons}$
≥ 135 MBtuh	003	11.6 EER		$(\$50 \times (\text{EER} - 11.5)) \times \text{tons}$
Package Terminal Air Conditioners	112	10.5 EER		\$50 per unit
Heat Pumps				
Air-Source				
<65 MBtuh – Single Phase	198	14.0 SEER	8.5 HSPF	$\$400 + (\$100 \times (\text{SEER} - 14.0))$ Maximum rebate \$600
	398	14.0 SEER	<8.5 HSPF	$\$200 + (\$100 \times (\text{SEER} - 14.0))$ Maximum rebate \$400
<65 MBtuh – Three Phase	245	14.0 SEER	8.5 HSPF	$\$300 + (\$100 \times (\text{SEER} - 14.0))$ Maximum rebate \$600
≥ 65 and <135 MBtuh	099	11.0 EER	3.4 COP ²	$(\$50 \times (\text{EER} - 10.9)) \times \text{tons}$
≥ 135 and < 240 MBtuh	099	10.8 EER	3.2 COP	$(\$50 \times (\text{EER} - 10.7)) \times \text{tons}$
≥ 240 MBtuh	099	10.0 EER	3.2 COP	$(\$50 \times (\text{EER} - 9.9)) \times \text{tons}$
Water-Source				
<17 MBtuh	220	11.8 EER	4.4 COP ²	$(\$50 \times (\text{EER} - 11.7)) \times \text{tons}$
≥ 17 MBtuh	220	12.6 EER	4.4 COP	$(\$50 \times (\text{EER} - 12.5)) \times \text{tons}$
Ground-Source (Geothermal)				
<135 MBtuh				
Closed loop	396	14.1 EER	3.3 COP ²	\$300 per heating ton plus \$300 per ton ground loop ³
Open loop	397	16.2 EER	3.6 COP	\$300 per heating ton plus \$300 per ton ground loop ³
≥ 135 MBtuh	See Nonresidential Custom Systems Program			
Desuperheater	019	NA	NA	\$100 per unit
Package Terminal Heat Pumps	126	10.5 EER	3.0 COP ²	\$50 per unit
Chillers				
Air-Cooled, w/condenser	015	<1.25 kW/ton ⁴		$((\$400 \times (1.25 - \text{kW/ton})) + \$10) \times \text{tons}$
Water-Cooled				
<150 tons	055	<0.70 kW/ton ⁴		$((\$400 \times (0.70 - \text{kW/ton})) + \$10) \times \text{tons}$
≥ 150 and <300 tons	055	<0.63 kW/ton ⁴		$((\$400 \times (0.63 - \text{kW/ton})) + \$10) \times \text{tons}$
≥ 300 tons	055	<0.58 kW/ton ⁴		$((\$400 \times (0.58 - \text{kW/ton})) + \$10) \times \text{tons}$
Furnaces (Natural Gas)				
<225 MBtuh	040		92 AFUE	$\$250 + (\$25 \times (\text{AFUE} - 92))$ Maximum rebate \$350
≥ 225 MBtuh	See Nonresidential Custom Systems Program			
Boilers (Natural Gas)				
<300 MBtuh				
85-89.9 AFUE	038		85 AFUE	\$100 per unit
≥ 90 AFUE	038		90 AFUE	$\$200 + (\$50 \times (\text{AFUE} - 90))$ Maximum rebate \$400
≥ 300 and ≤ 2,500 MBtuh	006		82 Thermal Efficiency	$(\$0.80 + (\$0.20 \times (\text{TE} - 82))) \times \text{MBtuh}$
>2,500 MBtuh	See Nonresidential Custom Systems Program			
Water Heaters (Natural Gas)				
≤ 75 MBtuh				
≤ 30 gallons	205		0.64 EF	\$50 per unit
>30 gallons and ≤ 60 gallons	205		0.62 EF	\$50 per unit
>60 gallons	205		0.59 EF	\$50 per unit
>75 MBtuh	096		85 Thermal Efficiency	$(\$0.80 + (\$0.20 \times (\text{TE} - 85))) \times \text{MBtuh}$
Programmable Thermostats	See application	Must have two or more temperature settings		\$30 per unit

¹ Equipment efficiencies to be rated at full load according to test procedures and conditions specified in ASHRAE Standard 90.1.

² COP rated at 47° F dry bulb.

³ New ground loop installation only. Maximum rebated loop size determined by the rated heating capacity of installed unit.

⁴ kW/ton = 12/EER

EF – Energy Factor

For all energy-efficient equipment not listed above, please see **2008 Nonresidential Custom Systems Program** brochure.

DISCLAIMER: MidAmerican does not guarantee that installation and operation of energy-efficient equipment will result in reduced usage or in cost savings. The manner in which a customer uses and maintains energy-efficient equipment affects potential cost savings. MidAmerican makes no warranties, expressed or implied, with respect to any equipment purchased or installed, including, but not limited to, any warranty of merchantability or fitness for a particular purpose. In no event shall MidAmerican be held liable for any incidental or consequential damages or injuries resulting from defective equipment or installation. MidAmerican reserves the right to cancel or change these programs at any time. MidAmerican's acceptance of this application does not guarantee payment of rebate or acceptance of financing.



Attachment C1-2

2008 Nonresidential Equipment Rebate Schedule

Lighting Measures

2008 LIGHTING EQUIPMENT INFORMATION

Eligible Lighting Equipment

EQUIPMENT TYPE	FIXTURE SIZE	# OF LAMPS	LAMP TYPE	REBATE AMOUNTS
Fluorescent U-bend T-8 fixtures; for existing buildings only (with electronic ballasts)	2 Foot	2	T-8 U-Bend	\$10/fixture
Fluorescent T-8 or T-5 fixtures; for existing buildings only (with electronic ballasts)	2 Foot	1	T-8 or T-5	\$10/fixture
		2	T-8 or T-5	\$10
	4 Foot	1	T-8 or T-5	\$6
		2	T-8 or T-5	\$8
	8 Foot	3	T-8 or T-5	\$12
		4	T-8 or T-5	\$16
Fluorescent T-8 fixtures (with high output electronic ballasts)	8 Foot	1	T-8	\$8
		2	T-8	\$10
	8 Foot	1 or 2	T-8 HO	\$10
Fluorescent T-8 and T-5 fixtures, high-bay* (with high output electronic ballasts) For existing buildings For new buildings	4 Foot	3-6	T-8 or T-5 HO	\$12/lamp
	4 Foot	3-6	T-8 or T-5 HO	\$6/lamp
Occupancy sensors	N/A	N/A	Wall-mount and ceiling-mount (must control > 400 watts)	\$20 each
Occupancy sensors, high-bay	N/A	N/A	Fixture-mount (must control > 150 watts)	\$20 each
Pulse start metal halide fixtures	≥320 watts	1	Pulse start metal halide	\$15/fixture
360 watts metal halide lamps	N/A	1	For reduced wattage replacements only	\$3/lamp
Compact fluorescent lamps (self-ballast/screw-in)	N/A	1	9 watts and up	\$2/lamp**
Compact fluorescent fixtures (hard-wired)	N/A	Any	Hard-wired	\$10/fixture
150 watts compact fluorescent low-bay fixtures (hard-wired)	N/A	Any	Hard-wired	\$25/fixture
LED exit sign (existing buildings only)	N/A	2	LED	\$5/sign
LED traffic lighting retrofit	N/A	N/A	Red 12"	\$20 each
			Red 8"	\$15
			Green 12"	\$60
			Green 8"	\$40
			Green Arrow	\$30
			Don't Walk 12"	\$25
Don't Walk 8"	\$20			
Refrigerated case lighting fluorescent T-8 fixtures (with electronic ballasts)	Any	Any	T-8	\$10/fixture

* Requires dealer/customer to complete Supplemental Information form and submit ballast cut sheet. Forms available at www.midamericanenergy.com/lighting.

** Maximum rebate of \$2/lamp or 50 percent of purchase price per lamp.

Disclaimer: MidAmerican does not guarantee that installation and operation of energy-efficient equipment will result in reduced usage or in cost savings. The manner in which a customer uses and maintains energy-efficient equipment affects potential cost savings. MidAmerican makes no warranties, expressed or implied, with respect to any equipment purchased or installed, including, but not limited to, any warranty of merchantability or fitness for a particular purpose. In no event shall MidAmerican be held liable for any incidental or consequential damages or injuries resulting from defective equipment or installation. MidAmerican reserves the right to cancel or change these programs at any time. MidAmerican's acceptance of this application does not guarantee payment of rebate or acceptance of financing.

Attachment C1-3

2008 Nonresidential Equipment Rebate Schedule

Efficient Motor Measures

MOTOR INCENTIVES AVAILABLE (THREE PHASE ONLY)

NEMA PREMIUM – TEFC MOTORS

HORSE POWER	SPEED in RPM	NOMINAL EFFICIENCY	INCENTIVES AVAILABLE
1	3600	77.0%	\$25
	1800	85.5%	\$35
	1200	82.5%	\$35
1.5	3600	84.0%	\$25
	1800	86.5%	\$45
	1200	87.5%	\$45
2	3600	85.5%	\$35
	1800	86.5%	\$50
	1200	88.5%	\$40
3	3600	86.5%	\$35
	1800	89.5%	\$50
	1200	89.5%	\$65
5	3600	88.5%	\$45
	1800	89.5%	\$55
	1200	89.5%	\$90
7.5	3600	89.5%	\$70
	1800	91.7%	\$65
	1200	91.0%	\$135
10	3600	90.2%	\$70
	1800	91.7%	\$80
	1200	91.0%	\$160
15	3600	91.0%	\$155
	1800	92.4%	\$80
	1200	91.7%	\$185
20	3600	91.0%	\$125
	1800	93.0%	\$120
	1200	91.7%	\$260
25	3600	91.7%	\$200
	1800	93.6%	\$170
	1200	93.0%	\$240
30	3600	91.7%	\$200
	1800	93.6%	\$200
	1200	93.0%	\$255
40	3600	92.4%	\$210
	1800	94.1%	\$220
	1200	94.1%	\$385
50	3600	93.0%	\$310
	1800	94.5%	\$300
	1200	94.1%	\$425
60	3600	93.6%	\$310
	1800	95.0%	\$385
	1200	94.5%	\$450
75	3600	93.6%	\$385
	1800	95.4%	\$520
	1200	94.5%	\$575
100	3600	94.1%	\$695
	1800	95.4%	\$645
	1200	95.0%	\$1,000
125	3600	95.0%	\$475
	1800	95.4%	\$700
	1200	95.0%	\$625
150	3600	95.0%	\$600
	1800	95.8%	\$675
	1200	95.8%	\$900
200	3600	95.4%	\$700
	1800	96.2%	\$725
	1200	95.8%	\$1,275

NEMA PREMIUM – OPEN DRIP PROOF

HORSE POWER	SPEED in RPM	NOMINAL EFFICIENCY	INCENTIVES AVAILABLE
1	3600	77.0%	\$15
	1800	85.5%	\$25
	1200	82.5%	\$20
1.5	3600	84.0%	\$30
	1800	86.5%	\$25
	1200	86.5%	\$30
2	3600	85.5%	\$25
	1800	86.5%	\$25
	1200	87.5%	\$35
3	3600	85.5%	\$25
	1800	89.5%	\$30
	1200	88.5%	\$45
5	3600	86.5%	\$30
	1800	89.5%	\$40
	1200	89.5%	\$40
7.5	3600	88.5%	\$60
	1800	91.0%	\$70
	1200	91.2%	\$175
10	3600	89.5%	\$45
	1800	91.7%	\$100
	1200	91.7%	\$190
15	3600	90.2%	\$90
	1800	93.0%	\$140
	1200	91.7%	\$195
20	3600	91.0%	\$95
	1800	93.0%	\$115
	1200	92.4%	\$195
25	3600	91.7%	\$125
	1800	93.6%	\$125
	1200	93.0%	\$120
30	3600	91.7%	\$140
	1800	94.1%	\$125
	1200	93.6%	\$120
40	3600	92.4%	\$120
	1800	94.1%	\$175
	1200	94.1%	\$190
50	3600	93.0%	\$115
	1800	94.5%	\$105
	1200	94.1%	\$190
60	3600	93.6%	\$125
	1800	95.0%	\$205
	1200	94.5%	\$225
75	3600	93.6%	\$390
	1800	95.0%	\$255
	1200	94.5%	\$225
100	3600	93.6%	\$390
	1800	95.4%	\$360
	1200	95.0%	\$315
125	3600	94.1%	\$355
	1800	95.4%	\$400
	1200	95.0%	\$375
150	3600	94.1%	\$265
	1800	95.8%	\$250
	1200	95.4%	\$500
200	3600	95.0%	\$500
	1800	95.8%	\$430
	1200	95.4%	\$785

For motors > 200 HP, please use the Nonresidential Custom Systems program.



800-894-9599

www.MIDAMERICANENERGY.com/ee



Attachment C1-4

2008 Nonresidential Equipment Rebate Schedule

Commercial Kitchen Measures

2008 ELIGIBLE COMMERCIAL KITCHEN EQUIPMENT

EQUIPMENT TYPE/SIZE/CAPACITY	EQUIPMENT CODE	MINIMUM QUALIFYING EFFICIENCY	REBATES
Ice Makers			
Air-Cooled			
Ice-Making Head			
< 450 lbs. ice per day ¹	361	≤ 10.26 - 0.0086H kWh/100 lbs. ice ²	\$100
≥ 450 lbs. ice per day	361	≤ 6.89 - 0.0011H kWh/100 lbs. ice	\$100
Remote Condensing			
< 1,000 lbs. ice per day ¹	362	≤ 8.85 - 0.0038H kWh/100 lbs. ice ²	\$100
≥ 1,000 lbs. ice per day	362	≤ 5.10 kWh/100 lbs. ice	\$100
Self-Contained			
< 175 lbs. ice per day ¹	363	≤ 18.0 - 0.0469H kWh/100 lbs. ice ²	\$100
≥ 175 lbs. ice per day	363	≤ 9.80 kWh/100 lbs. ice	\$100
Water-Cooled			
Ice-Making Head			
< 500 lbs. ice per day ¹	364	≤ 7.80 - 0.0055H kWh/100 lbs. ice ²	\$100
≥ 500 lbs. ice per day	364	≤ 5.58 - 0.0011H kWh/100 lbs. ice	\$100
≥ 1,436 lbs. ice per day	364	≤ 4.00 kWh/100 lbs. ice	\$100
Self-Contained			
< 200 lbs. ice per day ¹	365	≤ 11.40 - 0.0190H kWh/100 lbs. ice ²	\$100
≥ 200 lbs. ice per day	365	≤ 7.60 kWh/100 lbs. ice	\$100
Solid Door Refrigerators			
< 19 cubic feet	374	≤ [(0.10 x cu. ft.) + 2.04] kWh/day ³	\$100
19 - 30 cubic feet	374	≤ [(0.10 x cu. ft.) + 2.04] kWh/day	\$125
31 - 60 cubic feet	374	≤ [(0.10 x cu. ft.) + 2.04] kWh/day	\$150
61 - 90 cubic feet	374	≤ [(0.10 x cu. ft.) + 2.04] kWh/day	\$200
Glass Door Refrigerators			
< 19 cubic feet	375	≤ [(0.12 x cu. ft.) + 3.34] kWh/day ³	\$125
19 - 30 cubic feet	375	≤ [(0.12 x cu. ft.) + 3.34] kWh/day	\$150
31 - 60 cubic feet	375	≤ [(0.12 x cu. ft.) + 3.34] kWh/day	\$175
61 - 90 cubic feet	375	≤ [(0.12 x cu. ft.) + 3.34] kWh/day	\$225
Solid Door Freezers			
< 19 cubic feet	376	≤ [(0.4 x cu. ft.) + 1.38] kWh/day ³	\$50
19 - 30 cubic feet	376	≤ [(0.4 x cu. ft.) + 1.38] kWh/day	\$75
31 - 60 cubic feet	376	≤ [(0.4 x cu. ft.) + 1.38] kWh/day	\$100
61 - 90 cubic feet	376	≤ [(0.4 x cu. ft.) + 1.38] kWh/day	\$125
Hot Food Holding Cabinets			
Any size	377	≤ 40 watts/cubic foot	\$250
Natural Gas Fryers			
Any size	386	ENERGY STAR ⁴ Minimum cooking efficiency of 50 percent; maximum idle energy rate of 9,000 Btu/hr	\$500

¹ Ice harvest rate

² Based on Consortium for Energy Efficiency (CEE) Tier 1 qualifying efficiency levels; for more information on qualifying equipment, visit www.cee1.org.

³ For more information on qualifying equipment, visit the ENERGY STAR Web site, www.energystar.gov/index.cfm?c=commercial_food_service.commercial_food_service.

⁴ For more information on qualifying equipment, visit the ENERGY STAR Web site, www.energystar.gov/index.cfm?c=fryers.pr_fryers.

H = Ice harvest rate



Nonresidential Custom Program

1. Program Description

This program provides a delivery channel for measures not targeted by MidAmerican's other nonresidential programs. The program allows customers to receive financial incentives for individual equipment and systems not covered under the prescriptive rebate schedules in the Nonresidential Equipment program. While customers also can implement custom measures through the Small Commercial Energy Audit, Nonresidential Energy Analysis and Commercial New Construction programs, the Custom program serves customers not interested in pursuing the comprehensive approaches of these other programs. The program is marketed as the Custom Systems program.

2. Operations

The program is generally customer-driven; that is, customers bring project ideas to MidAmerican and MidAmerican provides financial incentives for those projects meeting program guidelines. MidAmerican uses three program contractors to help deliver the program. One contractor works directly with customers to help identify and flesh out project ideas and also to help MidAmerican develop accurate and complete data to evaluate project proposals. The second contractor calculates cost-effectiveness and rebates for proposed projects. The third contractor is responsible for program administration, including processing applications, tracking program data and coordinating rebate distribution with MidAmerican's accounts payable department. Two of the contractors also help MidAmerican verify project installations.

Key steps in program participation include:

- Program enrollment, which involves filling out the program application to define project equipment, costs and energy savings,
- Technical assistance, where necessary, from the program contractor to help identify and define projects,
- Project qualification, which involves evaluating cost-effectiveness from a societal perspective (that is, MidAmerican provides incentives only to those projects that conserve energy for less than it would cost MidAmerican to supply the project with electricity and natural gas),
- Rebate calculation which, subject to certain constraints, buys down the customer investment so that it pays back in annual savings over a period of one and one-half to two years,
- Rebate processing, which involves coordination with MidAmerican's accounts payable department and
- Verification, where appropriate, that the project installation meets program guidelines.

3. Value Proposition

Customers participating in the program receive three main benefits:

- ***Flexibility*** to implement energy efficiency measures not covered by MidAmerican's other programs,
- ***Financial benefits*** in the form of rebates that buy down the higher incremental costs of energy efficiency strategies and ongoing utility bill savings throughout the life of the installed equipment and

- **Confidence** in efficiency investment through MidAmerican’s independent verification of customers’ cost and benefit analyses used to estimate energy savings.

4. Customer Targets

The program applies to all nonresidential customers in both new and existing buildings.

Measures covered by the Nonresidential Equipment program are not eligible for the program.

While the program is, by definition, very broad, principal targets include:

- Large commercial and industrial customers served by key account managers who can help them identify attractive project opportunities and
- Customers with equipment that lends itself to customized specifications (e.g., customers with compressed air or refrigeration systems).

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential electric rates	Nonresidential gas rates
Customer Status	Customer building or business owners; Landlords of customers	Customer building or business owners; Landlords of customers
Building Type	All	All
Business Type	All	All
Building Vintage	Existing and new construction	Existing and new construction
Geography	Installed in MidAmerican Illinois electric territory	Installed in MidAmerican Illinois natural gas territory
Size	All	All

5. Trade Ally Targets

The program relies on a wide variety of trade allies for program delivery, including:

- Engineering firms qualified to specify custom-efficiency improvements,
- Companies qualified to specify and install windows, insulation and other building shell improvements,

- Companies qualified to specify and install energy management systems and other building controls and
- Lighting and mechanical contractors qualified to specify and install complex or very large systems not covered by the Nonresidential Equipment program.

6. Eligible Measures

All energy efficiency measures not included in the Nonresidential Equipment program are potentially eligible for the program. The most common systems include:

- Low-E windows,
- Building insulation,
- Energy management systems and other building control systems,
- Refrigeration systems,
- Complex lighting systems,
- Heat-recovery measures,
- Heating and process measures,
- Large boilers,
- Large motors and
- Compressed air systems.

7. Financial Incentives

MidAmerican expects to provide financial incentives that buy down the customer payback to a period of two years for owner-occupied buildings and one and one-half years for tenant-occupied space. Rebates also would be capped to encourage customers to concentrate on the most cost-effective measures. This approach is consistent with MidAmerican's Iowa

Nonresidential Custom program. However, MidAmerican performs an annual review of rebate levels and may adjust rebates in the future as market conditions change.

MidAmerican also will require that custom projects be approved in advance of measure purchase and installation. MidAmerican may waive the pre-approval requirement where customers can exhibit circumstances that make advance application impractical (e.g., an emergency equipment failure). MidAmerican may lower incentives for customers who do not obtain pre-approval.

The program also may offer financial incentives for analysis support to customers installing measures that are new, unusual or otherwise in need of specialized energy analysis. In general, MidAmerican provides analysis support by directing the program contractor to perform analyses that are funded in whole or in part by MidAmerican. MidAmerican also may authorize and fund analyses by other qualified engineers or certified energy managers, including qualified customer staff.

8. Promotion

The promotional strategy for the program is to leverage the promotion and delivery efforts of other programs. The program will be identified and described in general terms in MidAmerican's general promotional materials as well as materials developed for individual programs. In addition, program-specific materials will be developed and distributed to interested customers identified through other programs. Customers who do not qualify for other programs (or who are not able to follow through with the requirements of other programs) also will be directed to the program as an alternate delivery option.

MidAmerican also will promote the program through personal contacts for selected target markets. These targets include customers served by trade allies for common measures, large

customers served by MidAmerican's staff of key account managers and trade ally firms specifying and installing custom measures.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	9,272	9,322	9,371	9,419	9,464
Natural Gas	5,141	5,156	5,170	5,184	5,197
Electric Measures					
Lighting	8	21	28	28	28
Large Motors	-	1	1	1	1
Insulation**	1	2	2	2	2
Low-E Windows (w/AC)**	-	1	2	2	2
Controls**	1	4	5	5	5
Other	2	5	7	7	7
Natural Gas Measures					
Large Boilers	8	20	26	26	26
Insulation**	2	5	6	6	6
Windows**	2	4	6	6	6
Controls**	8	20	26	26	26

* June-December

** Electric and natural gas measure counts for insulation, windows and controls are not additive.

10. Energy Savings

Table 3 provides energy-savings goals.

Table 3
Cumulative Energy Savings

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	42,977	231,376	454,144	676,913	899,682
Peak Demand (kW)	6	33	65	97	129
Natural Gas Impacts					
Annual Energy (therms)	15,354	53,793	103,496	153,198	202,901
Peak-Day Demand (therms)	249	873	1,679	2,485	3,291

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$7,000	\$8,000	\$8,000	\$8,000	\$8,000
Administration	\$17,000	\$18,000	\$18,000	\$18,000	\$19,000
Advertising & Promotion	\$8,000	\$9,000	\$9,000	\$9,000	\$9,000
Customer Incentives	\$4,000	\$20,000	\$22,000	\$23,000	\$23,000
Monitoring & Evaluation	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Equipment	\$3,000	\$5,000	\$5,000	\$5,000	\$5,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$44,000	\$65,000	\$67,000	\$68,000	\$69,000
Natural Gas Budget					
Planning & Design	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Administration	\$7,000	\$7,000	\$7,000	\$8,000	\$8,000
Advertising & Promotion	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Customer Incentives	\$29,000	\$74,000	\$98,000	\$101,000	\$103,000
Monitoring & Evaluation	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Equipment	\$1,000	\$1,000	\$1,000	\$1,000	\$2,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$43,000	\$88,000	\$112,000	\$116,000	\$119,000
Total Budget					
Planning & Design	\$9,000	\$10,000	\$10,000	\$10,000	\$10,000
Administration	\$24,000	\$25,000	\$25,000	\$26,000	\$27,000
Advertising & Promotion	\$10,000	\$11,000	\$11,000	\$11,000	\$11,000
Customer Incentives	\$33,000	\$94,000	\$120,000	\$124,000	\$126,000
Monitoring & Evaluation	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
Equipment	\$4,000	\$6,000	\$6,000	\$6,000	\$7,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$87,000	\$153,000	\$179,000	\$184,000	\$188,000

Small Commercial Audit Program

1. Program Description

This program encourages small business customers to adopt comprehensive energy efficiency strategies by providing online energy audits, more extensive on-site energy audits, direct installation of low-cost measures and recommendations for additional measures. The program also provides financial incentives more generous than those offered under the less comprehensive Nonresidential Equipment and Nonresidential Custom programs. In addition, the program covers the nonresidential portion of the multifamily buildings addressed by the Residential Audit program (i.e., covering master-metered apartments as well as common areas and building systems served on nonresidential tariffs). The program is marketed as BusinessCheck[®].

2. Operations

The program is delivered through two program contractors: one experienced with energy systems in buildings with complex business and energy operations, and the other more experienced with simpler buildings. The contractors provide a range of services, including:

- No-cost audits, which provide comprehensive analyses of buildings and equipment systems as well as free, immediate installation of low-cost measures such as compact fluorescent lamps (CFLs), light-emitting diode exit signs, water heater efficiency measures and simple controls,
- Recommendations for energy efficiency projects appropriate for small businesses, focusing primarily on lighting and insulation projects and
- Verifying completed installations for a sample of participants.

In addition, one of the program contractors also performs administrative functions such as program enrollment, data tracking and coordination of rebate distribution with MidAmerican's accounts payable department.

Where appropriate, the program also coordinates with the multifamily component of the Residential Audit program. MidAmerican serves multifamily buildings in a unified, comprehensive manner, addressing measures for central building systems such as insulation, windows, heating and cooling systems and common-area lighting, as well as measures appropriate to individual living units such as CFLs and individual heating and cooling systems. MidAmerican tracks the program efforts for individually-metered apartments (residential tariffs) through the residential program, and efforts for master-metered units and common areas (nonresidential tariffs) through the nonresidential program.

The program also offers an online energy audit tool to give customers an opportunity to evaluate their own energy usage and opportunities for efficiency improvements. Customers using the online tool also can request an on-site audit by completing a simple Web form.

3. Value Proposition

Customers participating in the program receive these four main benefits:

- ***Trustworthy energy-savings advice*** from trained auditors and through an online audit,
- ***Immediate savings*** through the direct installation of low-cost lighting, water heating and other energy-saving measures,
- ***Significant savings, increased comfort and increased property values*** through insulation, lighting and additional efficiency projects and

- **Convenience** by reliance on the program contractor to provide convenient scheduling, ongoing reminders to ensure follow-through on savings recommendations and quality control over efficiency installations.

4. Customer Targets

The program targets small commercial customers (owners and tenants) in existing commercial buildings. The program uses building size (generally, less than 25,000 square feet) and tariff (those used by smaller business customers) to target and qualify customers. However the program manager also uses discretion to determine whether this or other programs would better serve customer needs. Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	On-Site Audit	Direct Installation Measures	Project Rebates
Customer Class	Nonresidential rates serving smaller customers; MidAmerican must provide delivery of heating fuel	Nonresidential rates serving smaller customers; MidAmerican must provide delivery of fuel saved by measure	Nonresidential rates serving smaller customers; MidAmerican must provide delivery of fuel saved by measure
Customer Status	Building owners; Landlords; Tenants	Building owners; Landlords; Tenants	Building owners; Landlords; Tenants
Building Type	All	All	All
Business Type	All	All	All
Building Vintage	Existing buildings	Existing buildings	Existing buildings
Geography	Illinois	Illinois	Illinois
Size	Less than 25,000 sq. ft.	Less than 25,000 sq. ft.	Less than 25,000 sq. ft.
Other	N/A	N/A	Pre-qualified during on-site audit

5. Trade Ally Targets

Key trade allies for the program include the contractors delivering the follow-up projects identified during the audit. These are predominantly lighting and insulation contractors, but also contractors that install heating, cooling, motor, refrigeration and control systems.

6. Eligible Measures

Potentially all energy-saving measures are eligible for the program. Typical measures installed during the audit include CFLs, LED exit signs, occupancy sensors, programmable thermostats, water heater tank and pipe insulation, faucet aerators, vending machine controls and high-pressure rinse sprayers. Additional projects typically include insulation, T-8 and T-5 lighting systems, lighting controls, daylighting, custom task lighting, windows, efficient natural gas furnaces, efficient air conditioners, efficient heat pumps, programmable thermostats, commercial kitchen equipment, efficient refrigeration systems and energy management systems.

7. Financial Incentives

To encourage customers in this difficult-to-reach segment to participate in the program and invest in the comprehensive solutions recommended by the auditors, the program provides financial incentives larger than those available for the less comprehensive Equipment and Custom programs.

Two types of incentives are offered through the program.

- **Full subsidies** are offered for the audit as well as the low-cost measures directly installed during the audit. The strategy is to provide a source of immediate savings and to fully overcome market barriers concerning split incentives (i.e., landlords own the buildings but tenants pay utility bills), cost and perceived quality.

- **Rebates** are offered for the more extensive projects identified during the audit, including insulation, lighting and other measures. Rebates up to 70 percent of the installed cost of high-efficiency fluorescent lighting and upgraded insulation are offered to participants. Other efficiency projects are paid incentives consistent with the Nonresidential Equipment and Nonresidential Custom programs.

MidAmerican performs an annual review of qualifying equipment and may adjust measures and rebate levels in the future as market conditions change.

8. Promotion

The promotional strategy for the program focuses on direct mailing to target likely participants. The ideal customers for the program are those who are:

- Motivated to reduce energy use,
- Aware of the benefits of upgrading to energy-efficient measures,
- In older buildings with T-12 lighting and/or little or no ceiling or roof insulation,
- Using electricity a large number of hours per year,
- In buildings with intensive energy usage and
- Building owners (especially those with multiple buildings).

While it is difficult to capture these features in a direct mailing, the following types of customers will be targeted:

- Energy-intensive business segments, such as restaurants and smaller grocery stores,
- Smaller local chains with local or regional ownership and decision-making,
- Businesses in which the financial decision-maker is able to be present at the audit and
- Businesses with cost-effective energy efficiency opportunities.

In addition, MidAmerican will highlight the program in customer newsletters provided to all Illinois nonresidential customers and conduct limited newspaper and other advertising.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	9,138	9,187	9,236	9,284	9,329
Gas	5,110	5,126	5,140	5,153	5,167
Electric Measures					
Audits (Electric Heat Customers)	1	3	5	5	5
Direct-Install Measures (Electric)	72	149	247	247	247
Follow-Up Measures (Electric)	22	46	77	77	77
Natural Gas Measures					
Audits (Gas Heat Customers)	27	56	93	93	93
Direct-Install Measures (Gas)	208	429	713	713	713
Follow-Up Measures (Gas)	122	250	417	417	417

* June-December

10. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	15,832	53,769	112,610	171,450	230,291
Peak Demand (kW)	4	12	26	40	53
Natural Gas Impacts					
Annual Energy (therms)	10,814	32,354	68,068	103,781	139,495
Peak-Day Demand (therms)	215	645	1,356	2,068	2,780

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$5,000	\$5,000	\$5,000	\$6,000	\$6,000
Administration	\$17,000	\$18,000	\$18,000	\$19,000	\$20,000
Advertising & Promotion	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Customer Incentives	\$3,000	\$8,000	\$12,000	\$12,000	\$13,000
Monitoring & Evaluation	\$2,000	\$2,000	\$2,000	\$3,000	\$5,000
Equipment	\$2,000	\$4,000	\$4,000	\$4,000	\$4,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$35,000	\$43,000	\$47,000	\$50,000	\$54,000
Natural Gas Budget					
Planning & Design	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Administration	\$18,000	\$19,000	\$19,000	\$20,000	\$20,000
Advertising & Promotion	\$4,000	\$4,000	\$5,000	\$5,000	\$5,000
Customer Incentives	\$21,000	\$44,000	\$74,000	\$75,000	\$77,000
Monitoring & Evaluation	\$2,000	\$2,000	\$2,000	\$3,000	\$3,000
Equipment	\$2,000	\$3,000	\$3,000	\$3,000	\$3,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$52,000	\$77,000	\$108,000	\$111,000	\$113,000
Total Budget					
Planning & Design	\$10,000	\$10,000	\$10,000	\$11,000	\$11,000
Administration	\$35,000	\$37,000	\$37,000	\$39,000	\$40,000
Advertising & Promotion	\$10,000	\$10,000	\$11,000	\$11,000	\$11,000
Customer Incentives	\$24,000	\$52,000	\$86,000	\$87,000	\$90,000
Monitoring & Evaluation	\$4,000	\$4,000	\$4,000	\$6,000	\$8,000
Equipment	\$4,000	\$7,000	\$7,000	\$7,000	\$7,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$87,000	\$120,000	\$155,000	\$161,000	\$167,000

Nonresidential Energy Analysis Program

1. Program Description

This program promotes the analysis and implementation of comprehensive efficiency strategies in large, existing commercial buildings and industrial facilities and processes. The program is delivered in conjunction with engineering firms, architects and equipment contractors for commercial buildings and by specialty engineering firms and equipment contractors, as well as customers' in-house expertise, for industrial facilities. The program is delivered through a program contractor who provides energy analysis and project management services. A portion of the program is delivered under the service mark, *EfficiencyPartners*[®].

2. Operations

Key features of the program for *large commercial building* owners and property managers include:

- Establishment of a financial incentive strategy that encourages comprehensive efficiency strategies,
- Development of clear processes and guidelines for qualifying prospective customers to maximize the benefits of audit resources,
- Customer analysis reports tailored to provide the information customers need to make business decisions regarding energy efficiency investments,
- Benchmarking of management systems and energy performance against similar companies and
- Use of a program contractor to manage day-to-day program operation and to provide some of the marketing, audit and verification services required for program delivery.

Key features of the program for *industrial facilities* include:

- Establishment of a proactive program designed to seek out comprehensive efficiency strategies in industrial process applications,
- Development of specialty process expertise to deliver the program,
- Establishment of a financial incentive strategy that encourages comprehensive efficiency strategies,
- Development of clear processes and guidelines for qualifying prospective customers to maximize the benefits of audit resources,
- Customized customer analysis reports to provide the information customers need to make business decisions regarding energy efficiency investments,
- Benchmarking of management systems and energy performance against similar companies and
- Use of a program contractor to manage day-to-day program operation and to provide some of the marketing, audit and verification services required for program delivery.

Program assessments and program process evaluations, including surveys with participating and nonparticipating customers, will be used to determine program effectiveness. Adjustments to program features, such as qualification guidelines or incentives, may be made on an ongoing basis to maximize program efficacy.

3. Value Proposition

Customers participating in the program receive three main benefits:

- *Financial benefits* in the form of:
 - Free preliminary walk-through energy audit,
 - Free business process evaluation,

- Comprehensive energy analyses with costs shared by customers and MidAmerican (but free to customers that follow through on analysis recommendations) and
- Comprehensive incentives reducing the payback of implemented energy efficiency measures and providing ongoing bill savings.
- **Decision support** in the form of:
 - Comprehensive, quality information tailored to the customer’s business decision on the costs and benefits of energy efficiency strategies and
 - Detailed design specifications for the measures selected for implementation.
- **Confidence** in the final decision due to:
 - Extensive customer involvement in the review process and measure selection and
 - Independent verification by MidAmerican that selected measures were installed according to design specifications.

4. Customer Targets

For *large commercial buildings*, the program targets owners and tenants of existing buildings over 25,000 sq. ft. in size. Priority targets include:

- Buildings occupied by the owner, since these customers have fewer barriers to implementing energy efficiency strategies,
- Property and asset managers of building portfolios, highlighting the competitive advantage MidAmerican can bring to these firms through the program and
- Older buildings with high energy and maintenance costs.

Larger commercial buildings undergoing extensive remodeling are eligible for the Commercial New Construction program. Smaller commercial buildings are generally eligible for

the Small Commercial Energy Audit program or the Commercial New Construction program if undergoing extensive remodeling. Customers with smaller energy-intensive buildings, multiple buildings of mixed size under one owner or buildings with complex energy issues may be eligible for the program.

Large multifamily buildings with centrally-metered heating and/or cooling systems are eligible for the program as well. To the extent practical and as requested by customers, MidAmerican will coordinate energy analysis services for a building's central systems with residential services for tenant-occupied end-uses to maximize delivery efficiency.

For *industrial or manufacturing process facilities*, the program will be available to customers in existing as well as new industrial process facilities. The program will primarily target customers with peak demands above 500 kW. The program will be available to Company customers in all industry sectors, but initially will target customers in the metals, consumer products and water treatment industries, since these represent a significant portion of MidAmerican's industrial base.

Large industrial or manufacturing process customers also may be eligible through the commercial energy analysis component of the program for office space separated from or attached to the process facility, or for the process facility's building shell and mechanical comfort systems.

For both components of the program, eligibility for the analysis and implementation financial incentives outlined in Section 7 requires that customers agree to a comprehensive energy analysis of a significant portion of their facility as a result of a preliminary walk-through audit. For *commercial customers*, MidAmerican generally defines comprehensive as addressing systems that represent all energy use. For *industrial or manufacturing customers*, MidAmerican

generally defines comprehensive as an entire process audit. Customers unable to commit to a comprehensive audit will be referred to the Nonresidential Equipment and Nonresidential Custom programs. Customer eligibility requirements are outlined in Table 1.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment	Natural Gas Equipment
Customer Class	Nonresidential customers in all rate classes meeting other eligibility requirements	Nonresidential customers in all rate classes meeting other eligibility requirements
Customer Status	<u>Commercial</u> : Building owners, tenants and property managers also are targeted by the program, but owner must participate. Large multifamily buildings with central building systems are eligible <u>Industrial</u> : Process owners	<u>Commercial</u> : Building owners, tenants and property managers also are targeted by the program, but owner must participate. Large multifamily buildings with central building systems are eligible <u>Industrial</u> : Process owners
Business Type	<u>Commercial</u> : All businesses <u>Industrial</u> : All; initial emphasis on consumer products and metal sectors	<u>Commercial</u> : All businesses <u>Industrial</u> : All; initial emphasis on consumer products and metal sectors
Building Vintage	<u>Commercial</u> : Existing buildings <u>Industrial</u> : Existing and new facilities	<u>Commercial</u> : Existing buildings <u>Industrial</u> : Existing and new facilities
Geography	Illinois electric service territory	Illinois natural gas service territory
Size	<u>Commercial</u> : 25,000 sq. ft. or larger <u>Industrial</u> : All facilities	<u>Commercial</u> : 25,000 sq. ft. or larger <u>Industrial</u> : All facilities

5. Trade Ally Targets

The *commercial building* component of the program relies primarily on the following trade allies for program delivery:

- Engineering firms and certified energy managers qualified to provide comprehensive energy analysis for large buildings and sophisticated customers,
- Architects and engineering firms qualified to provide detailed building design specifications for selected energy efficiency strategies,
- Equipment and mechanical contractors qualified to install energy efficiency equipment and systems and

- General contractors and other construction firms qualified to manage energy efficiency construction renovation projects.

The *industrial process* component of the program relies primarily on the following trade allies for program delivery:

- Engineering firms qualified to provide comprehensive energy analysis for industrial processes specific to MidAmerican's customers,
- Engineering firms qualified to provide detailed process design specifications for selected energy efficiency strategies,
- Equipment contractors qualified to install specialty energy efficiency equipment required by MidAmerican's process customers and
- General contractors and other construction firms qualified to manage new or revamped energy efficiency process projects.

MidAmerican's program contractor will perform energy assessments of customer facilities. Where more detailed engineering assessments are required, MidAmerican's program contractor will work with customers to identify appropriate specialty engineering expertise, including resources available from MidAmerican's program contractor, other engineering firms pre-qualified by the program contractor, qualified contractors chosen by customers, or qualified customer staff. Where appropriate, MidAmerican will rely on its own program contractor to review customers' analyses and verify equipment installation.

MidAmerican also will rely on the program contractor for project management of commercial building energy analysis projects and industrial process energy analysis projects. The program contractor will be responsible for recruiting and managing qualified trade allies necessary to implement the program, for marketing the program to customers in conjunction with

Company staff, for providing implementation support in the form of preliminary walk-through and comprehensive analyses, and for monitoring and verification services.

MidAmerican may create partnerships with credible local engineering and energy organizations, which have already developed programs targeting Illinois commercial and industrial facilities. MidAmerican will leverage the processes, tools and marketing strategies already employed by these groups.

These partners and trade allies will play a key role in delivering the program. To support this key role, MidAmerican will implement a series of initiatives to increase overall awareness of the program, recognize outstanding performances and demonstrate the benefits of energy-efficient commercial buildings and industrial processes.

6. Eligible Measures

All energy efficiency measures are potentially eligible for the program. Typical *commercial building* measures will include daylighting, T-8 and T-5 lighting systems, lighting controls, custom task lighting, efficient HVAC equipment, HVAC controls, efficient motors, variable-speed drive motor controllers, efficient refrigeration systems, refrigeration controls and energy management systems. In addition, the program targets comprehensive efficiency strategies and reflects the interactions among different building systems.

Typical *industrial process* measures will include NEMA Premium[®] efficiency motors, variable-speed drives, motor replacement programs, efficient boilers and process heating systems, process heat pumps and other heat recovery systems, efficient refrigeration systems, pinch technology for steam processes and control systems. In addition, other process changes identified by customers, even if they do not require capital improvements, will be eligible for the program.

7. Financial Incentives

MidAmerican offers customers financial incentives for each step of the program process, including the preliminary walk-through audit, the comprehensive energy analysis and implementation.

MidAmerican will provide commercial and industrial customers with preliminary walk-through audits at no charge. The walk-through helps customers understand the potential for energy savings, the potential costs of the comprehensive energy analysis, the program process and expectations and other program alternatives that might benefit the customer. The strategy is to provide a service that has low cost to MidAmerican, while providing both MidAmerican and the customer the information necessary to make further commitments of costs and other program resources required for the comprehensive analysis and implementation.

MidAmerican provides qualified customers with comprehensive energy analyses for commercial buildings and for industrial process facilities on a shared-cost basis between MidAmerican and the customer. MidAmerican may provide full funding for the energy analyses, provided customers implement a predetermined level of the energy-savings measures. The strategy is to completely offset the analysis cost barrier of customers who follow through with implementation, but require some customer investment to ensure that customers are serious about following through.

MidAmerican also offers comprehensive implementation incentives structured to buy down the simple payback of customers' incremental cost of energy efficiency measures to one year. Incentives only will be offered on measures exceeding local building codes, where applicable, and that pass a societal cost-effectiveness analysis. Implementation incentives will be capped at a maximum buy down, where appropriate, of four years' payback of customers'

incremental costs. In addition, incentives may be time-limited, in whole or in part, to encourage customers to proceed to implementation or, in some cases, may be structured over time, consistent with an ongoing implementation plan developed as part of the program.

The incentive strategy is to offset the cost barrier associated with efficient equipment and systems, to promote comprehensive efficiency strategies and to encourage customers to move into implementation. MidAmerican may offer variations in incentive structure to accomplish these strategies. MidAmerican will continue to evaluate all incentives to ensure they continue to meet program goals.

8. Promotion

The promotional strategy for the program includes three components:

- **General promotion:** Program-specific materials and brochures will be distributed to interested parties, including building owners, property managers, architects, engineering firms, contractors and trade allies (e.g., lighting contractors).
- **Individual communication:** This takes place once prospective customers are identified and/or underway. Parties involved in the communication include the program contractor as well as MidAmerican staff (including key account managers and call center associates).
- **Trade ally promotion:** Promotional efforts may include articles, brochures, case studies and selected advertising in professional journals designed to make potential energy service partners aware of the program and to recognize participating customers, professionals and trade allies' projects, as well as to recognize outstanding trade ally and partner performance.

9. Participation

Table 2 provides program participation assumptions.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	86	87	87	87	87
Natural Gas	31	31	31	31	31
Electric Facilities**					
Technical/Business Assessments	3	5	5	5	5
Efficiency Projects	-	2	4	4	4
Natural Gas Facilities**					
Technical/Business Assessments	3	5	5	5	5
Efficiency Projects	-	2	4	4	4

* June-December

** Electric and natural gas participants are not additive. Most participants will receive both electric and natural gas service.

10. Energy Savings

Table 3 provides energy-savings goals.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	-	218,968	875,871	1,970,710	3,284,516
Peak Demand (kW)	-	29	118	265	442
Natural Gas Impacts					
Annual Energy (therms)	-	2,885	11,540	25,964	43,274
Peak-Day Demand (therms)	-	73	294	661	1,102

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Nonresidential Energy Analysis Program Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$7,000	\$8,000	\$8,000	\$8,000	\$8,000
Administration	\$21,000	\$21,000	\$22,000	\$23,000	\$23,000
Advertising & Promotion	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Customer Incentives	\$28,000	\$63,000	\$93,000	\$125,000	\$143,000
Monitoring & Evaluation	\$4,000	\$4,000	\$4,000	\$4,000	\$6,000
Equipment	\$2,000	\$3,000	\$4,000	\$4,000	\$4,000
Installation	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Electric Total	\$68,000	\$105,000	\$137,000	\$170,000	\$190,000
Natural Gas Budget					
Planning & Design	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Administration	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Advertising & Promotion	\$0	\$0	\$0	\$0	\$0
Customer Incentives	\$5,000	\$13,000	\$25,000	\$38,000	\$45,000
Monitoring & Evaluation	\$0	\$1,000	\$1,000	\$1,000	\$1,000
Equipment	\$0	\$0	\$0	\$0	\$0
Installation	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$8,000	\$17,000	\$29,000	\$42,000	\$49,000
Total Budget					
Planning & Design	\$8,000	\$9,000	\$9,000	\$9,000	\$9,000
Administration	\$23,000	\$23,000	\$24,000	\$25,000	\$25,000
Advertising & Promotion	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Customer Incentives	\$33,000	\$76,000	\$118,000	\$163,000	\$188,000
Monitoring & Evaluation	\$4,000	\$5,000	\$5,000	\$5,000	\$7,000
Equipment	\$2,000	\$3,000	\$4,000	\$4,000	\$4,000
Installation	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Total	\$76,000	\$122,000	\$166,000	\$212,000	\$239,000

Commercial New Construction Program

1. Program Description

This program promotes the design and construction of high-efficiency commercial buildings, serving customers undergoing new construction as well as major renovation of existing buildings. The program is delivered in partnership with key developers, architects, engineering firms and equipment contractors and provides separate delivery strategies targeting large and small buildings. The program provides a mix of technical and financial assistance to help reduce market barriers to energy efficiency.

2. Operations

The program is delivered through the assistance of a program contractor, who provides energy design assistance, project management and verification services. The contractor also helps MidAmerican strengthen relations with key trade allies. A second program contractor also assists with data tracking and rebate processing.

The program has slightly different tracks for large and small buildings, with larger buildings typically defined as those greater than 50,000 square feet of floor space. However, depending on the complexity of the building, the program manager may deviate from this size limit in specifying program services.

The program uses a similar process for both large and small buildings, although more detailed design and verification services are provided for larger building projects.

Key steps in program participation include:

- Program enrollment,

- Energy design assistance, through which the program contractor works with the design team to identify energy efficiency strategies for the building project and then uses computer modeling to assess the costs and benefits of different bundles of combined strategies,
- Selection of preferred design strategies by the building developer/owner,
- Verification by the program contractor that the preferred design strategies are incorporated into construction documents and into actual building (including rerunning computer models to capture the costs and benefits of revised construction approaches) and
- Processing rebate checks which are provided directly to building owners.

3. Value Proposition

Buildings participating in the program receive three main benefits:

- ***Financial benefits*** in the form of:
 - Free energy design assistance,
 - Comprehensive construction incentives that reduce the payback period of selected energy efficiency measures and
 - Lower monthly operating costs, state-of-the-art technologies, improved comfort and greater employee productivity.
- ***Decision support*** in the form of:
 - High-quality information on the costs and benefits of energy efficiency strategies potentially adaptable to the building and
 - Detailed design specifications for selected measures.
- ***Confidence*** in their final design decision due to:

- Owner/developer involvement in the measure selection and review process and
- Independent verification that selected measures are included in design specifications, construction documents and final installation.

4. Customer Targets

This program targets owners and developers of proposed new construction or renovation projects. Owners and developers who decide not to participate in the program still are eligible for energy efficiency incentives through MidAmerican's other nonresidential programs.

The large building component targets buildings larger than 50,000 square feet such as schools, universities and large office buildings. The small building component targets buildings such as medical clinics, small offices, commercial strip malls, school additions and retail space.

This program is not designed to help industrial customers constructing new manufacturing facilities and processes. These customers would be served under the Nonresidential Custom program. However, industrial customers would be eligible for this program for new, non-process buildings (e.g., office buildings, non-process warehouses).

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment*	Gas Equipment*
Customer Class	Nonresidential electric rates	Nonresidential gas rates
Customer Status	Building owners and developers	Building owners and developers
Building Type	Commercial buildings (i.e., non-manufacturing)	Commercial buildings (i.e., non-manufacturing)
Business Type	All	All
Building Vintage	New construction	New construction
Geography	Illinois	Illinois
Size	Large: 50,000 sq. ft. or more in size Small: below 50,000 sq. ft. in size	Large: 50,000 sq. ft. or more in size Small: below 50,000 sq. ft. in size

* Projects involving replacement of individual pieces of equipment are addressed through the Nonresidential Equipment and Nonresidential Custom programs.

5. Trade Ally Targets

The program relies primarily on the following trade allies for program delivery:

- Architect and engineering (A/E) firms,
- Developers,
- Construction firms/building contractors,
- Design-to-build contractors,
- Mechanical contractors and
- Equipment contractors, such as HVAC and electrical equipment.

6. Eligible Measures

All energy efficiency measures that improve energy efficiency relative to Illinois building standards are potentially eligible. Typical measures include daylighting, lighting controls, custom task lighting, Low-E windows, increased wall and roof insulation, efficient heating and cooling equipment, efficient motors, variable-speed drives and building controls.

7. Financial Incentives

The program offers financial incentives in three areas: design assistance, verification and comprehensive construction incentive. Design assistance and verification services are paid for by MidAmerican and come at no cost to the building owner/developer. In addition, a participation fee is paid to the design team used by the building owner/developer in order to compensate them for their additional costs of program participation. Participation fees are structured per square foot, to simplify administration for both MidAmerican and participating design firms.

Construction incentives are structured per unit of annual energy saved (e.g., \$/kWh and \$/therm) relative to the appropriate baseline. To encourage more comprehensive solutions, MidAmerican structures incentives to increase as annual savings increase. In 2007, Iowa incentives ranged from five to 14 cents per annual kilowatt-hour saved and from 40 cents to \$1.80 per annual therm saved. MidAmerican will work with builders and public officials to set Illinois incentives at levels that reflect local market conditions. MidAmerican also performs an annual review of qualifying equipment to ensure that program incentives evolve to meet changing market conditions.

8. Promotion

The promotional strategy for this program focuses on targeted trade allies through direct mail, magazine advertising and personal communication. Program-specific promotional materials and brochures will be mailed to interested parties, including owners, developers, architects, engineers, contractors and trade allies. Advertisements will be placed in appropriate professional and trade journals and publications. Presentations will be made at trade shows and professional association meetings. Presentations also will be made to targeted customer segments, such as school and hospital administrators.

9. Participation

Table 2 provides program participation assumptions. Note that completed design assistance and projects reflect the long lead times for new construction.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	49	49	49	48	45
Natural Gas	15	15	14	14	13
Electric Buildings**					
Large Buildings					
Energy Design Assistance	2	4	4	4	4
Completed Buildings	-	-	2	4	4
Small Buildings					
Energy Design Assistance	3	6	6	6	6
Completed Buildings	-	2	6	7	7
Natural Gas Buildings**					
Large Buildings					
Energy Design Assistance	2	4	4	4	4
Completed Buildings	-	-	2	4	4
Small Buildings					
Energy Design Assistance	3	6	6	6	6
Completed Buildings	-	2	6	7	7

*June-December

**Electric and natural gas participants are not additive. Most participants will receive both electric and natural gas service.

10. Energy Savings

Table 3 provides energy-savings goals.

Table 3
Cumulative Energy Savings

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	-	363,783	2,504,043	5,875,106	9,246,170
Peak Demand (kW)	-	77	529	1,241	1,953
Natural Gas Impacts					
Annual Energy (therms)	-	1,703	41,464	116,727	191,990
Peak-Day Demand (therms)	-	16	387	1,090	1,793

* June-December

11. Budget

Table 4 provides program budget assumptions.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$31,000	\$32,000	\$33,000	\$33,000	\$35,000
Administration	\$20,000	\$20,000	\$20,000	\$22,000	\$22,000
Advertising & Promotion	\$20,000	\$21,000	\$21,000	\$22,000	\$22,000
Customer Incentives	\$15,000	\$62,000	\$240,000	\$376,000	\$384,000
Monitoring & Evaluation	\$26,000	\$26,000	\$27,000	\$27,000	\$28,000
Equipment	\$12,000	\$18,000	\$18,000	\$19,000	\$19,000
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$124,000	\$179,000	\$359,000	\$499,000	\$510,000
Natural Gas Budget					
Planning & Design	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Administration	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Advertising & Promotion	\$2,000	\$2,000	\$3,000	\$3,000	\$3,000
Customer Incentives	\$5,000	\$12,000	\$61,000	\$110,000	\$113,000
Monitoring & Evaluation	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Equipment	\$1,000	\$2,000	\$2,000	\$2,000	\$2,000
Installation	\$0	\$0	\$0	\$0	\$0
Natural Gas Total	\$20,000	\$28,000	\$78,000	\$127,000	\$130,000
Total Budget					
Planning & Design	\$35,000	\$36,000	\$37,000	\$37,000	\$39,000
Administration	\$23,000	\$23,000	\$23,000	\$25,000	\$25,000
Advertising & Promotion	\$22,000	\$23,000	\$24,000	\$25,000	\$25,000
Customer Incentives	\$20,000	\$74,000	\$301,000	\$486,000	\$497,000
Monitoring & Evaluation	\$31,000	\$31,000	\$32,000	\$32,000	\$33,000
Equipment	\$13,000	\$20,000	\$20,000	\$21,000	\$21,000
Installation	\$0	\$0	\$0	\$0	\$0
Total	\$144,000	\$207,000	\$437,000	\$626,000	\$640,000

Nonresidential Load Management Program

1. Program Description

This program provides large customers who purchase bundled electric service from MidAmerican with financial incentives to reduce demand during MidAmerican's system peak hours. Customers use one of three strategies to reduce demand when MidAmerican calls a curtailment event: they shed load, shift load to non-peak periods or generate replacement power with on-site generators. Customers use MidAmerican's Curtailment Manager software system to help them and MidAmerican monitor load levels in near-real time during curtailment events. Customers also receive ongoing support to help them with program compliance from their assigned key account manager. The program is marketed to customers as the Curtailment Program.

2. Operations

A version of this program has been offered in MidAmerican's Illinois service territory for many years. Participation in the existing Illinois program is limited to 5,000 kilowatts of contract demand savings and, as part of this energy efficiency plan, MidAmerican proposes to remove this limitation and expand the program. MidAmerican also proposes to create a new tariff rider, making minor modifications to program operating parameters, but maintaining current incentive levels. The proposed tariff rider is included as Exhibit No. 4.5 to the testimony of MidAmerican witness Debra Kutsunis.

The current program has three participating customers; two served under one-year contracts and one served under a five-year contract signed in 2007. Any new load added to the program will be served under one-year contracts.

The program is delivered through MidAmerican's energy efficiency staff and key account managers. Key steps in program participation include:

- Signing the program contract, which describes the rights and responsibilities of customers and MidAmerican in program operations as governed by the curtailment tariff rider.
- Installing necessary hardware and software systems. Customers must have electric meters that can record interval data. Participants also are encouraged to use MidAmerican's Curtailment Manager software for monitoring curtailment performance in near-real time during curtailment events and must install a communication line (telephone or Internet) to transmit the interval data from their meter(s) to MidAmerican. Customers also may choose to install additional systems to help their facilities meet their curtailment requirements (e.g., generators, control systems). Along with Curtailment Manager, MidAmerican provides additional software modules that can help customers track and manage energy consumption and costs throughout the year.
- Testing program operations during a mock curtailment event that MidAmerican conducts each year prior to the curtailment season (which runs from June 1 through Sept. 30).
- Meeting program requirements during curtailment events called during the curtailment season. MidAmerican is required to provide at least 30 minutes notice of each event if a warning has been issued at least 12 hours prior to the event. If a warning is not issued, MidAmerican must provide at least two hours' notice. MidAmerican's electric trading department initiates the curtailment event, which is then communicated by energy efficiency to customers through personal communications from key account managers as well as via MidAmerican's Curtailment Manager software.

- Evaluating program performance after the curtailment season, calculating incentives and delivering curtailment incentives to customers. Customers that do not fully meet their contract requirements may be penalized by MidAmerican and/or removed from the program.

3. Value Proposition

Customers participating in this program receive three main benefits:

- **Financial benefits** in the form of incentive payments that compensate the customer for reducing load during MidAmerican's system peak hours,
- **Surety** in the form of clear tariff requirements specifying notice requirements, number of curtailments and other program procedures and
- **Information** in a variety of formats, including advice from key account managers on different curtailment strategies, analyses of interval load data and ongoing communication from key account managers providing notification on curtailment days.

4. Customer Targets

Target customers include:

- Customers with a minimum of 250 kilowatts of curtailable load,
- Customers with on-site generation already installed for emergency purposes,
- Industrial customers who can shed or shift process activities during system peak hours,
- Customers with energy management systems or other controls that allow them to shift or shed load during system peak hours,
- Customers in manufacturing or warehousing, hospitals, government entities, large offices and data/call centers,
- Customers with consistent load patterns throughout the summer period and

- Sophisticated customers with on-site energy managers.

Table 1 outlines customer eligibility requirements.

**Table 1
Customer Eligibility Parameters**

	Electric Equipment
Customer Class	Nonresidential electric rates serving larger customers
Customer Status	Customer facilities or business owners
Building Type	All
Business Type	All
Building Vintage	Existing and new construction
Geography	Illinois electric territory
Size	Able to provide at least 250 kW of curtailable load

MidAmerican performs periodic reviews of its Curtailment program and may adjust program requirements in the future as market conditions change. Any changes that result in changes to the tariff will need to be approved by the Illinois Commerce Commission.

5. Trade Ally Targets

For the most part, this program is delivered through MidAmerican’s internal staff. However, trade allies providing services and equipment that enable customer participation can also be helpful in identifying potential new participants. These include:

- Firms that sell, specify or service emergency generators and
- Firms that sell, specify or service energy management systems.

6. Eligible Measures

In this program, MidAmerican does not promote specific measures, but instead rewards strategies that customers choose to implement to reduce load during system peak hours. The curtailment strategies used by customers include shedding load, shifting load to non-peak periods and generating with on-site generators. The most common technologies used to enable

participation include emergency generators, energy management systems and other control systems.

7. Financial Incentives

MidAmerican offers customers financial incentives in return for program participation. Customer incentives are defined on the basis of dollars per contract kilowatt of reduced demand, measured at the customer meter. Incentives in the current program are set at \$39.62 per contract kilowatt for one-year contracts and \$37.00 per contract kilowatt for five-year contracts. MidAmerican proposes to maintain the \$39.62 per contract kilowatt for one-year contracts under the new tariff. The new tariff will apply to all participants added to the program, to existing participants as their existing contracts expire, and to existing participants wishing to increase loads enrolled in the program.

Exhibit 4.5 to MidAmerican witness Debra Kutsunis' testimony provides the draft Curtailment Service Rider that MidAmerican proposes for Illinois, including program terms, conditions and incentives. MidAmerican also performs periodic reviews of its Curtailment program and may adjust program requirements and incentives in the future as market conditions change. Since the program operates through a tariff rider, any incentive changes would need to be approved by the Illinois Commerce Commission.

8. Promotion

The promotional strategy for this program relies primarily on one-on-one marketing with prospective customers by key account managers. MidAmerican provides the following materials to support the key account manager marketing efforts:

- A program brochure that clearly explains the program's general terms, including program requirements, financial incentives and program compliance,

- Case studies of successful curtailment strategies used by existing customers and
- A program-specific Web site page on MidAmerican’s energy efficiency Web site.

9. Participation

Table 2 provides program participation assumptions, including participants in the existing program as well as new participants.

**Table 2
Participation**

	2008*	2009	2010	2011	2012
Eligible Customers					
Electric	86	87	87	87	87
Electric Measures					
Customers (Cumulative)	6	11	12	12	12
Contract kW (at Meter)	12,439	18,786	20,646	20,646	20,646

* June-December

10. Energy Savings

Table 3 provides energy savings goals, including savings from the existing program as well as savings from new and expanded participants.

**Table 3
Cumulative Energy Savings**

	2008*	2009	2010	2011	2012
Electric Impacts					
Annual Energy (kWh)	349,227	527,430	579,651	579,651	579,651
Peak Demand (kW)	13,412	20,257	22,262	22,262	22,262

* June-December

11. Budget

Table 4 provides program budget assumptions, including costs to serve existing participants as well new and expanded participants.

**Table 4
Budget**

	2008	2009	2010	2011	2012
Electric Budget					
Planning & Design	\$45,000	\$47,000	\$48,000	\$49,000	\$50,000
Administration	\$33,000	\$33,000	\$35,000	\$36,000	\$37,000
Advertising & Promotion	\$27,000	\$27,000	\$28,000	\$29,000	\$29,000
Customer Incentives	\$522,000	\$792,000	\$872,000	\$891,000	\$911,000
Monitoring & Evaluation	\$25,000	\$26,000	\$27,000	\$28,000	\$28,000
Equipment	\$0	\$0	\$0	\$0	\$0
Installation	\$0	\$0	\$0	\$0	\$0
Electric Total	\$652,000	\$925,000	\$1,010,000	\$1,033,000	\$1,055,000

Monitoring and Evaluation

1. Introduction

This report describes MidAmerican's proposed monitoring and evaluation activities (M&E) for the plan period.

2. Objectives of Monitoring and Evaluation Activities

MidAmerican's energy efficiency M&E activities have one primary objective: optimal program performance. Well-designed monitoring, verification and tracking functions provide comprehensive and timely data to program managers. Timely data allows monitoring of program performance and identification and correction of problems related to achievement of program goals on a continuous basis. Process research and monitoring provide continuous and timely feedback providing management the information needed to correct problems as they arise.

3. Evaluation Strategy

At the highest level, MidAmerican's proposed evaluation plans and strategy are as follows.

- Process evaluations will be completed as needed as program design, orientation and delivery change and as new programs are introduced. These evaluations will provide feedback on how well each program is performing relative to stated goals.
- Impact evaluation activities will provide information on how much actual savings vary from estimated savings. Impact evaluations will rely on a mix of engineering algorithms, simulation modeling and metering to estimate actual savings. The choice of methodology will be determined by the size, cost and complexity of the measures installed, as well as the program delivery strategy employed.

- Verification activities will ensure measures are installed consistent with program requirements and, where appropriate, also will provide information to help improve impact estimates. For some programs, incentive payments are tied to verified savings.

MidAmerican's evaluation approach is designed to be efficient. A key element of MidAmerican's approach is the evaluation effort is generally structured by evaluation function, rather than by program or customer sector. Each major function, such as process or impact evaluation, starts from an area-wide perspective, with approaches and issues spanning all or most program areas. Broad cross-sector evaluation activities will be focused as needed for each program and provide conclusions specific to each program.

This approach will allow substantial efficiencies in developing and interpreting the information gathered for each program. Not only are there many commonalities in program structure and delivery method across the various energy efficiency programs, but also many of the required evaluation functions are similar even where program delivery methods may vary. In addition, evaluators will be able to see consistencies across programs, rather than viewing each program independently.

4. Process Evaluation

Overview of Process Evaluation Approach

Process evaluation is the review and assessment of the program administrative structure, processes and implementation. The goal of process analysis is to develop recommendations for improving the management and functioning of the programs to more effectively achieve the established goals. Process analysis addresses the design and functioning of the program's administration and, but not directly, the choice or design of the program activities.

MidAmerican completed process evaluations of its Iowa residential portfolio in 2005 and its Iowa nonresidential portfolio in 2006.

5. Impact Analysis and Monitoring and Verification

Overview of Impact Analysis Approach

MidAmerican will employ a combination of strategies to estimate measure and program-level impacts. Impacts from

- ***Residential Equipment, Residential Audit, Residential Low-Income, Nonresidential Equipment*** and ***Small Commercial Energy Audit*** programs will be based on engineering estimates, adjusted for known customer-specific factors such as equipment size and efficiency. Engineering reviews will be done periodically to determine the accuracy of the engineering estimates and adjustments may be made, where warranted.
- ***Residential and Nonresidential Load Management*** programs will be calculated based on detailed load metering. An impact evaluation for the Iowa residential load management program will be completed during 2008 and results will be extrapolated to the Illinois program. The impact evaluation strategy for the nonresidential load management program is to use actual interval meter data from all participants to measure demand savings on curtailment days. Load levels on curtailment days will be compared to similar peak noncurtailment days to calculate program impacts and customer compliance at the end of each season.
- The ***Residential New Construction*** program will be based initially on modeled savings for a typical home and sometimes on individually-modeled homes. As necessary, engineering reviews will be updated based on actual new home characteristics and savings estimates may be adjusted accordingly.

- The *Commercial New Construction* program will be based on detailed site-specific ex-post verification and building simulation modeling for each participant.
- The *Nonresidential Custom and Nonresidential Energy Analysis* programs will be established based upon initial engineering estimates required to pre-qualify rebates prior to implementation. As necessary, ex-ante and ex-post metering also will be employed to improve the accuracy of the engineering estimates.

Overview of Verification Approach

MidAmerican will undertake activities to verify that measures have been installed according to program guidelines. For most programs, MidAmerican's program contractors perform verification inspections for a sample of participants or for participants receiving large rebates. For the Residential and Commercial New Construction programs as well as the Nonresidential Energy Analysis program, a majority of buildings are inspected by MidAmerican or certified by independent third parties to ensure that all required measures are installed properly. The verification strategy for the Nonresidential Load Management program is to use the Curtailment Manager software to monitor program compliance in near-real time on curtailment days in addition to detailed meter data analysis at the end of each season.

Engineering Review Process

As discussed previously, periodic engineering reviews of energy-savings algorithms will be done to verify the accuracy of initial savings estimates for standard measures. Where significant differences are found to exist, the savings assumptions may be adjusted. The following paragraphs describe the general approach likely to be taken for these engineering reviews.

For most projects and measures, the engineering reviews will be based largely upon examination and analysis of information provided on rebate forms, program tracking data, project documentation and measurement and verification data showing how energy savings were estimated. These reviews will reveal the degree of differences between actual savings and savings assumed in the program tracking database.

The extent of available data sources will define the scope of further efforts to collect and analyze data to estimate savings impacts for individual projects and/or measures. For most measures, it is likely that extensive data will be available from program operations and no further data collection will be needed. When program data is sketchy or incomplete, additional effort may be required to gather more comprehensive data, particularly for large custom projects.

For a sample of implemented projects, the evaluation will conduct project-specific analyses to estimate impacts. These analyses may include additional measure-specific data collection depending on the adequacy of program data and project documentation. Different levels of analysis may need to be conducted depending upon the complexity of the project or measure and its relative contribution to total program savings.

The first step in the engineering review will be to gather program data, including information provided on rebate forms, tracking data, project documentation and any program monitoring and verification data available. These data will be used to determine the types of measures involved, the degree of complexity in the algorithms used to calculate savings impacts and ultimately, the nature of the review process and analytical methods needed during the engineering review.

The review process for standard measures (generally those in the prescriptive programs) is straightforward. A standard measure requires a relatively simple algorithm that relies generally

upon a change in otherwise constant-value parameters. An example is a lighting measure that simply reduces wattage parameters and/or hours of operation from one fixed schedule to another.

A nonstandard measure usually requires a more elaborate algorithm or perhaps many algorithms integrated in a model of operation. An example of a nonstandard measure would be a variable-frequency drive on a motor, the savings depending on variations in equipment loading. Most industrial process measures are nonstandard because of their loading variability and complexity.

For standard measures, a sample will be drawn and brief reviews conducted of the available program data and project documentation to check the completeness of information for developing savings estimates. The accuracy of those estimates then will be checked using standard algorithms.

Our approach to nonstandard measures and projects is correspondingly more complex. First, there is a compilation of project documentation. Many of the nonstandard measures and projects will come through MidAmerican's programs in which energy analysis assistance is provided. Therefore, comprehensive documentation of energy-savings calculations should be available. Technologies and projects associated with programs that do not provide in-depth energy analysis should nonetheless have extensive documentation as well, since the customer (or its consultant) will have done the analysis before submitting it to MidAmerican.

The second step is to review available documentation for completeness. In most cases, the required documentation will have been provided; however, callbacks to customers may be required on occasion to fill in any missing fields or clarify data provided.

Analytical Methods

Savings impacts will be estimated using three main types of analytical methods: engineering analysis, simulation modeling and metering. The particular method chosen will depend on the complexity of the project or measure and the availability of project documentation to perform the analysis.

These methods do not apply to all measures. Nor does increasing complexity of the method necessarily offer a more accurate result. Certain measures, however, do require specific methods to yield a reliable result.

Engineering analysis is the preferred method for standard measures such as lighting retrofits where the impacts are a function simply of wattage and runtime differences. It also applies to such retrofits as insulation and increases in efficiency of constant-load equipment.

Engineering analysis may require both standard project information plus on-site data collection by spot measurements of such values as power, combustion efficiency or flow rate that can verify that correct values are being used in engineering equations. For most of the more complex projects that we expect to be developed, the spot measurement data will have already been collected by the program contractor and be included with the project documentation. Therefore, little additional data collection effort should be required.

Simulation modeling is the preferred method for more complex measures, multiple measures and large loads that vary according to identifiable conditions or a known schedule. This method includes both operational simulation modeling and whole-building simulation. Operational simulation modeling is typically used to estimate energy-savings impacts from complex industrial process technologies, while whole-building simulation is required for very large new commercial buildings or commercial building retrofit projects. It involves elaborate

engineering and computer analysis and usually requires substantial data on the systems or buildings affected by the implemented measure(s). Again, as above, any on-site spot measurements required will already be included with the project documentation.

Project documentation for several of the proposed programs should already include simulation modeling inputs and outputs. For example, the Commercial New Construction program performs post whole-building simulation modeling as part of its verification activities, thus no additional modeling is needed. For some of the industrial programs, extensive modeling will have been done when a project is initially analyzed. Program contractors also may do additional modeling at the verification stage. Thus, the focus of evaluation activities will largely be on reviewing a sample of these analyses, rather than performing the simulations themselves.

Table 1 lists the 11 programs and the various savings-analysis methods applicable to each. As noted above, the assignment of a method to a particular program does not necessarily mean that the evaluators will be performing that analytical step; more likely, their role will be reviewing the work done by others.

Table 1
Savings-Analysis Methods by Program Component

Program	Analysis		Simulation	
	Engineering	Metering	Operational	Whole-Building
Residential Equipment	✓			
Residential Audit	✓			
Residential Low Income	✓			
Residential New Construction	✓			✓
Residential Load Management	✓	✓		
Nonresidential Equipment	✓			
Nonresidential Custom	✓	✓	✓	
Small Commercial Energy Audit	✓			
Nonresidential Load Management	✓	✓		
Nonresidential Energy Analysis	✓	✓	✓	
Commercial New Construction	✓	✓	✓	✓

Metered Data is the preferred method for load management programs.

During 2008, a detailed impact evaluation of the Residential Load Management program in Iowa will be completed. To assess program impacts, the evaluation relies on field inspections and installation of end-use metering on a large sample of participants. Because of the complexity of this task and the need to collect data during summer months when cycling is occurring, it has taken two years to complete.

Field inspections will be used to determine the degree to which air conditioner load is effectively being controlled. A sample of participants has been selected for these field inspections. Possible inspection results might reveal:

- Faulty switches that are unable to receive the signal to cycle,
- Switches that have been tampered with so the signal is not received and
- Air conditioners that are no longer being operated.

End-use metering has been installed on the air conditioner compressors of a sample of participants. The sample represents a subset of those sites with properly functioning equipment based on the field inspection findings. Load impacts will be calculated by comparing end-use loads on cycling days versus loads on comparable weather days on which there was no cycling. Impacts will be calculated based on differences between loads on cycling versus non-cycling days. The end-use metering will provide load shapes as well as load impacts, which can help to answer questions concerning the impact of the program on shoulder periods during cycling days.

Metering also is used each year to calculate impacts from the Nonresidential Load Management program. Each program participant has interval meters installed and MidAmerican calculates program impacts by comparing metered load on curtailment days to load on non-curtailment days with similar characteristics.

Metering also is used, as appropriate, to improve the engineering algorithms and simulation modeling used to calculate impacts in the Commercial New Construction, Nonresidential Energy Analysis and Nonresidential Custom programs. Typically, metering is used to confirm operating characteristics for key equipment (e.g., lighting operating hours, cooling system temperatures).

6. Conclusion

MidAmerican implements a comprehensive set of M&E activities for its energy efficiency programs. These activities provide program managers with timely information and feedback that allows them to monitor program performance and identify implementation problems as they arise, helping the Company achieve its overall energy efficiency goals and objectives.

Accounting Plan and Procedures

1. Introduction

This section describes MidAmerican's plan and procedures to account for energy efficiency in Illinois. These procedures ensure that these costs are categorized appropriately and in sufficient detail to identify individual costs for each program by type of expenditure.

2. Accounting System

MidAmerican will use the Management Information System (MIS) to identify expenditures as energy-efficiency expenditures. Costs are separated by program, cost category and resource using project numbers, subnumbers and cost elements. The project numbers are used to indicate the energy-efficiency program for which the costs are being incurred. Project subnumbers are used to designate the category of costs, such as planning, administration, customer incentives, etc. Cost elements are used to indicate the type of cost such as labor, transportation or nonlabor voucher costs.

In general, the company uses a 44-character codeblock to account for expenditures. Using the MIS codeblock, employees assign the appropriate energy-efficiency codeblock to time sheets, purchase orders, requests for payment and employee expense reports. Those elements of the codeblock that are specifically used to account for energy-efficiency expenditures are as follows.

Responsibility Center

The responsibility center is used to identify the organizational unit within the company that is responsible for the expenditure.

Bill Center

The bill center is used to identify the business unit for which the cost was incurred. For energy-efficiency expenditures within the Delivery business unit, the bill center is the same as the responsibility center.

Utility Indicator

The utility indicator is a utility type code used to identify which utility - electric, gas or common (allocated to gas and electric) - is responsible for the expenditure.

Activities

The activity number is used to identify energy-efficiency expenditures. The activity numbers used are as follows.

- 173172 Electric Recoveries Over/Under
- 173272 Gas Recoveries Over/Under
- 186390 Gas Deferred Expenditures
- 186395 Electric Deferred Expenditures
- 440011 Electric Residential Revenue
- 440045 Electric Residential Over/Under Recoveries
- 442001 Electric Small General Service Revenue
- 442045 Electric Small General Service Over/Under Recoveries
- 444211 Electric Large General Service Revenue
- 442245 Electric Large General Service Over/Under Recoveries
- 445011 Electric Public Authorities Revenue
- 480011 Gas Residential Service Revenue
- 480042 Gas Residential Over/Under Recoveries

481011 Gas Commercial Service Revenue
 481042 Gas Commercial Over/Under Recoveries
 481211 Gas Industrial Service Revenue
 481242 Gas Industrial Over/Under Recoveries
 489042 Gas Transportation Over/Under Recoveries
 489062 Gas Transportation Revenue
 908102 Electric Expense-Embedded
 908202 Gas Expense-Embedded
 908105 Electric Amortization
 908205 Gas Amortization

Project Numbers

The following project numbers are to be used.

Electric Utility

<u>Project Number</u>	<u>Project Name</u>
17802	Residential Equipment
17804	Commercial New Construction
17805	Nonresidential Equipment
17806	Residential New Construction
17808	Residential Audit
17812	Energy-Efficiency Management – Nonresidential
17817	Nonresidential Custom
17818	Energy-Efficiency Management – Residential
17820	Small Commercial Energy Audit

17821	Nonresidential Energy Analysis
17831	Residential Load Management
17834	Energy-Efficiency Management – Residential and Nonresidential
17836	Nonresidential Load Management
17839	Low Income

Gas Utility

Project Number Project Name

46002	Residential New Construction
98647	Small Commercial Energy Audit
98648	Nonresidential Energy Analysis
98849	Energy-Efficiency Management – Residential
98851	Commercial New Construction
98852	Energy-Efficiency Management – Nonresidential
98853	Energy-Efficiency Management – Residential and Nonresidential
98854	Low Income
98855	Residential Audit
98856	Residential Equipment
98858	Nonresidential Equipment
98859	Nonresidential Custom

Project Subnumbers

Project subnumbers are used to identify the cost category of the expenditure. The project subnumbers that are used for MidAmerican energy-efficiency expenditures are as follows.

- 30 Planning and Design
- 31 Administration
- 32 Advertising and Promotion
- 33 Customer Incentives
- 34 Monitoring and Evaluation
- 36 Equipment
- 37 Installation

Additional numbers or letters may be used to further segregate costs.

Location

All energy-efficiency expenditures will be accounted for using Illinois location code 300.

Cost Elements

The appropriate cost elements will be used to identify the type of cost, i.e. labor, transportation or nonlabor.

The MIS system and code block for energy-efficiency expenditures make it possible to identify where the expenditures originated, which program the expenditures were made for, the type of source of the expenditure and the category or type of expenditure. MIS completely supports both the internal information requirements and the regulatory reporting requirements related to program expenditures.

3. Procedures

Direct Costs

Direct costs are expenditures that can be specifically assigned to energy-efficiency programs. All employees active in the design, implementation or evaluation of energy-efficiency

programs and related activities are trained in the use of the energy-efficiency activity codeblock and are instructed to charge all costs, both labor and nonlabor, that are incurred in the performance of their energy-efficiency assignments to these energy-efficiency activities.

Indirect Costs

Indirect costs are expenditures incurred to support energy-efficiency programs that cannot be specifically assigned (directly charged) to energy-efficiency programs. These expenditures are charged to programs through the use of loading rates for employee benefits associated with Illinois energy-efficiency related labor previously identified in direct costs.

Embedded Costs

2007 costs incurred for energy efficiency programs already in existence in Illinois will not be recovered through the Energy Efficiency Cost Recovery (EECR) factor. Such embedded costs include dollars related to MidAmerican's on-line energy audit program (Nexus) and MidAmerican's current Rider No. 4 Curtailment Service.

Recoveries

Energy-efficiency expenditures are charged to unique deferred debit activities. When amounts are billed to customers, they will be credited to the appropriate revenue activity through the company's Customer Information System (CIS).

Anticipated recoveries will be projected for the 12 months of the recovery period and as amounts are recovered from customers, an entry will be made to book the amount over or under the anticipated recovery. The deferred debits for energy-efficiency expenditures will be reduced on a monthly basis by the amount of the approved expenditures as they are amortized.

4. Summary

To summarize, the basic accounting procedures will work as follows.

- As expenditures are made, they are recorded in the deferral activities.
- The labor expenditures are loaded as appropriate using the applicable loading rates.
- The approved expenditures are expensed monthly based on authorized recoveries.
- The recovery of approved expenditures and other costs, if appropriate, is billed to regular service accounts.

5. Internal Auditing Report

Each year, on or before April 1, beginning in 2009, the Company shall submit to the Manager of the accounting Department of the Illinois Commerce Commission an annual internal report that includes, but is not limited to, 1) a test that costs recovered through Rider No. 2 (electric) and Rider No. 10 (gas) are associated with the commission approved programs are not recovered through other approved tariffs; 2) a test of customer bills that Rider Nos. 2 and 10 are being properly billed to customers; 3) a test that Rider Nos. 2 and 10 revenues are properly stated; and 4) a test that any reimbursements of costs are being identified and recorded properly to be reflected in the calculation of the rates and reconciliation.

Implementation Guidelines

1. Introduction

In this section, MidAmerican describes the key implementation areas and, for each, the guidelines for program management in Illinois. The implementation areas include:

- Consistency of programs,
- Managing participation and budgets,
- Continuous program and process improvement,
- Reporting and
- Coordinating with other utilities.

In formulating the guidelines, MidAmerican has kept in mind that one important reason its programs have been successful in Iowa is that customers like them. MidAmerican's Iowa customers have come to rely on the programs and they expect MidAmerican to help them manage their utility costs. The guidelines presented in this document all have a foundation in maintaining customer satisfaction with MidAmerican's programs.

2. Consistency of Programs

MidAmerican has proposed the suite of programs included in this energy efficiency plan in order to offer generally consistent programs across MidAmerican's Illinois and Iowa jurisdictions. Because media messages cannot be readily contained within state boundaries, any differences between programs offered by MidAmerican in Iowa and Illinois may create customer confusion. As with any new venture, it will take time for the Illinois programs to become established, so, initially, there may be small differences between the Illinois programs and those

currently offered in Iowa. However, MidAmerican's long-term goal is to work with each jurisdiction so that programs can be as similar as possible for all customers.

3. Managing Participation and Budgets

In this filing, MidAmerican provides budget estimates for each program and year based on estimates of participation and rebate levels for each measure offered in each program. MidAmerican used its Iowa experience, augmented by available Illinois market information, to estimate participation, assuming it will take two or three years for the Illinois programs to reach full participation rates.

For any program and any year, actual participation and spending may vary substantially from these estimates. For example, pent-up demand or general customer interest may cause some programs to take off right away, and not require the two- to three-year growth period assumed in the budget estimates. Other programs may take longer to become established.

Other factors beyond MidAmerican's control can also have substantial impacts on program participation and budgets. For example, MidAmerican has offered a residential audit program in Iowa for over 16 years. While participation in most years is stable and somewhat predictable, events such as extreme weather, high natural gas energy prices and media attention can lead to large participation swings. In a typical heating season, MidAmerican completes around 6,000 audits; after the high natural gas prices and media attention that followed the Gulf hurricanes in late 2005, MidAmerican completed almost 10,000 audits in the 2005-2006 winter season.

Additional factors also may affect program participation and budgets. For example, the new construction programs are driven by levels of construction activity, which in turn can be significantly impacted by interest rates and the general health of the economy. The general health

of the economy also affects other programs, but usually to a lesser extent. Residential and business customers may defer major purchases of heating and cooling equipment if the economy is performing poorly. Large industrial customers may expand or contract their manufacturing operations in reaction to economic conditions, possibly influencing their level of participation in the Nonresidential Load Management program.

MidAmerican has developed the following guidelines for managing the issue of uncertain program participation levels in Illinois:

Ensure program stability. MidAmerican considers it very important that it offer stable, predictable rebates to customers and trade allies, even if program spending in a given year exceeds the estimates provided in this filing. Therefore, it does not plan to abruptly stop individual programs if budgets run out. Experience has shown that stopping programs leads customers and trade allies to lose faith in the programs, causing participation in the programs (and customer satisfaction) to deteriorate.

Manage total budgets rather than individual program budgets. MidAmerican will focus on total rather than individual budgets as it reviews implementation progress. MidAmerican has developed a portfolio of programs to implement in Illinois. The portfolio effect can help offset budget swings in individual programs to the extent that some programs spend below their budget estimates while others exceed budgeted levels. MidAmerican has proposed a cost recovery approach that allocates costs between electric and natural gas customers and residential and nonresidential customers. If individual programs exceed budgets, but other programs under-spend, in some cases the overall class cost recovery factors could still remain close to levels approved as part of this filing.

4. Continuous Program and Process Improvement

MidAmerican has developed programs for Illinois based on programs that have evolved in Iowa over the last 16 years. The program descriptions provided in Sections B and C describe the measures, rebates, promotional strategies and other features that are currently used to successfully implement these programs in Iowa. MidAmerican's programs have improved over the last 16 years and MidAmerican expects continuous improvement in the future. For example, over the last few years, MidAmerican has:

- Changed qualifying efficiencies and rebate levels for residential and small commercial air conditioning equipment to reflect changes in federal equipment efficiency standards,
- Changed qualifying requirements and rebate levels for the residential and nonresidential new construction programs to reflect changes in the Iowa building code, the International Energy Conservation Code, and the U.S. EPA's ENERGY STAR[®] homes program,
- Increased rebates for natural gas heating and water heating equipment as well as residential insulation to help customers respond to sharp increases in natural gas prices,
- Added point-of-sale rebates for compact fluorescent lighting to the Residential Audit program, in coordination with the *Change a Light, Change the World* campaign and
- Added a range of measures to the Nonresidential Equipment program to help business customers improve the efficiency of commercial kitchen equipment.

MidAmerican maintains functions for research and development as well as monitoring and evaluation and uses the results of these efforts to improve programs. MidAmerican performs an annual research and development effort to review new energy efficiency technologies; program measures and features offered by utilities in other jurisdictions; changes in government standards for equipment and buildings; and other issues that affect program operations. From this

annual effort, MidAmerican may propose changes in measure offerings, eligibility requirements, rebate levels and other program features for the coming year. MidAmerican also periodically performs formal process evaluations which rely on independent evaluators to capture feedback from program participants, other customers, trade allies, program contractors and MidAmerican staff. The evaluators use the information they collect to structure specific recommendations for program improvements.

MidAmerican believes that having the flexibility to make program improvements based on results of research and development and monitoring and evaluation will be essential to successful program operation. MidAmerican plans to provide 30 days advance notice to the Commission when it is necessary to change various program terms, such as qualifying efficiency levels, measures included and rebate levels. Note the next section provides reporting guidelines that will keep the Commission and Commission staff informed of progress of program implementation and initiation of any program improvements.

5. Reporting

MidAmerican believes it is important to provide the Commission and Commission staff with timely reports on program results, but also recognizes a need to balance the costs of preparing reports with the benefits those reports provide. MidAmerican has developed the following reporting guidelines for Illinois:

File annual reports. MidAmerican proposes to file an annual report to the Commission each year that details program results for the previous calendar year and lays out key changes to be implemented in the current year. For example, the 2009 report will provide results for 2008 programs and describe changes planned for 2009.

In the annual report, MidAmerican will provide reviews of each individual program, outlining key quantitative results (e.g., participation levels) for the previous year, key successes and challenges addressed in the previous year and key changes to be implemented in the current year.

MidAmerican also will provide data tables across all programs that outline:

- Spending, by program, fuel and functional cost category, and
- Energy and demand savings, by program and fuel.

In addition, MidAmerican intends to provide informal quarterly reports to Commission staff to keep them informed of implementation progress.

Reconcile cost recovery adjustment clause. Consistent with Section 8-408 of the Public Utilities Act (Act), MidAmerican proposes to make an annual filing that reconciles the cost recovery adjustment clause. The reconciliation will take into account actual program costs and total energy deliveries for the previous year and estimated costs and energy deliveries for the coming year, and calculate new charges.

6. Coordinating With Other Utilities

MidAmerican serves approximately 85,000 customers in Illinois; over 63,000 of these customers purchase both electricity and natural gas, but another 2,000 or so purchase only natural gas and almost 20,000 customers purchase only electricity. MidAmerican's programs address electric as well as natural gas measures, but many of MidAmerican's customers will only be eligible for some measures. This situation will present some challenges for program implementation, including communicating clearly to customers to make sure they understand program eligibility requirements; delivering programs in an efficient and cost-effective manner,

even when only one fuel is covered; and helping customers interested in implementing comprehensive energy efficiency strategies.

In Iowa, MidAmerican works jointly with the other investor-owned utilities and some municipal utilities to coordinate services and rebates. For example, in the residential audit program, the investor-owned utilities share a common audit contractor. The utility providing the heating fuel pays for the audit, the auditor coordinates installation and specification of both electric and natural gas efficiency measures, and the utilities work together to ensure that the appropriate utility funds the appropriate measures. In addition, the Iowa investor-owned utilities often pool resources to provide energy efficiency education for customers and trade allies.

MidAmerican plans , where appropriate, to coordinate implementation with other investor- and publicly-owned utilities in Illinois, sharing costs and resources as appropriate to meet the needs of MidAmerican customers.