## MidAmerican Energy Company South Dakota Energy Efficiency Plan 2013-2017 Executive Summary

### **General Description**

MidAmerican Energy Company (MidAmerican) proposes to continue providing a comprehensive portfolio of energy efficiency programs in this 2013-2017 energy efficiency plan. There are some significant changes in the details of MidAmerican's programs, however. MidAmerican has updated its avoided costs, recognizing the significant decrease in expected future natural gas prices. MidAmerican has also incorporated changes in standards resulting from implementation of the requirements of EISA 2007. In addition, MidAmerican has prepared this plan examining individually the cost-effectiveness of each of the measures offered, including only those that are expected to provide net benefits to MidAmerican's South Dakota customers.

Most programs will be offered as joint electric and natural gas programs. Customers will only be eligible for the portions of the programs related to the energy service they purchase from MidAmerican, however. For example, customers who purchase natural gas only will not be eligible to receive rebates for central air conditioners which save electricity. For programs that by their nature save energy from multiple sources, MidAmerican will estimate a savings value based on its avoided cost for that energy, regardless of what entity provides the energy service. The Residential Audit and Small Commercial Audit programs are the primary multi-energy source programs, however some measures in other programs may save energy from multiple sources as well.

## **Program List**

The 2013-2017 South Dakota energy efficiency plan provides rebates and incentives for energy efficiency projects and equipment for South Dakota customers in the following programs:

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

**Residential Audit** – This program provides free energy audits, energy savings suggestions, direct installation of simple energy-efficiency measures and rebates for more extensive building shell retrofits.

**Residential Load Management** – This program provides financial incentives to customers that allow MidAmerican to control their central air conditioning on summer peak days.

**Nonresidential Equipment** – This program provides rebates to encourage customers to purchase specified efficient heating, cooling, lighting, motor and commercial kitchen equipment variable-speed drives (VSDs).

**Nonresidential Custom** – This program provides financial incentives to encourage customers to pursue energy efficiency projects or purchase of efficient equipment that does not fit into MidAmerican's other nonresidential programs.

**Small Commercial Audit** – This program serves small business customers by providing energy audits, direct installation of simple energy-efficiency measures and rebates for more extensive projects.

**Appliance Recycling** – This program offers financial incentives to *residential* customers to stop using old, inefficient refrigerators, freezers and room air conditioners and helps them dispose of the old units.

### **Budgets**

Anticipated five-year spending for the 2013-2017 South Dakota energy efficiency plan are shown in the table below. MidAmerican proposes a budget of nearly \$3.1 million in energy efficiency over the five-year period, with \$2.3 million of that for residential customers and \$0.8 million for nonresidential customers. MidAmerican's accounting systems will ensure that costs for providing the programs are recovered from the appropriate customers.

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2013	\$56,600	\$64,126	\$120,726
2014	\$56,800	\$66,406	\$123,206
2015	\$57,100	\$67,664	\$124,764
2016	\$57,600	\$69,124	\$126,724
2017	\$57,800	\$70,443	\$128,243
Total	\$285,900	\$337,763	\$623,663
Gas Spending	Administrative Cost	Incentive Cost	Total Cost

Gas Spending	Administrative Cost	Incentive Cost	Total Cost
2013	\$166,400	\$315,269	\$481,669
2014	\$166,400	\$319,668	\$486,068
2015	\$166,400	\$320,581	\$486,981
2016	\$166,400	\$324,007	\$490,407
2017	\$166,400	\$327,447	\$493,847
Total	\$832,000	\$1,606,972	\$2,438,972

Total Spending	Administrative Cost	Incentive Cost	Total Cost
2013	\$223,000	\$379,395	\$602,395
2014	\$223,200	\$386,074	\$609,274
2015	\$223,500	\$388,245	\$611,745
2016	\$224,000	\$393,130	\$617,310
2017	\$224,200	\$397,891	\$622,091
Total	\$1,117,900	\$1,944,735	\$3,062,635

# MidAmerican Energy Company South Dakota Energy Efficiency Plan 2013-2017 Appliance Recycling Program

## **Description of Program**

The appliance recycling program offers financial incentives to *residential* customers who stop using old, inefficient refrigerators, freezers and room air conditioners and helps them dispose of the old units in an environmentally responsible manner. It provides rebates to customers participating in the program and also provides free pick up and disposal of old appliances. The program is marketed under the name Appliance Recycling Program.

The objectives of this program are to prevent customers who currently use a qualifying appliance from keeping their existing unit when they purchase a new one and to prevent migration of the old unit to the secondary market for used, inefficient appliances in MidAmerican's service territory.

The program primarily targets residential electric customers. but is available to all electric customers recycling residential-sized equipment. Program measures must save energy supplied directly by MidAmerican.

This is a new program in South Dakota.

#### **Measure List**

The Appliance Recycling program provides rebates and incentives for recycling the following measures:

Refrigerators Freezers Window Air Conditioners

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

#### **Budgets**

Anticipated five-year spending for the Appliance Recycling program is as follows.

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2013	\$2,000	\$3,270	\$5,270
2014	\$2,000	\$3,942	\$5,942
2015	\$2,000	\$4,461	\$6,461
2016	\$2,000	\$5,133	\$7,133
2017	\$2,000	\$5,632	\$7,632
Total	\$10,000	\$22,438	\$32,438

# MidAmerican Energy Company South Dakota Energy Efficiency Plan 2013-2017 Nonresidential Equipment Program

### **Description of Program**

The Nonresidential Equipment program promotes the purchase of energy-efficient equipment by nonresidential customers. The program offers financial incentives to customers installing energy-efficient equipment, either for first-time or retrofit installations.

The program is available to all nonresidential customers for both new and existing buildings **where not required by local building code**. Program measures must save energy supplied directly by MidAmerican.

Transportation gas customers with daily metering are ineligible for incentives for gas measures; however, customers with monthly metering under the Monthly Metered Transportation Service gas tariff are eligible for energy efficiency incentives.

#### **Measure List**

The Nonresidential Equipment program provides rebates and incentives for the following measures:

Variable Speed Drives Central Air Conditioners Natural Gas Furnaces Natural Gas Boilers Window Air Conditioners Programmable Thermostats Natural Gas Water Heaters Lighting

- Pulse-Start Metal Halide Lighting
- LED Exit Lights
- T-5/T-8 Fluorescent Lighting

Information on savings, incentives, incremental costs, and other qualifying information for all measures in this program is provided in Appendix A.

#### **Budgets**

Anticipated five-year spending for the Nonresidential Equipment program is as follows.

Electric Spending	Administrative Cost	Incentive Cost	Total Cost
2013	\$14,000	\$10,115	\$24,115
2014	\$14,000	\$10,119	\$24,119
2015	\$14,000	\$10,117	\$24,117
2016	\$14,000	\$10,113	\$24,113
2017	\$14,000	\$10,114	\$24,114

Key steps in program participation include:

- Program application The customer identifies a project and fills out an application to define
  project equipment, costs and energy savings for project evaluation. This may be done with
  the assistance of a trade ally and/or key account manager, or as a result of a small
  commercial energy audit.
- Technical assistance When necessary, the program contractor helps a customer identify the technical information necessary to submit for project evaluation.
- Project evaluation The program contractor determines project incremental cost and potential energy and capacity savings data.
- Cost effectiveness analysis and rebate calculation MidAmerican evaluates costeffectiveness and determines if the project meets program guidelines and qualifies for financial incentives. The incentive will be the minimum of three years' bill savings or the buy-down (from incremental cost) to a two-year payback, unless the payback is less than two years. Projects with buy-downs of less than two years are not eligible for incentives. Rebate amounts are also capped at 70 percent of installed cost.
- Approval/denial notification MidAmerican either sends the customer a project approval letter and self-verification form or a denial letter.
- Rebate processing and database maintenance The program implementation contractor and MidAmerican process rebates and maintain the database for tracking and reporting purposes.
- Verification The customer submits a self-verification form. Where appropriate, the program contractor verifies that a project installation meets program guidelines.

#### **Marketing Plan**

MidAmerican will promote the program through articles that will periodically appear in a monthly electronic newsletter sent to small to midsize commercial customers as well as a quarterly newsletter that is sent with customer bills. The articles will reference the energy efficiency website, which features a dedicated Web page that includes program information and qualification requirements, application and verification forms, and a program brochure. A reference to the energy efficiency website will appear quarterly on customer bills and monthly in the electronic newsletter.

Key account managers will promote the program to large commercial and industrial customers during routine contacts. Key account managers help assigned customers identify energy efficiency projects and determine whether the projects qualify for prescriptive rebates or if they should be submitted through the custom program.

Program referrals are also expected from trade allies. Information will be available on a dedicated portion of the energy efficiency website to assist trade allies in marketing and delivering energy-efficient products and services to customers, while encouraging participation in energy efficiency programs. The website offers trade allies the opportunity to order program materials, learn about