

## MidAmerican Energy Company South Dakota Energy Efficiency 2011 Energy Efficiency Plan Update

Participation in MidAmerican Energy Company's (MidAmerican) South Dakota energy efficiency programs is expected to increase in 2011, fueled primarily by greater customer awareness. This report provides MidAmerican's expected participation levels, savings impacts, and spending levels for 2011 programs and outlines changes to those levels from MidAmerican's approved Energy Efficiency Plan in Docket Nos. EL07-015 and GE10-001. The 2010 Energy Efficiency Plan Update includes

1. Updated budgets and anticipated participation levels for 2011
2. MidAmerican's performance incentive award

### **1. Expected Budgets and Participation for 2011**

Expected participation levels and savings for MidAmerican's energy efficiency programs for 2011 are provided in Exhibit A. After reviewing actual results for 2009 and 2010, MidAmerican proposes the following changes to expected participation levels and energy savings from those assumed in MidAmerican's original 2009 plan filing.

- MidAmerican is projecting total annual natural gas savings in 2011 of 246,280 therms, which is an increase of 9,451 therms over 2010 results, but is a decrease of 15,743 therms from MidAmerican's original projection of 262,023 therms.
- MidAmerican is projecting total annual natural gas spending in 2011 of \$1,172,284, which is an increase of \$57,391 over 2010 and an increase of \$59,284 over MidAmerican's original 2011 projection of \$1,113,000.
- MidAmerican is projecting total annual electricity savings in 2011 of 674,149 kWh, which is an increase of 274,318 kWh over 2010 results, but is a decrease of 169,576 kWh from MidAmerican's original projection of 843,725 kWh.
- MidAmerican is projecting total annual electricity spending in 2011 of \$118,165, which is an increase of \$3,154 over 2010 and an increase of \$23,165 over MidAmerican's original 2011 projection of \$94,863.
- Total residential spending for 2011 is expected to be \$1,051,743, which is an increase of \$22,574 over 2010 and an increase of \$141,743 over MidAmerican's original 2011 estimate.
- Total nonresidential spending for 2011 is expected to be \$238,706, which is an increase of \$37,871 over 2010, but is a decrease of \$59,294 from MidAmerican's original 2011 estimate.

**a. Residential Equipment**

MidAmerican is anticipating increased spending and savings impacts for both gas and electric components of the Residential Equipment program. Spending is expected to be approximately \$258,000 higher than originally anticipated for 2011, with kWh savings expected to be approximately 300% higher and gas savings expected to be 21% higher than anticipated. Increases are driven by the following:

- Furnace rebates for both 2009 and 2010 were much higher than anticipated, with furnace rebates nearly double the anticipated amount for 2010. MidAmerican is projecting an approximate 11% increase in furnace rebates from 2010 to 2011. This increase is half of the increase included in MidAmerican's original plan filing due to the fact that increased federal tax incentives for high efficiency equipment for 2009 and 2010, which likely drove higher than expected participation in those years, will not apply in 2011.
- Heat pump rebates for both 2009 and 2010 were also much higher than anticipated, and are expected to grow by approximately 17% in 2011.
- Furnace fan rebates, which were not originally included in MidAmerican's approved Energy Efficiency Plan, provided 16,809 kWh of annual savings in 2010 and are anticipated to continue at the same rate in 2011.

**b. Residential Audit**

MidAmerican is anticipating decreased spending and savings impacts for the gas component of the Residential Audit program, and slightly decreased savings for the electric component of the program. Spending is expected to be approximately \$52,000 lower than originally anticipated for 2011, with kWh savings expected to be approximately 2,000 kWh lower and gas savings expected to be approximately 47% lower than anticipated. Decreases are driven by the following:

- The number of audits performed in 2010 was significantly lower than expected, and was lower than 2009 even though 2009 was only a partial year, which suggests a significant amount of pent-up demand was served in 2009. MidAmerican is projecting only a modest increase in audits from 2010 to 2011.
- The number of insulation measures installed by electric customers post-audit was significantly below the levels anticipated for 2009 and 2010. This reduction in installation rate is reflected in lower electric savings estimates for 2011.

**c. Residential Load Management**

MidAmerican is anticipating decreased spending and savings impacts for the Residential Load Management program. Spending is expected to be approximately \$17,000 lower than originally anticipated for 2011, with participation and savings expected to be approximately half of what was originally anticipated.

**d. Nonresidential Equipment**

MidAmerican is anticipating increased spending, but decreased savings impacts for the electric component of the Nonresidential Equipment program from what was originally anticipated for 2011. This is due to higher than anticipated administrative costs and lower than anticipated savings from variable speed drives. The gas component of the program is expected to see decreases in both spending and savings. Combined electric and gas spending is expected to be approximately \$10,000 higher than originally anticipated for 2011, with kWh savings expected to approximately 33% lower and gas savings expected to be 57% lower than anticipated. Decreases in savings are driven by the following:

- Installations of high-efficient furnaces for both 2009 and 2010 were much lower than anticipated, with furnace installations less than half the anticipated number for 2010. MidAmerican is projecting an approximate 20% increase in furnace installations from actual 2010 levels, but the number of installations will still be considerably less than originally anticipated for 2011.
- Savings per measure for adjustable speed drives for 2009 and 2010 were significantly below levels projected in the approved Energy Efficiency Plan (74,295 kWh for 2009/2010 compared to 136,035 for the plan). It is also anticipated that only three adjustable speed drives will be rebated in 2011 compared to four in the original plan.
- Anticipated 2011 results for the Nonresidential Equipment program also include one pre-approved lighting project rebate of \$18,480 for a project expected to save 204,140 kWh per year.

**e. Nonresidential Custom**

MidAmerican does not anticipate changes to spending or savings impacts for the electric component of the Nonresidential Custom program from what was originally anticipated for 2011. Anticipated 2011 spending and savings for the gas component of the program have been adjusted to include three additional projects that have already been approved for 2011. These projects include:

- One pre-approved radiant infrared heating project expected to save 2,347 therms per year and for which an incentive of \$4,400 has been approved, and
- One pre-approved boiler control project that is expected to save 11,000 therms per year and for which an incentive of approximately \$25,000 has been approved.

**f. Small Commercial Audit**

MidAmerican is anticipating increased spending and savings impacts for the electric component of the Small Commercial Audit program from what was originally anticipated for 2011. The gas component of the program is expected to see decreases in both spending and savings. Combined electric and gas spending is expected to be approximately \$98,000 lower than originally anticipated for 2011, with kWh savings expected to be approximately 17% higher and gas savings expected to be 61% lower than anticipated. Decreases in savings are driven by the following:

- The number of audits performed in 2010 was significantly lower than expected. MidAmerican is projecting an approximate 60% increase in audits from 2010 to 2011, but the total number will still be well below the original plan levels.
- The penetration rate of insulation and thermostat measures installed by both gas and electric customers post-audit (percentage of customers who receive audits that install insulation and/or thermostats afterwards) was significantly below the level anticipated for 2009 and 2010. This decrease is reflected in reductions to both the electric and gas savings estimates for 2011.

**2. Performance Incentive Award**

In March 2009, the South Dakota Public Utilities Commission (Commission) approved MidAmerican Energy Company's Energy Efficiency Plan in Docket No. EL07-015. This plan included a provision for a performance incentive award based on achieving a minimum level of electric kWh and natural gas therm savings. Once that threshold was met, the incentive was tied to net utility benefits, up to a predetermined cap. The resulting performance incentive dollars were then included in the cost recovery reconciliation and recovered in the following year's cost recovery factor.

In the 2010 South Dakota Plan Update filing made February 18, 2010, MidAmerican requested a change in its performance incentive calculation. MidAmerican proposed an incentive that provides a return on its energy efficiency expenditures, including the following elements:

- The return will be the rate of return in MidAmerican's most recent gas rate case in Docket No. NG-04-001.

- The incentive will be calculated separately for gas and electric.
- The incentive will be calculated by multiplying the authorized return by approved energy efficiency expenditures.
- An estimated incentive for the current year based on the Commission-approved energy efficiency budget for that year will be included in the cost recovery factor.
- The final incentive award will be determined in the next year's reconciliation and will be capped at a return on the lower of actual energy efficiency expenditures or the budget approved by the Commission.
- The final incentive will be reconciled with the cost recovery factor and any over or under collection will be recovered in the following period.

The Commission approved MidAmerican's revised incentive award calculation on April 6, 2010. Consistent with this approved incentive mechanism, MidAmerican is including an incentive award for 2011 of \$108,198, which is outlined in detail in Exhibit C.