

**TO:** COMMISSIONERS AND ADVISORS  
**FROM:** JOSEPH REZAC, LORENA REICHERT, AND AMANDA REISS  
**SUBJECT:** STAFF RECOMMENDATION FOR DOCKET GE18-002  
**DATE:** MARCH 15, 2018

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## STAFF MEMORANDUM

### OVERVIEW

Since 2009, MidAmerican Energy Company (MidAmerican) offered energy efficiency programs to both electric and natural gas customers located within their service territory. In this docket, MidAmerican submitted its 2017 annual report, 2017 reconciliation of expenses and revenues, and proposed 2018 Energy Efficiency Cost Recovery (ECR) rates for Commission review and approval. It should be noted that the 2018 Energy Efficiency Plan budgets were approved by the Commission in docket GE17-002.

This memo provides a brief summary of MidAmerican's 2017 plan performance and Staff's recommendation.

### 2017 ENERGY EFFICIENCY PLAN RESULTS

In 2017, MidAmerican came in under budget for both gas and electric programs. Actual spending and energy savings are provided in further detail below.

#### Electric Program Budgeted vs. Actuals

Results from MidAmerican's 2017 electric programs are provided in Table 1. Looking at energy savings, MidAmerican experienced more energy savings than forecasted. Rolling up all electric programs, energy savings were 1,199,861 kWh in 2017, or 108% more than the energy savings goal for the year. The large majority of energy savings came from the Nonresidential Equipment program, where four variable speed drive projects accounted for 81.8% of total electric program energy savings. Those four projects produced 981,186 kWh in energy savings.

From a spending perspective, MidAmerican came in 8% below the budget in 2017 for all electric programs. Electric program spending was 1% below the budget for residential programs and 27% below the budget for nonresidential programs.

Program	Energy Savings (kWh)			Expenditures		
	Budgeted	Actual	Variance	Budgeted	Actual	Variance
Residential Equipment	233,210	198,726	-15%	\$ 82,181	\$ 91,569	11%
Residential Audit	3,424	1,426	-58%	\$ 2,019	\$ 958	-53%
Residential Load Management	1,192	1,636	37%	\$ 18,191	\$ 13,454	-26%
Appliance Recycling	36,500	13,662	-63%	\$ 7,632	\$ 2,617	-66%
<b>Total Residential</b>	<b>274,326</b>	<b>215,450</b>	<b>-21%</b>	<b>\$ 110,023</b>	<b>\$ 108,598</b>	<b>-1%</b>
Nonresidential Equipment <sup>1</sup>	242,542	984,411	306%	\$ 19,554	\$ 26,721	37%
Nonresidential Custom	59,210	0	-100%	\$ 16,901	\$ (477)	-103%
Small Commercial Energy Audit	1,587	0	-100%	\$ 2,206	\$ 2,052	-7%
<b>Total Nonresidential</b>	<b>303,339</b>	<b>984,411</b>	<b>225%</b>	<b>\$ 38,661</b>	<b>\$ 28,296</b>	<b>-27%</b>
<b>Total All Electric Programs</b>	<b>577,665</b>	<b>1,199,861</b>	<b>108%</b>	<b>\$ 148,684</b>	<b>\$ 136,894</b>	<b>-8%</b>

1) Four variable speed drive projects generated 981,186 kWh of energy savings

### Gas Program Budgeted vs. Actuals

Results from MidAmerican's 2017 gas programs are provided in Table 2. Focusing on energy savings, the residential gas programs had 20% fewer energy savings than the goal and nonresidential gas programs had 33% more energy savings than the goal. Total energy savings for all programs in 2017 was 381,977 therms, or 5% fewer energy savings than the overall goal for the year.

Looking at spending, MidAmerican came in under budget for both residential and nonresidential gas programs in 2017. Residential program spending was 30% below the budget and nonresidential program spending was 12% below the budget. In 2017, a total of \$790,403 was spent out of the approved \$1,079,048 budget.

Program	Energy Savings (therms)			Expenditures		
	Budgeted	Actual	Variance	Budgeted	Actual	Variance
Residential Equipment	256,754	221,667	-14%	\$ 557,206	\$ 458,591	-18%
Residential Audit	38,904	16,326	-58%	\$ 307,289	\$ 143,119	-53%
<b>Total Residential</b>	<b>295,658</b>	<b>237,993</b>	<b>-20%</b>	<b>\$ 864,495</b>	<b>\$ 601,710</b>	<b>-30%</b>
Nonresidential Equipment	84,229	143,342	70%	\$ 137,651	\$ 168,197	22%
Nonresidential Custom	13,774	0	-100%	\$ 31,219	\$ 3,150	-90%
Small Commercial Energy Audit	10,308	642	-94%	\$ 45,683	\$ 17,346	-62%
<b>Total Nonresidential</b>	<b>108,311</b>	<b>143,984</b>	<b>33%</b>	<b>\$ 214,553</b>	<b>\$ 188,693</b>	<b>-12%</b>
<b>Total All Gas Programs</b>	<b>403,969</b>	<b>381,977</b>	<b>-5%</b>	<b>\$1,079,048</b>	<b>\$ 790,403</b>	<b>-27%</b>

Benefit/Cost Analysis of Electric Programs

Table 3 shows the 2017 benefit/cost test results for the electric programs. The total resource cost (TRC) test is highlighted in the table. This test is used by Staff to determine whether or not the program is cost effective. Overall, MidAmerican’s energy efficiency programs were demonstrated to be cost effective.

<b>Table 3. 2017 Electric Program Benefit/Cost Test Results</b>					
<b>Program</b>	<b>TRC</b>	<b>PART</b>	<b>RIM</b>	<b>UTILITY</b>	<b>SOCIETAL</b>
Residential Equipment	1.49	1.63	0.91	2.62	1.52
Residential Audit	1.68	2.53	0.53	1.21	1.13
Residential Appliance Recycling	4.76	4.58	1.89	6.07	5.63
Nonresidential Equipment	51.48	16.38	3.49	122.61	72.07
Nonresidential Custom	-	-	-	-	-
Small Commercial Energy Audit	-	1	-	-	-
<b>Total Electric Energy</b>	<b>12.19</b>	<b>4.68</b>	<b>2.91</b>	<b>28.62</b>	<b>16.63</b>
Residential Load Management	1.05	1.02	0.34	0.34	0.97

Benefit/Cost Analysis of Gas Programs

Table 4 shows the 2017 benefit/cost test results for the gas programs. Again, the total TRC test is highlighted in the table. The only program that did not have a TRC result greater than 1.0 was the small commercial energy audit. In response to Staff Data’s request 1-1b, MidAmerican identified that the company had stopped performing assessments in September 2017 because the funding for the nonresidential equipment program was “almost depleted.” The company did not want assessments completed when the subsequent equipment upgrades would not be able to be rebated. This related to both gas and electric.

<b>Table 4. 2017 Gas Program Benefit/Cost Test Results</b>					
<b>Program</b>	<b>TRC</b>	<b>PAR</b>	<b>RIM</b>	<b>UTILITY</b>	<b>SOCIETAL</b>
Residential Equipment	1.27	1.51	0.84	5.03	1.74
Residential Audit	1.27	2.1	0.53	1.13	1.15
Nonresidential Equipment	2.16	2.31	0.94	8.65	3.08
Nonresidential Custom	-	-	-	-	-
Small Commercial Energy Audit	0.33	1.24	0.29	0.4	0.49
<b>Total Gas</b>	<b>1.47</b>	<b>1.74</b>	<b>0.85</b>	<b>4.97</b>	<b>2.01</b>

## 2017 PERFORMANCE INCENTIVE

Recovery of the 2017 performance incentive is included in the proposed electric ECR rates for 2018. Since both the gas and electric programs came in under budget in 2017, the performance incentives were calculated using actual program costs. The electric program has an incentive of \$9,473. It is included in the electric ECR factors for recovery in 2018.

The gas program has an incentive of \$54,696. It is not currently included in the gas ECR factors as they are set to \$0.00000 pursuant to the most recent order in GE17-001, dated February 27, 2018. According to Staff's Data request 1-10, MidAmerican is exploring options to reduce the volatility in the gas ECR factor. The company does not yet have a timeline for filing these proposed changes.

## 2018 ENERGY EFFICIENCY COST RECOVERY FACTORS

Staff reviewed MidAmerican's calculations for the electric 2018 ECR factors and found the factors to be properly calculated. Table 5, below, provides the proposed 2018 electric ECR factors and the estimated annual bill impact for a typical customer's utility bill from the current ECR rates.

Program	Class	2017 ECR Factor	Proposed ECR Factor	Difference	Average 2018 Usage <sup>1</sup>	Estimated Bill Impact
Electric	Residential	\$ 0.00261	\$ 0.00015	\$ (0.00246)	13,338	\$ (32.81)
	Nonresidential	\$ 0.00018	\$ 0.00004	\$ (0.00014)	195,966	\$ (27.44)
Gas <sup>[2]</sup>	Residential	\$ 0.04222	\$ -	\$ (0.04222)	640	\$ (27.02)
	Nonresidential	\$ (0.00440)	\$ -	\$ 0.00440	4,641	\$ 20.42

1) Average 2018 Usage was calculated based on January-December 2017 actual sales and customers

2) Current Factor was approved in February 2018 in GE17-001

## STAFF RECOMMENDATION

Staff makes the following recommends to the Commission:

- 1) That the Commission approve the 2017 reconciliation amounts;
- 2) That the Commission approve the 2017 performance incentive; and
- 3) That the Commission approves the electric Energy Efficiency Cost Recovery Factors and tariff sheet filed on February 23, 2018, with an effective date of April 2, 2018.