



EEP-2009-0002

**FILED WITH  
Executive Secretary**

**December 29, 2011**

**IOWA UTILITIES BOARD**

December 29, 2011

Joan Conrad  
Executive Secretary  
Iowa Utilities Board \*  
1735 E Court Ave.  
Des Moines, IA 50319-0069

Subject: Summary of 2010 Energy Efficiency Programs.

Dear Ms. Conrad:

Maquoketa Valley Electric Cooperative is submitting a summary of 2010 Energy Efficiency Programs in accordance with the requirements of SF 2386 on energy efficiency.

Please feel free to contact me if you have questions at 319-462-3541.

Sincerely,

James M. Lauzon  
CEO/Executive Vice President  
Maquoketa Valley Electric Cooperative



# **Maquoketa Valley Electric Cooperative**

## **2010 Energy Efficiency Program Summary**

**Pursuant to Senate File 2386**

**December 29, 2011**



## **Executive Summary**

The following pages contain a summary of the Energy Efficiency Programs offered by Maquoketa Valley Electric Cooperative for the year 2010. This summary is being filed in accordance with the requirements for non rate regulated utilities as described in SF 2386 on energy efficiency.

Maquoketa Valley's initial Energy Efficiency Plan was filed on December 31, 2009 as part of the Iowa Association for Electric Cooperative's joint filing for several Iowa Electric Cooperative's.

The 2010 summary includes the type of program, number of program participants, the investment by Maquoketa Valley in each of the programs, and the energy savings resulting from each program.

Maquoketa Valley offered approximately 50 Energy Efficiency programs in 2010 with 2990 member consumers participating in the various offerings.

The savings gained by Maquoketa Valley's members in 2010 resulting from Energy Efficiency programs was 3,664,476 kwh's per year. Maquoketa Valley invested \$572,999 on these programs in 2010.

The initial plan had projected savings of 4,132,512 kwh's along with investment by Maquoketa Valley of \$945,825 in 2010.

Based on these results Maquoketa Valley members experienced 89% of projected energy savings while the Cooperative spent 61% of its projected cost to implement the programs in 2010.

At this time Maquoketa Valley Electric Cooperative has no updates or amendments for the years 2011-2014 as outlined in the initial Energy Efficiency Plan.

The following pages include tables with actual 2010 numbers in same format as the original filing. Some programs outlined in the original filing have been reallocated due to program tracking procedures, but goal totals remain consistent.

		2010 Actual Activity				
Maquoketa Valley Electric Cooperative	Measure Description	Participants	Total Cost	Annual kWh Savings	Lifetime kWh Savings	KW Savings
<b>1. Incentive Programs for Energy Efficient Technologies</b>						
<b>1 Residential Cooling &amp; Heating (low income included)</b>						
	ENERGY STAR Central Air Conditioning	Rebate for central air conditioners above the baseline efficient models.				
	SEER 14.5 (and EER 12)		39	\$5,252	9,671	135,393
	SEER 16 (and EER 13)		80	\$15,120	36,781	514,941
	ENERGY STAR Qualified Room Air Conditioner	Rebate for window air conditioners above the baseline efficient models.	18	\$970	1,864	16,773
	Geothermal Heat Pump	Rebate for geothermal heat pumps above the baseline efficient models.	107	\$183,435	1,608,500	32,169,990
	Air Source Heat Pump	Rebate for air source heat pumps above the baseline efficient models.	17	\$12,822	148,171	2,222,561
	Heat Recovery Ventilators	Rebate for heat recovery ventilators.	41	\$5,264	25,485	509,699
	Residential Contractor Rebates	Incentive for heat pump installs	97	\$22,161		
<b>2 Residential Lighting (low income included)</b>						
<b>Interior Lighting</b>						
	Change a Light Rebate Program	Rebate for compact fluorescent light bulbs.	846	\$12,698	492,140	3,592,624
	Local Rebate Program(s)	Rebate for compact fluorescent light bulbs.	94	\$6,449	71,136	711,361
<b>Exterior Lighting</b>						
	High Efficiency Exterior Lighting	Rebates for exterior lighting (high pressure sodium, metal halide or compact fluorescent)	47	\$2,927	21,147	93,047
	High Pressure Sodium - 50 - 100 W					
	High Pressure Sodium - 100+ W					
	Metal Halide - 70 - 250 W					
	Metal Halide - 250+ W (pulse start lamp and ballasts)					
	LED Holiday Lighting	Rebate for holiday lighting.	106	\$1,818	8,178	98,136
<b>3 Residential Water Heating (low income included)</b>						
	High Efficiency Water Heater	Rebate for high efficiency electric water heaters.	235	\$58,047	69,708	1,045,617
	Heat Pump Water Heater - (Add-On)	Rebate for add-on heat pump water heater.	1	\$437	1,912	19,121
	Heat Pump Water Heater - (Integrated)	Rebate for integrated heat pump water heater.				
	Solar Water Heaters (w/ Electric auxiliary tank)	Rebate for solar water heater.				
	Flow Restrictors - Faucet	Incentive for faucet flow restrictors.	5	\$181	1,841	16,565
	Flow Restrictors - Shower	Incentive for low-flow shower head.	5	\$196	3,141	31,410
	Tank Insulation	Incentive for water heater tank insulation.	2	\$64	339	3,394
	Pipe Insulation	Incentive for water pipe insulation.				
<b>4 Residential Appliances (low income included)</b>						
	ENERGY STAR Qualified Clothes Washer	Rebate for ENERGY STAR clothes washer.	272	\$23,620	51,960	571,564
	ENERGY STAR Qualified Dishwasher	Rebate for ENERGY STAR dishwasher.	137	\$8,063	16,005	176,052
	ENERGY STAR Qualified Refrigerator	Rebate for ENERGY STAR refrigerator.	365	\$21,482	38,215	573,230
	ENERGY STAR Qualified Dehumidifier	Rebate for ENERGY STAR dehumidifier.	39	\$2,039	9,155	109,862
	ENERGY STAR Qualified Freezer	Rebate for ENERGY STAR freezer.	53	\$2,770	3,914	58,703
	Appliance Recycling	Incentives for appliance recycling.	203	\$24,866	270,318	2,162,541
	Efficient Television	Rebate for efficient television.	14	\$1,041	2,314	27,773
<b>5 Efficient Home Incentives (low income included)</b>						
	Energy Efficient Home Construction Rebates *	Rebate for energy efficient home construction.	2	\$601	2,204	66,126
	Advanced Lighting Package					
<b>6 Additional Low Income</b>						
	Energy Efficiency Kits (CAAP give-away/drop-off)	Energy efficiency kit for low-income.				
	Weatherization Rebates	Rebates for various insulation measures.				
<b>7 Building Shell - Existing Home Only</b>						
	Weatherization Rebates	Rebates for various insulation measures.	12	\$2,923	4,695	140,848

Residential Total

\$415,243

2,898,794 45,067,331

782

Residential Average kWh Sales (3 yr Ave actual and projected)

170,978,061

Residential kWh Savings as percentage of Residential kWh Sales

1.7%

		2010 Actual Activity					
Maquoketa Valley Electric Cooperative		Measure Description	Participants	Total Cost	Annual kWh Savings	Lifetime KWh Savings	KW Savings
<b>§ Agriculture/Commercial &amp; Industrial Lighting</b>							
Interior Lighting							
	High Efficiency Interior Lighting	Rebates for various interior lighting (e.g., CFLs, LEDES, florescent tubes, metal halide)	36	\$26,678	404,446	2,426,676	16
<b># Ag/Commercial &amp; Industrial Heating and Cooling</b>							
	ENERGY STAR Air Conditioning	Rebate for ENERGY STAR air conditioning.	1	\$151	275	4,120	0
	Geothermal Heat Pump	Rebate for geothermal heat pump.	1	\$3,367	19,163	383,266	1
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	Rebate for air source heat pump.	1	\$1,011	6,998	104,967	0
<b># Ag/Commercial &amp; Industrial Appliances</b>							
	Commercial ENERGY STAR Refrigerators and Freezers	Rebates for ENERGY STAR refrigerators & freezers.	1	\$164	428	5,131	0
<b># Ag/Commercial &amp; Industrial Insulation</b>							
	Building Envelope	Rebates for insulation.					
<b># Ag/Commercial &amp; Industrial Motors and Other</b>							
	Custom Rebate Program		3	\$5,229	100,808	1,209,696	42
	Premium Motors Rebate Program - NEMA	Rebate for premium motors.					
	Variable Speed Drive Motor Incentive	Incentives for variable speed drive motors.					
<b># Agricultural</b>							
	Dairy Pre-coolers Incentive	Rebate for dairy precoolers.	6	\$2,626	40,708	610,624	23
	Dairy Heat Reclaimer	Rebate for dairy heat reclaimer.	3	\$1,984	33,228	498,425	12
	Livestock Ventilation Fans	Rebate for livestock ventilation fans.	2	\$2,195	12,313	147,752	4
	Ventilation Thermostat Controller	Rebate for ventilation thermostat controller.					
	Circulating Fans --- BESS Lab Ratings	Rebate for circulating fans.					
	Scroll compressor (milk cooling)	Rebate for milk cooling scroll compressor.	1	\$304	3,664	54,967	0
	Efficient Livestock Waterers	Rebate for efficient livestock waterer.					
	Variable Speed Drive Motor - Dairy Vacuum Pump	Rebate for variable speed motors for dairy vacuum pumps.	11	\$5,100	142,653	2,425,093	13
	Hog Farrowing - Heat Lamps (<= 175W)	Rebate for farrowing heat lamps.	1	\$55	999	3,994	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	Rebate for single crate heating pads.					
	Hog Farrowing - Heat Lamp or Pad Controller	Rebate for controller for heat pad or lamp.					
<b>Commercial and Industrial Total</b>				<b>\$48,863</b>	<b>765,682</b>	<b>7,874,710</b>	<b>112</b>
<b>C &amp; I Average kWh Sales (3 yr Ave actual and projected)**</b>					<b>89,271,069</b>		
<b>C &amp; I kWh Savings as percentage of C &amp; I kWh Sales</b>					<b>0.9%</b>		
<b>II. Demand Response Programs</b>							
#	Commercial and Industrial Time-of-Day Price	Commercial and Industrial Time-of-Day Price					
<b>III. Energy Audit &amp; Technical Support Programs</b>							
#	Expert Energy Services - Agricultural	Expert Energy Services - Agricultural					
#	Expert Energy Services - C&I	Expert Energy Services - Commercial and Industrial.					
#	Energy Audit Services - Residential *	Energy Audit Services - Residential	86	\$33,770			
<b>IV. Educational &amp; Research Programs</b>							
#	Member Information and Education	Member Information and Education	12,414	\$46,112			
#	Peak Alert	Peak Alert					
#	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	Economic contributions to Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,414	\$29,011			
<b>TOTAL</b>				<b>\$572,999</b>	<b>3,664,476</b>	<b>52,942,042</b>	<b>895</b>
<b>Total Average kWh Sales (3 yr Ave actual and projected)**</b>					<b>260,249,129</b>		
<b>Total kWh Savings as percentage of Total kWh Sales</b>					<b>1.41%</b>		

\* Savings for the specific measures are accounted for and included in the applicable programs.

\*\*Excludes kWh sales to biofuel production facilities, natural gas pumping stations and possibly other uniquely situated or new or very large members