

December 31, 2009

IOWA UTILITIES BOARD

Humboldt County Rural Electric Cooperative EEP-2009-0002

BACKGROUND

Humboldt County Rural Electric Cooperative (REC), formed in 1935, provides reliable electric service to a rural region in northern Iowa.

Humboldt County REC is a small town not-for-profit cooperative, based out of Humboldt, Iowa. Humboldt County REC serves the members with a staff of 15 employees and has approximately 900 miles of distribution line with less than two members per mile.

Humboldt County REC is governed by a seven member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Humboldt, Kossuth, Pocahontas, Webster and Wright counties. The cooperative provides electric service to 1,874 member-consumers. One of these is a large (greater than 1,000 KVA) commercial member and 103 of these are small (less than 1,000 KVA) commercial members and the remaining 1,770 are residential and/or farm members.

Of the 103 small commercial accounts most are Ag industry based. These include hog finishing and farrowing facilities, egg laying and Ag equipment remanufacturing. In 2009 an Ag equipment repair service center and a waste management/landfill completed high efficiency lighting upgrades with a total savings of 55,000 kWh's per year.

Corn Belt Power Cooperative in Humboldt, Iowa is our generation and transmission cooperative.

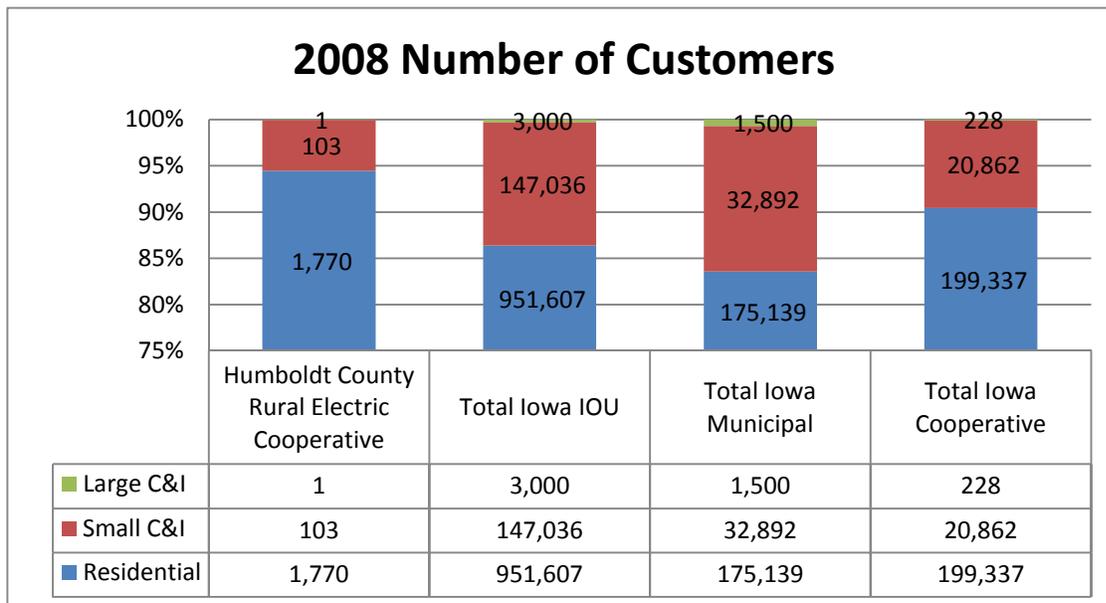
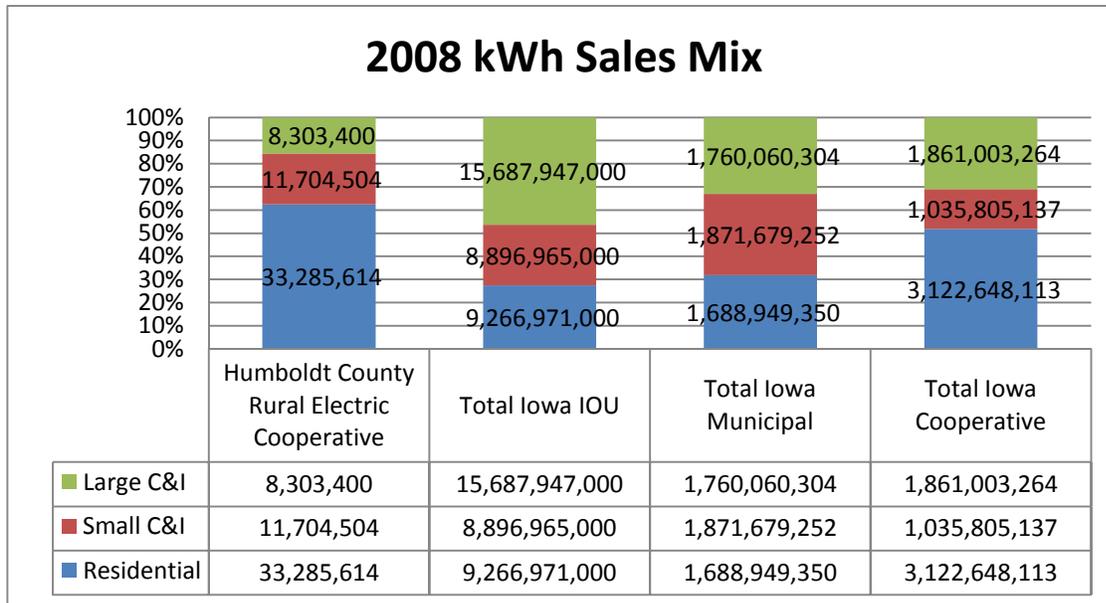
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Humboldt County REC itself. This illustrates that making any comparison of Humboldt County REC's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

The Website for Humboldt County REC is www.humboldtrec.coop and is one of the mechanisms used to promote energy efficiency programs.

Education at a whole is the key to a successful energy efficiency program. Humboldt County REC continues to promote and educate our members through our annual training events.

Momentum is Building is held every February in Des Moines, showing the latest updates on energy efficiency building techniques and code updates. Area contractors and electricians are encouraged to participate.

Build it Right seminars are held in Fort Dodge every fall. This seminar is open to the public for a one day training event on energy efficiency remodeling and green building. It is sponsored by Corn Belt Power and its 10 distribution cooperatives.

We are presently constructing an energy efficiency trailer to be used as a mobile display for energy efficiency building techniques. The trailer will be used by Corn Belt's 10 distribution cooperatives at their annual meetings, trade shows, county fairs and the Farm Progress Show.

Humboldt County REC has been focusing in on 2 major CFL lighting programs to reduce kWh usage in that area.

First, in our local program we distributed 2,600 CFL's during our fall line patrol, 2 bulbs to each residential household. Also, at our 2009 annual meeting, another 1,000 bulbs were distributed to members who attended the meeting. Change a Light, Change the World CFL rebate program has been a part of our energy efficiency lighting program since 2006 with a total of 1,400 bulbs rebated. To date more than 5,000 CFL bulbs have been installed with a total of 316,000 kWhs per year saved.

Humboldt County REC is supporting members in financial need by distributing energy efficiency kits through Upper Des Moines Opportunity, Inc. in Humboldt County and North Iowa Community Action Agency in Kossuth County.

The kits included energy efficiency information along with basic weatherization items, such as outlet gaskets, window coverings, door weather stripping and foam crack sealer. Also included are CFL bulbs for energy savings. Free in home energy audits are also available to all members of Humboldt County REC.

Humboldt County REC has been committed to supply side and demand side energy efficiency for many years. Humboldt County REC has invested \$831,926 in demand

side energy efficiency programs from 1992 through 2007. Going forward, Humboldt County REC has a planned demand side investment of \$.5 million for 2010 through 2014.

Through its power supplier Corn Belt Power Cooperative, Humboldt County REC is aggressively pursuing a load management program expected to be implemented in the next couple years. Items currently being completed include load research, infrastructure review, implementation strategies and benefit-cost evaluation.

Energy Efficiency Goals

Humboldt County REC's energy efficiency portfolio consists of programs that are tailored to each member's rate classes, i.e. residential, farm, small C&I and commercial. An independent third party consultant performed an assessment of potential study to determine programs that have a high acceptance to members as well as being cost effective for the cooperative. Along with our standard programs we offer a customizable energy efficiency rebate program for our large commercial class that can maximize the potential kWh savings in both their lighting and production needs.

Humboldt County REC's energy efficiency programs take advantage of and promote the use of local contractors and businesses for the installation of all equipment and building shell energy efficiency upgrades.

Humboldt County REC also participates annually in several community education programs designed to excite both members and non-members in energy efficiency building and weatherization improvements. Also through web based programs and TV and radio spots, newsprint and visual media.

A nationwide campaign of "Together We Save" has been launched by the Touchstone Energy Cooperatives of which Humboldt County REC is a member. "Together We Save" is a direct approach campaign to inspire "everyone" not just rural cooperative members to do their part or their share to save and conserve energy. This in its self will have a greater impact on our nation's energy and environment than any rebate program will accomplish.

In home energy audits is another way Humboldt County REC reaches directly out to our members and makes them aware of what can be done in their home or by changing their habits to conserve and save energy. In home audits consist of a walk through with the member to find areas that need to be corrected to improve the efficiency of their home. Air infiltration, insulation, lighting and appliances are the areas covered and have the largest effect on their utility bill.

Below are some of the new energy efficiency measures offered to Humboldt County REC members.

Pilot Programs

- Heat Pump Water Heater
- Solar Water Heater
- Appliance Recycling
- LED Exterior and Interior Lighting

New Programs

- Heat Recovery Ventilators
- T8 & T5 Light Fixture (Residential)
- Appliances – Energy Star
 1. Refrigerator
 2. Freezer
 3. Washing Machine
 4. Dishwasher
- Build Shell Weatherization
 1. Insulation Attic Walls and Basement
 2. Infiltration Control

Aq Programs

- Exterior and Interior Lighting
- Premium Motors
- Livestock Heating and Ventilation

The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates.

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	51	\$9,418	216,363	47,273	15,455
	SEER 14.5 (and EER 12)	17	\$2,125	52,836	11,544	3,774
	SEER 15 +	17	\$3,193	67,894	14,834	4,850
	SEER 16 (and EER 13)	17	\$4,100	95,633	20,895	6,831
	Geothermal Heat Pump	33	\$55,926	8,764,094	1,221,662	438,205
	Air Source Heat Pump	57	\$40,755	6,715,478	1,303,824	447,699
	Heat Recovery Ventilators	28	\$4,368	350,582	48,205	17,529
	Residential Contractor Rebates	75	\$18,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,325	\$3,313	633,452	273,421	86,774
	Local CFL Rebate Program(s)	8,000	\$30,000	3,824,616	1,702,740	523,920
	T8 or better Lighting Fixtures	281	\$2,108	231,082	39,244	14,090
	2 ft. T8 or better Fixture w/ electronic ballasts	60	\$450	5,461	916	333
	4 ft. T8 or better Fixture w/ electronic ballasts	110	\$825	76,093	12,865	4,640
	8 ft. T8 or better Fixture w/ electronic ballasts	111	\$833	149,528	25,463	9,118
	ENERGY STAR LED lighting	85	\$213	113,786	17,105	6,321
Exterior Lighting						
	High Efficiency Exterior Lighting	32	\$198	32,039	20,707	7,282
	High Pressure Sodium - 100+ W	32	\$198	32,039	20,707	7,282
	LED Holiday Lighting	335	\$838	312,354	76,146	26,030
Residential Water Heating (low income included)						
	High Efficiency Water Heater	225	\$46,250	1,081,001	214,813	72,067
	50-79 gallon	80	\$10,000	277,056	57,720	18,470
	80 gallon+	145	\$36,250	803,945	157,093	53,596
	Heat Pump Water Heater - (Add-On)	14	\$5,250	269,619	65,479	26,962
	Heat Pump Water Heater - (Integrated)	14	\$5,250	323,543	65,479	26,962
	Solar Water Heaters (w/ Electric auxiliary tank)	4	\$1,500	89,777	18,704	7,481
	Flow Restrictors - Faucet	840	\$7,031	2,802,794	915,728	311,422
	Flow Restrictors - Shower	420	\$7,035	2,657,340	781,385	265,734
	Pipe Insulation	460	\$2,875	819,513	170,435	54,634
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	26	\$1,690	63,492	17,538	5,772
	ENERGY STAR Qualified Dishwasher	56	\$1,750	72,479	19,179	6,589
	ENERGY STAR Qualified Refrigerator	56	\$1,750	88,578	17,188	5,905
	ENERGY STAR Qualified Freezer	56	\$1,750	62,471	12,122	4,165
	Appliance Recycling	165	\$11,550	1,043,729	348,652	119,782
	Refrigerator	56	\$3,850	605,314	195,766	67,257
	Freezer	56	\$3,850	395,524	127,918	43,947
	Window AC Unit	56	\$3,850	42,890	24,968	8,578
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	5	\$6,250	166,500	13,320	4,440
Additional Low Income						
	Energy Efficiency Kits	60	\$1,875	610,189	192,097	67,799
Building Shell - Existing Home Only						
	Weatherization Rebates	100	\$50,000	3,376,259	353,896	117,965
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$7,500	456,876	45,688	15,229
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	10	\$3,750	47,952	4,795	1,598
	Wall (Bring Up to R19) - Elect. Heat Only	5	\$3,750	218,448	21,845	7,282
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	10	\$3,750	45,621	4,562	1,521
	Foundation (Bring Up to R-10)	30	\$22,500	1,941,057	194,106	64,702
	Infiltration Control	25	\$6,250	568,181	68,182	22,727
	Duct Insulation (in unconditioned space)	10	\$2,500	98,124	14,719	4,906
Residential Total		12,803	\$317,691	34,721,130	7,956,339	2,680,983
Residential Average kWh Sales (3 yr Ave actual and projected)						165,319,195
Residential kWh Savings as percentage of Residential kWh Sales						1.6%

		2010-2014				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program					
	High Efficiency Interior Lighting					
	T8 or T-5 fixtures - 2 ft	90	\$675	15,644	7,043	2,697
	T-8 or 46" T5 - 4 ft	150	\$1,125	208,858	87,024	32,634
	T8 or T-5 fixtures - 8 ft	175	\$1,313	208,858	88,578	32,634
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	250	\$18,000	1,408,118	512,043	182,873
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	250	\$9,000	1,262,819	459,207	164,003
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	80	\$300	156,288	61,050	24,420
	Pulse Start Metal Halide Fixtures - 250+ watts	80	\$300	188,114	73,482	29,393
	CFL lamps - Energy Star- 9W and up	305	\$1,144	151,400	161,327	58,231
	Occupancy Sensors - Must control >150 Watts	55	\$1,031	293,040	82,584	29,304
	LED Exit Signs	25	\$156	65,168	17,150	5,717
Exterior Lighting						
	High Efficiency Exterior Lighting	25	\$156	27,875	17,066	5,689
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	25	\$156	27,875	17,066	5,689
Agricultural						
	Livestock Ventilation Fans	5	\$1,824	170,070	38,974	14,172
	36"-47"	32	\$1,824	170,070	38,974	14,172
	Circulating Fans --- BESS Lab Ratings	30	\$1,824	127,446	29,206	10,620
	36"-47"	32	\$1,824	127,446	29,206	10,620
	Efficient Livestock Waterers	13	\$819	123,983	22,253	10,332
	Hog Farrowing - Heat Lamps (<= 175W)	15	\$60	10,057	7,542	2,514
	Hog Farrowing - Single Crate Heating Pads (<=85W)	15	\$480	30,137	9,041	3,014
	Hog Farrowing - Double Crate Heating Pads(<=170W)	15	\$945	60,273	18,082	6,027
Ag, Commercial and Industrial Total		2,078	\$40,402	4,779,874	1,872,805	689,753
C & I Average kWh Sales (3 yr Ave actual and projected)**						95,516,561
C & I kWh Savings as percentage of C & I kWh Sales						0.7%

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$3,125			
	Expert Energy Services - C&I	10	\$6,250			
	Energy Audit Services - Residential *	82	\$24,600			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	100	\$12,500			
	Member Information and Education	7,375	\$36,506			
	Peak Alert	7,375	\$1,844			
	Living with Energy in Iowa	7,375	\$38,940			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,375	\$24,665			
TOTAL		44,578	\$506,523	39,501,003	9,829,144	3,370,736
Total Average kWh Sales (3 yr Ave actual and projected)**						260,835,756
Total kWh Savings as percentage of Total kWh Sales						1.3%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	9	\$1,536	38,182	2,727	3
	SEER 14.5 (and EER 12)	3	\$375	9,324	666	1
	SEER 15 +	3	\$561	11,981	856	1
	SEER 16 (and EER 13)	3	\$600	16,876	1,205	1
	Geothermal Heat Pump	5	\$8,685	1,327,893	66,395	8
	Air Source Heat Pump	10	\$7,150	1,178,154	78,544	10
	Heat Recovery Ventilators	4	\$624	50,083	2,504	
	Residential Contractor Rebates	15	\$3,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	300	\$750	143,423	19,647	18
	Local CFL Rebate Program(s)	2,000	\$7,500	956,154	130,980	120
	T8 or better Lighting Fixtures	41	\$308	32,840	2,002	1
	2 ft. T8 or better Fixture w/ electronic ballasts	10	\$75	910	56	
	4 ft. T8 or better Fixture w/ electronic ballasts	15	\$113	10,376	633	0
	8 ft. T8 or better Fixture w/ electronic ballasts	16	\$120	21,554	1,314	0
	ENERGY STAR LED lighting	10	\$25	13,387	744	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,006	1,138	0
	High Pressure Sodium - 100+ W	5	\$31	5,006	1,138	0
	LED Holiday Lighting	60	\$150	55,944	4,662	15
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$8,750	207,875	13,858	2
	50-79 gallon	20	\$2,500	69,264	4,618	1
	80 gallon+	25	\$6,250	138,611	9,241	1
	Heat Pump Water Heater - (Add-On)	1	\$375	19,259	1,926	0
	Heat Pump Water Heater - (Integrated)	1	\$375	23,110	1,926	0
	Solar Water Heaters (w/ Electric auxiliary tank)					
	Flow Restrictors - Faucet	160	\$1,339	533,866	59,318	3
	Flow Restrictors - Shower	80	\$1,340	506,160	50,616	4
	Pipe Insulation	120	\$750	213,786	14,252	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	5	\$325	12,210	1,110	0
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	10	\$313	15,818	1,055	0
	ENERGY STAR Qualified Freezer	10	\$313	11,156	744	0
	Appliance Recycling	30	\$2,063	186,380	21,390	6
	Refrigerator	10	\$688	108,092	12,010	2
	Freezer	10	\$688	70,629	7,848	1
	Window AC Unit	10	\$688	7,659	1,532	2
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	10	\$313	101,698	11,300	1
Building Shell - Existing Home Only						
	Weatherization Rebates	20	\$10,000	675,252	23,593	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,500	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$750	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$750	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$750	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$4,500	388,211	12,940	0
	Infiltration Control	5	\$1,250	113,636	4,545	0
	Duct Insulation (in unconditioned space)	2	\$500	19,625	981	0
Residential Total		2,962	\$58,325	6,353,877	512,717	197
Residential Average kWh Sales (3 yr Ave actual and projected)					32,557,324	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

		2010				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
Change a Light Rebate Program						
High Efficiency Interior Lighting						
		220	\$5,214	620,956	87,557	2
	T8 or T-5 fixtures - 2 ft	10	\$75	1,738	300	0
	T-8 or 46" T5 - 4 ft	20	\$150	27,848	4,351	0
	T8 or T-5 fixtures - 8 ft	25	\$188	29,837	4,662	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	40	\$2,880	225,299	29,260	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	40	\$1,440	202,051	26,240	0
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	10	\$38	19,536	3,053	0
	Pulse Start Metal Halide Fixtures - 250+ watts	10	\$38	23,514	3,674	0
	CFL lamps - Energy Star- 9W and up	50	\$188	24,820	9,546	0
	Occupancy Sensors - Must control >150 Watts	10	\$188	53,280	5,328	0
	LED Exit Signs	5	\$31	13,034	1,143	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,575	1,138	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	5	\$31	5,575	1,138	0
Agricultural						
	Livestock Ventilation Fans	1	\$285	26,573	2,214	1
	36"-47"	5	\$285	26,573	2,214	1
	Circulating Fans --- BESS Lab Ratings	5	\$285	19,913	1,659	1
	36"-47"	5	\$285	19,913	1,659	1
	Efficient Livestock Waterers	1	\$63	9,537	795	
	Hog Farrowing - Heat Lamps (<= 175W)	3	\$12	2,011	503	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	3	\$96	6,027	603	
	Hog Farrowing - Double Crate Heating Pads(<=170W)	3	\$189	12,055	1,205	
Ag, Commercial and Industrial Total		241	\$6,175	702,648	95,674	3
C & I Average kWh Sales (3 yr Ave actual and projected)**					19,694,837	
C & I kWh Savings as percentage of C & I kWh Sales					0.5%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$625			
	Expert Energy Services - C&I	2	\$1,250			
	Energy Audit Services - Residential *	15	\$4,500			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	20	\$2,500			
	Member Information and Education	1,475	\$7,301			
	Peak Alert	1,475	\$369			
	Living with Energy in Iowa	1,475	\$7,788			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,475	\$4,933			
TOTAL		9,141	\$93,766	7,056,525	608,391	199
Total Average kWh Sales (3 yr Ave actual and projected)**					52,252,160	
Total kWh Savings as percentage of Total kWh Sales					1.2%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,252	50,909	3,636	4
	SEER 14.5 (and EER 12)	4	\$500	12,432	888	1
	SEER 15 +	4	\$752	15,975	1,141	1
	SEER 16 (and EER 13)	4	\$1,000	22,502	1,607	2
	Geothermal Heat Pump	6	\$10,125	1,593,472	79,674	9
	Air Source Heat Pump	11	\$7,865	1,295,969	86,398	11
	Heat Recovery Ventilators	5	\$780	62,604	3,130	
	Residential Contractor Rebates	15	\$3,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	300	\$750	143,423	19,647	18
	Local CFL Rebate Program(s)	1,800	\$6,750	860,539	117,882	108
	T8 or better Lighting Fixtures	50	\$375	41,687	2,542	1
	2 ft. T8 or better Fixture w/ electronic ballasts	10	\$75	910	56	
	4 ft. T8 or better Fixture w/ electronic ballasts	20	\$150	13,835	844	0
	8 ft. T8 or better Fixture w/ electronic ballasts	20	\$150	26,942	1,643	1
	ENERGY STAR LED lighting	15	\$38	20,080	1,116	1
Exterior Lighting						
	High Efficiency Exterior Lighting	6	\$38	6,007	1,365	0
	High Pressure Sodium - 100+ W	6	\$38	6,007	1,365	0
	LED Holiday Lighting	65	\$163	60,606	5,051	16
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,375	218,282	14,552	2
	50-79 gallon	15	\$1,875	51,948	3,463	0
	80 gallon+	30	\$7,500	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	2	\$750	38,517	3,852	0
	Heat Pump Water Heater - (Integrated)	2	\$750	46,220	3,852	0
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$375	22,444	1,870	0
	Flow Restrictors - Faucet	160	\$1,339	533,866	59,318	3
	Flow Restrictors - Shower	80	\$1,340	506,160	50,616	4
	Pipe Insulation	80	\$500	142,524	9,502	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	6	\$390	14,652	1,332	0
	ENERGY STAR Qualified Dishwasher	11	\$344	14,237	1,294	1
	ENERGY STAR Qualified Refrigerator	11	\$344	17,399	1,160	0
	ENERGY STAR Qualified Freezer	11	\$344	12,271	818	0
	Appliance Recycling	30	\$2,269	205,018	23,529	6
	Refrigerator	11	\$756	118,901	13,211	2
	Freezer	11	\$756	77,692	8,632	2
	Window AC Unit	11	\$756	8,425	1,685	3
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	11	\$344	111,868	12,430	1
Building Shell - Existing Home Only						
	Weatherization Rebates	20	\$10,000	675,252	23,593	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,500	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$750	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$750	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$750	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$4,500	388,211	12,940	0
	Infiltration Control	5	\$1,250	113,636	4,545	0
	Duct Insulation (in unconditioned space)	2	\$500	19,625	981	0
Residential Total		2,756	\$62,597	6,727,306	529,268	191
Residential Average kWh Sales (3 yr Ave actual and projected)					32,946,871	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

		2011				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	110	\$275	59,780	16,606	7
	High Efficiency Interior Lighting	245	\$5,866	688,173	96,664	2
	T8 or T-5 fixtures - 2 ft	15	\$113	2,607	450	0
	T-8 or 46" T5 - 4 ft	25	\$188	34,810	5,439	0
	T8 or T-5 fixtures - 8 ft	30	\$225	35,804	5,594	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	45	\$3,240	253,461	32,917	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	45	\$1,620	227,307	29,520	0
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	10	\$38	19,536	3,053	0
	Pulse Start Metal Halide Fixtures - 250+ watts	10	\$38	23,514	3,674	0
	CFL lamps - Energy Star- 9W and up	50	\$188	24,820	9,546	0
	Occupancy Sensors - Must control >150 Watts	10	\$188	53,280	5,328	0
	LED Exit Signs	5	\$31	13,034	1,143	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,575	1,138	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	5	\$31	5,575	1,138	0
Agricultural						
	Livestock Ventilation Fans	1	\$285	26,573	2,214	1
	36"-47"	5	\$285	26,573	2,214	1
	Circulating Fans --- BESS Lab Ratings	5	\$285	19,913	1,659	1
	36"-47"	5	\$285	19,913	1,659	1
	Efficient Livestock Waterers	1	\$63	9,537	795	
	Hog Farrowing - Heat Lamps (<= 175W)	3	\$12	2,011	503	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	3	\$96	6,027	603	
	Hog Farrowing - Double Crate Heating Pads(<=170W)	3	\$189	12,055	1,205	
	Ag, Commercial and Industrial Total	376	\$7,103	829,646	121,387	9
	C & I Average kWh Sales (3 yr Ave actual and projected)**				19,089,250	
	C & I kWh Savings as percentage of C & I kWh Sales				0.6%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$625			
	Expert Energy Services - C&I	2	\$1,250			
	Energy Audit Services - Residential *	15	\$4,500			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	20	\$2,500			
	Member Information and Education	1,475	\$7,301			
	Peak Alert	1,475	\$369			
	Living with Energy in Iowa	1,475	\$7,788			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,475	\$4,933			
	TOTAL	9,070	\$98,966	7,556,952	650,655	200
	Total Average kWh Sales (3 yr Ave actual and projected)**				52,036,122	
	Total kWh Savings as percentage of Total kWh Sales				1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,252	50,909	3,636	4
	SEER 14.5 (and EER 12)	4	\$500	12,432	888	1
	SEER 15 +	4	\$752	15,975	1,141	1
	SEER 16 (and EER 13)	4	\$1,000	22,502	1,607	2
	Geothermal Heat Pump	7	\$11,810	1,859,050	92,953	11
	Air Source Heat Pump	12	\$8,580	1,413,785	94,252	12
	Heat Recovery Ventilators	6	\$936	75,125	3,756	
	Residential Contractor Rebates	15	\$3,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	250	\$625	119,519	16,373	15
	Local CFL Rebate Program(s)	1,600	\$6,000	764,923	104,784	96
	T8 or better Lighting Fixtures	60	\$450	51,881	3,164	1
	2 ft. T8 or better Fixture w/ electronic ballasts	10	\$75	910	56	
	4 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	17,294	1,055	0
	8 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	33,677	2,054	1
	ENERGY STAR LED lighting	20	\$50	26,773	1,487	1
Exterior Lighting						
	High Efficiency Exterior Lighting	7	\$43	7,009	1,593	0
	High Pressure Sodium - 100+ W	7	\$43	7,009	1,593	0
	LED Holiday Lighting	70	\$175	65,268	5,439	18
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,375	218,282	14,552	2
	50-79 gallon	15	\$1,875	51,948	3,463	0
	80 gallon+	30	\$7,500	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	3	\$1,125	57,776	5,778	1
	Heat Pump Water Heater - (Integrated)	3	\$1,125	69,331	5,778	1
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$375	22,444	1,870	0
	Flow Restrictors - Faucet	170	\$1,423	567,232	63,026	3
	Flow Restrictors - Shower	85	\$1,424	537,795	53,780	4
	Pipe Insulation	85	\$531	151,432	10,095	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	5	\$325	12,210	1,110	0
	ENERGY STAR Qualified Dishwasher	11	\$344	14,237	1,294	1
	ENERGY STAR Qualified Refrigerator	11	\$344	17,399	1,160	0
	ENERGY STAR Qualified Freezer	11	\$344	12,271	818	0
	Appliance Recycling	33	\$2,269	205,018	23,529	6
	Refrigerator	11	\$756	118,901	13,211	2
	Freezer	11	\$756	77,692	8,632	2
	Window AC Unit	11	\$756	8,425	1,685	3
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300		0
Additional Low Income						
	Energy Efficiency Kits	12	\$375	122,038	13,560	2
Building Shell - Existing Home Only						
	Weatherization Rebates	20	\$10,000	675,252	23,593	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,500	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$750	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$750	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$750	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$4,500	388,211	12,940	0
	Infiltration Control	5	\$1,250	113,636	4,545	0
	Duct Insulation (in unconditioned space)	2	\$500	19,625	981	0
Residential Total		2,555	\$65,299	7,150,258	547,379	181
Residential Average kWh Sales (3 yr Ave actual and projected)					32,941,667	
Residential kWh Savings as percentage of Residential kWh Sales					1.7%	

		2012				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	120	\$300	65,215	18,115	7
	High Efficiency Interior Lighting	290	\$6,594	781,880	111,044	2
	T8 or T-5 fixtures - 2 ft	20	\$150	3,477	599	0
	T-8 or 46" T5 - 4 ft	30	\$225	41,772	6,527	0
	T8 or T-5 fixtures - 8 ft	35	\$263	41,772	6,527	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	50	\$3,600	281,624	36,575	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	50	\$1,800	252,564	32,801	1
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	15	\$56	29,304	4,579	0
	Pulse Start Metal Halide Fixtures - 250+ watts	15	\$56	35,271	5,511	0
	CFL lamps - Energy Star- 9W and up	60	\$225	29,784	11,455	0
	Occupancy Sensors - Must control >150 Watts	10	\$188	53,280	5,328	
	LED Exit Signs	5	\$31	13,034	1,143	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,575	1,138	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	5	\$31	5,575	1,138	0
Agricultural						
	Livestock Ventilation Fans	1	\$399	37,203	3,100	1
	36"-47"	7	\$399	37,203	3,100	1
	Circulating Fans --- BESS Lab Ratings	5	\$399	27,879	2,323	1
	36"-47"	7	\$399	27,879	2,323	1
	Efficient Livestock Waterers	2	\$126	19,074	1,590	
	Hog Farrowing - Heat Lamps (<= 175W)	3	\$12	2,011	503	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	3	\$96	6,027	603	
	Hog Farrowing - Double Crate Heating Pads(<=170W)	3	\$189	12,055	1,205	
Ag, Commercial and Industrial Total		432	\$8,146	956,918	139,621	11
C & I Average kWh Sales (3 yr Ave actual and projected)**					18,721,475	
C & I kWh Savings as percentage of C & I kWh Sales					0.7%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$625			
	Expert Energy Services - C&I	2	\$1,250			
	Energy Audit Services - Residential *	17	\$5,100			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	20	\$2,500			
	Member Information and Education	1,475	\$7,301			
	Peak Alert	1,475	\$369			
	Living with Energy in Iowa	1,475	\$7,788			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,475	\$4,933			
TOTAL		8,927	\$103,311	8,107,176	687,000	192
Total Average kWh Sales (3 yr Ave actual and projected)**					51,663,142	
Total kWh Savings as percentage of Total kWh Sales					1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	9	\$1,689	38,182	2,727	3
	SEER 14.5 (and EER 12)	3	\$375	9,324	666	1
	SEER 15 +	3	\$564	11,981	856	1
	SEER 16 (and EER 13)	3	\$750	16,876	1,205	1
	Geothermal Heat Pump	7	\$11,810	1,859,050	92,953	11
	Air Source Heat Pump	12	\$8,580	1,413,785	94,252	12
	Heat Recovery Ventilators	6	\$936	75,125	3,756	
	Residential Contractor Rebates	15	\$3,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	250	\$625	119,519	16,373	15
	Local CFL Rebate Program(s)	1,400	\$5,250	669,308	91,686	84
	T8 or better Lighting Fixtures	65	\$488	52,337	3,191	1
	2 ft. T8 or better Fixture w/ electronic ballasts	15	\$113	1,365	83	
	4 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	17,294	1,055	0
	8 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	33,677	2,054	1
	ENERGY STAR LED lighting	20	\$50	26,773	1,487	1
Exterior Lighting						
	High Efficiency Exterior Lighting	7	\$43	7,009	1,593	0
	High Pressure Sodium - 100+ W	7	\$43	7,009	1,593	0
	LED Holiday Lighting	70	\$175	65,268	5,439	18
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,375	218,282	14,552	2
	50-79 gallon	15	\$1,875	51,948	3,463	0
	80 gallon+	30	\$7,500	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	4	\$1,500	77,034	7,703	1
	Heat Pump Water Heater - (Integrated)	4	\$1,500	92,441	7,703	1
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$375	22,444	1,870	0
	Flow Restrictors - Faucet	170	\$1,423	567,232	63,026	3
	Flow Restrictors - Shower	85	\$1,424	537,795	53,780	4
	Pipe Insulation	85	\$531	151,432	10,095	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	5	\$325	12,210	1,110	0
	ENERGY STAR Qualified Dishwasher	12	\$375	15,531	1,412	1
	ENERGY STAR Qualified Refrigerator	12	\$375	18,981	1,265	0
	ENERGY STAR Qualified Freezer	12	\$375	13,387	892	0
	Appliance Recycling	36	\$2,475	223,656	25,668	7
	Refrigerator	12	\$825	129,710	14,412	2
	Freezer	12	\$825	84,755	9,417	2
	Window AC Unit	12	\$825	9,191	1,838	3
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	13	\$406	132,208	14,690	2
Building Shell - Existing Home Only						
	Weatherization Rebates	20	\$10,000	675,252	23,593	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,500	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$750	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$750	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$750	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$4,500	388,211	12,940	0
	Infiltration Control	5	\$1,250	113,636	4,545	0
	Duct Insulation (in unconditioned space)	2	\$500	19,625	981	0
Residential Total		2,366	\$65,105	7,117,539	541,928	169
Residential Average kWh Sales (3 yr Ave actual and projected)					33,270,000	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

		2013				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	130	\$325	70,649	19,625	8
	High Efficiency Interior Lighting	330	\$7,284	874,717	125,275	2
	T8 or T-5 fixtures - 2 ft	20	\$150	3,477	599	0
	T-8 or 46" T5 - 4 ft	35	\$263	48,733	7,615	0
	T8 or T-5 fixtures - 8 ft	40	\$300	47,739	7,459	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	55	\$3,960	309,786	40,232	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	55	\$1,980	277,820	36,081	1
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	20	\$75	39,072	6,105	0
	Pulse Start Metal Halide Fixtures - 250+ watts	20	\$75	47,028	7,348	0
	CFL lamps - Energy Star- 9W and up	70	\$263	34,747	13,364	0
	Occupancy Sensors - Must control >150 Watts	10	\$188	53,280	5,328	
	LED Exit Signs	5	\$31	13,034	1,143	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,575	1,138	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	5	\$31	5,575	1,138	0
Agricultural						
	Livestock Ventilation Fans	1	\$399	37,203	3,100	1
	36"-47"	7	\$399	37,203	3,100	1
	Circulating Fans --- BESS Lab Ratings	7	\$399	27,879	2,323	1
	36"-47"	7	\$399	27,879	2,323	1
	Efficient Livestock Waterers	4	\$252	38,148	3,179	
	Hog Farrowing - Heat Lamps (<= 175W)	3	\$12	2,011	503	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	3	\$96	6,027	603	
	Hog Farrowing - Double Crate Heating Pads(<=170W)	3	\$189	12,055	1,205	
	Ag, Commercial and Industrial Total	486	\$8,987	1,074,264	156,951	12
	C & I Average kWh Sales (3 yr Ave actual and projected)**				18,911,280	
	C & I kWh Savings as percentage of C & I kWh Sales				0.8%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$625			
	Expert Energy Services - C&I	2	\$1,250			
	Energy Audit Services - Residential *	17	\$5,100			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	20	\$2,500			
	Member Information and Education	1,475	\$7,301			
	Peak Alert	1,475	\$369			
	Living with Energy in Iowa	1,475	\$7,788			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,475	\$4,933			
	TOTAL	8,792	\$103,958	8,191,803	698,878	181
	Total Average kWh Sales (3 yr Ave actual and projected)**				52,181,280	
	Total kWh Savings as percentage of Total kWh Sales				1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	9	\$1,689	38,182	2,727	3
	SEER 14.5 (and EER 12)	3	\$375	9,324	666	1
	SEER 15 +	3	\$564	11,981	856	1
	SEER 16 (and EER 13)	3	\$750	16,876	1,205	1
	Geothermal Heat Pump	8	\$13,496	2,124,629	106,231	12
	Air Source Heat Pump	12	\$8,580	1,413,785	94,252	12
	Heat Recovery Ventilators	7	\$1,092	87,646	4,382	
	Residential Contractor Rebates	15	\$3,750			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	225	\$563	107,567	14,735	14
	Local CFL Rebate Program(s)	1,200	\$4,500	573,692	78,588	72
	T8 or better Lighting Fixtures	65	\$488	52,337	3,191	1
	2 ft. T8 or better Fixture w/ electronic ballasts	15	\$113	1,365	83	
	4 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	17,294	1,055	0
	8 ft. T8 or better Fixture w/ electronic ballasts	25	\$188	33,677	2,054	1
	ENERGY STAR LED lighting	20	\$50	26,773	1,487	1
Exterior Lighting						
	High Efficiency Exterior Lighting	7	\$43	7,009	1,593	0
	High Pressure Sodium - 100+ W	7	\$43	7,009	1,593	0
	LED Holiday Lighting	70	\$175	65,268	5,439	18
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,375	218,282	14,552	2
	50-79 gallon	15	\$1,875	51,948	3,463	0
	80 gallon+	30	\$7,500	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	4	\$1,500	77,034	7,703	1
	Heat Pump Water Heater - (Integrated)	4	\$1,500	92,441	7,703	1
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$375	22,444	1,870	0
	Flow Restrictors - Faucet	180	\$1,507	600,599	66,733	4
	Flow Restrictors - Shower	90	\$1,508	569,430	56,943	5
	Pipe Insulation	90	\$563	160,340	10,689	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	5	\$325	12,210	1,110	0
	ENERGY STAR Qualified Dishwasher	12	\$375	15,531	1,412	1
	ENERGY STAR Qualified Refrigerator	12	\$375	18,981	1,265	0
	ENERGY STAR Qualified Freezer	12	\$375	13,387	892	0
	Appliance Recycling	36	\$2,475	223,656	25,668	7
	Refrigerator	12	\$825	129,710	14,412	2
	Freezer	12	\$825	84,755	9,417	2
	Window AC Unit	12	\$825	9,191	1,838	3
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	14	\$438	142,377	15,820	2
Building Shell - Existing Home Only						
	Weatherization Rebates	20	\$10,000	675,252	23,593	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,500	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$750	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$750	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$750	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$4,500	388,211	12,940	0
	Infiltration Control	5	\$1,250	113,636	4,545	0
	Duct Insulation (in unconditioned space)	2	\$500	19,625	981	0
Residential Total		2,164	\$66,364	7,372,150	549,692	158
Residential Average kWh Sales (3 yr Ave actual and projected)					33,603,333	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

		2014				
		Estimated Achievable Potential Goals				
Humboldt County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	140	\$350	76,084	21,134	8
	High Efficiency Interior Lighting	375	\$8,086	992,581	141,364	3
	T8 or T-5 fixtures - 2 ft	25	\$188	4,346	749	0
	T-8 or 46" T5 - 4 ft	40	\$300	55,695	8,702	0
	T8 or T-5 fixtures - 8 ft	45	\$338	53,706	8,392	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	60	\$4,320	337,948	43,889	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	60	\$2,160	303,077	39,361	1
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	25	\$94	48,840	7,631	0
	Pulse Start Metal Halide Fixtures - 250+ watts	25	\$94	58,786	9,185	0
	CFL lamps - Energy Star- 9W and up	75	\$281	37,229	14,319	0
	Occupancy Sensors - Must control >150 Watts	15	\$281	79,920	7,992	0
	LED Exit Signs	5	\$31	13,034	1,143	0
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$31	5,575	1,138	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	5	\$31	5,575	1,138	0
Agricultural						
	Livestock Ventilation Fans	1	\$456	42,517	3,543	1
	36"-47"	8	\$456	42,517	3,543	1
	Circulating Fans --- BESS Lab Ratings	8	\$456	31,861	2,655	1
	36"-47"	8	\$456	31,861	2,655	1
	Efficient Livestock Waterers	5	\$315	47,686	3,974	
	Hog Farrowing - Heat Lamps (<= 175W)	3	\$12	2,011	503	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	3	\$96	6,027	603	
	Hog Farrowing - Double Crate Heating Pads(<=170W)	3	\$189	12,055	1,205	
Ag, Commercial and Industrial Total		543	\$9,992	1,216,397	176,119	13
C & I Average kWh Sales (3 yr Ave actual and projected)**					19,099,719	
C & I kWh Savings as percentage of C & I kWh Sales					0.9%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$625			
	Expert Energy Services - C&I	2	\$1,250			
	Energy Audit Services - Residential *	18	\$5,400			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	20	\$2,500			
	Member Information and Education	1,475	\$7,301			
	Peak Alert	1,475	\$369			
	Living with Energy in Iowa	1,475	\$7,788			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,475	\$4,933			
TOTAL		8,648	\$106,522	8,588,547	725,811	171
Total Average kWh Sales (3 yr Ave actual and projected)**					52,703,052	
Total kWh Savings as percentage of Total kWh Sales					1.4%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Humboldt County Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning					
	SEER 14.5 (and EER 12)	1.16	1.16	3.20	1.72
	SEER 15 +	0.96	1.19	2.39	1.45
	SEER 16 (and EER 13)	0.86	1.08	2.35	1.20
	Geothermal Heat Pump	0.44	1.96	4.70	0.95
	Air Source Heat Pump	0.48	6.55	6.62	3.55
	Heat Recovery Ventilators	0.23	1.05	1.41	0.33
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)					
	Local CFL Rebate Program(s)	0.96	13.21	11.74	14.15
	T8 or better Lighting Fixtures				
	2 ft. T8 or better Fixture w/ electronic ballasts	0.12	2.23	0.22	0.30
	4 ft. T8 or better Fixture w/ electronic ballasts	0.42	3.51	3.04	1.84
	8 ft. T8 or better Fixture w/ electronic ballasts	0.56	9.69	7.39	6.39
	ENERGY STAR LED lighting	0.74	3.10	18.61	3.05
Exterior Lighting					
High Efficiency Exterior Lighting					
	High Pressure Sodium - 100+ W	0.26	3.02	1.22	0.86
	LED Holiday Lighting	0.90	4.67	25.26	5.19
Residential Water Heating (low income included)					
High Efficiency Water Heater					
	50-79 gallon	1.43	0.90	4.19	1.70
	80 gallon+	1.27	1.71	3.29	2.71
	Heat Pump Water Heater - (Add-On)	0.35	2.05	1.60	0.84
	Heat Pump Water Heater - (Integrated)	0.33	2.58	1.31	0.91
	Solar Water Heaters (w/ Electric auxiliary tank)	0.30	1.15	0.97	0.43
	Flow Restrictors - Faucet	0.30	57.34	3.57	4.40
	Flow Restrictors - Shower	0.36	20.76	5.08	6.32
	Pipe Insulation	0.38	38.59	1.45	1.91
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer					
	ENERGY STAR Qualified Dishwasher	0.74	2.68	3.00	2.31
	ENERGY STAR Qualified Refrigerator	0.35	2.72	1.59	1.16
	ENERGY STAR Qualified Freezer	0.38	3.13	1.39	1.43
Appliance Recycling					
	Refrigerator	0.53	4.87	6.90	3.01
	Freezer	0.54	3.29	4.80	2.09
	Window AC Unit	0.56	0.43	1.17	0.30
Efficient Home Incentives (low income included)					
Energy Efficient Home Construction Rebates *					
		0.30	1.95	0.77	0.84
Additional Low Income					
Energy Efficiency Kits					
		0.36	30.97	9.33	11.49
Building Shell - Existing Home Only					
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.30	3.60	2.19	1.51
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.36	0.54	0.85	0.31
	Wall (Bring Up to R19) - Elect. Heat Only	0.28	2.45	1.42	0.98
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.30	0.41	0.56	0.20
	Foundation (Bring Up to R-10)	0.22	1.45	1.32	0.48
	Infiltration Control	0.32	4.96	4.27	2.16
	Duct Insulation (in unconditioned space)	0.27	1.32	1.20	0.49

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Humboldt County Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.87	8.82	12.32	8.00
	High Efficiency Interior Lighting				
	T8 or T-5 fixtures - 2 ft	0.22	1.45	1.32	0.48
	T-8 or 46" T5 - 4 ft	0.32	4.96	4.27	2.16
	T8 or T-5 fixtures - 8 ft	0.27	1.32	1.20	0.49
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.28	3.81	1.13	1.14
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.34	3.69	3.22	1.43
	Pulse Start Metal Halide Fixtures - 100 - 249 Watts	0.39	3.97	12.45	1.81
	Pulse Start Metal Halide Fixtures - 250+ watts	0.39	4.76	15.01	2.18
	CFL lamps - Energy Star- 9W and up	0.34	9.20	3.78	3.07
	Occupancy Sensors - Must control >150 Watts	0.33	6.69	5.93	2.58
	LED Exit Signs	0.47	3.44	9.70	1.97
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	0.23	1.65	0.65	0.42
Agricultural					
	Livestock Ventilation Fans				
	36"-47"	0.44	5.33	3.20	2.69
	Circulating Fans --- BESS Lab Ratings				
	36"-47"	0.57	5.45	3.23	3.42
	Efficient Livestock Waterers	0.31	6.06	3.08	2.17
	Hog Farrowing - Heat Lamps (<= 175W)	0.32	11.67	4.09	3.76
	Hog Farrowing - Single Crate Heating Pads (<=85W)	0.28	4.16	1.34	1.27
	Hog Farrowing - Double Crate Heating Pads(<=170W)	0.28	4.48	1.34	1.35

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Domestic Water Heater Enhancement				
	Member Information and Education				
	Peak Alert				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

Iowa Lakes Electric Cooperative

BACKGROUND

Iowa Lakes Electric Cooperative formed with the consolidation of Iowa's Buena Vista County REC, Pocahontas County REC, and D.E.K. in 1986 and the merger of Cherokee County REC in 1989. The merger has created a financially sound, operationally efficient and regionally competitive cooperative that has been challenged by change and has succeeded with strength.

Iowa Lakes Electric Cooperative is a not-for profit, member-owned electric cooperative that serves over 12,000 member-owner accounts locally in Buena Vista, Cherokee, Clay, Dickinson, Emmet, Kossuth, Palo Alto, and Pocahontas counties. The Cooperative owns over 4,600 miles of line with an average of 2.58 member-owners per mile of distribution line.

Iowa Lakes Electric Cooperative's headquarters is located in Estherville, Iowa, and has six outlying service centers located in Swea City, Emmetsburg, Spencer, Cherokee, Storm Lake and Pocahontas, Iowa. The Cooperative employs 62 full-time employees.

The Cooperative is governed by a board of directors who are elected from among the member-owners of Iowa Lakes Electric Cooperative. The board consists of fourteen cooperative member-owners serving four-year terms. Elections are staggered so that some positions are up for election each year.

Iowa Lakes Electric Cooperative's wholesale power suppliers are Corn Belt Power Cooperative in Humboldt, Iowa and Northwest Iowa Power Cooperative (NIPCO) in Le Mars, Iowa. Cooperatives in Iowa and their generation and transmission (G&Ts) joined together in 2008 to perform an energy efficiency assessment through the Iowa Association of Electric Cooperatives (IAEC).

Iowa Lakes Electric Cooperative recently completed the construction of two separate wind energy farms that are strategically located near two existing ethanol plants. All the wind energy generated from the turbines is used to serve the ethanol plants. Iowa Lakes broke ground on the \$43 million community-based wind energy project in August 2008, and the wind farms began generating power in late March 2009. Iowa Lakes is the first distribution electric cooperative in the United States to develop a wind farm of this size and magnitude. And the first application of its kind in the nation to use wind energy to serve another renewable energy source, our existing ethanol plants.

Iowa Lakes Electric Cooperative uses a multitude of communication tools, including monthly and quarterly newsletters, Web sites, e-mail messages, Smart Choices e-mail newsletter, bill stuffers, radio, newspaper ads, brochures, open houses, targeted mailings, on-hold telephone messages, banners, bill messages, Public Service Announcements (PSA) and meetings designed to keep member-owners informed of energy efficiency opportunities and safety awareness.

Iowa Lakes Electric Cooperative sponsors local building professionals who attend the annual Momentum Is Building conference. The two-day conference focuses on energy-efficient building practices and materials, green building, and best practices in the industry. Iowa Lakes supports the Momentum Is Building Conference as a way to help our local trade professionals and the consumers in our area.

Iowa Lakes Electric Cooperative provides business support services for energy savings and efficiencies to any size business. The most popular energy efficient rebate our business accounts have taken advantage of is the lighting incentives. Regional experts along with Iowa Lakes, evaluates the businesses current or proposed lighting plan and recommends efficient alternatives. A well-planned lighting design can save businesses money for many years to come and has been shown to improve employee comfort and enhance the marketability of products in a retail setting. Some of the businesses who have taken advantage of the lighting incentive include:

- Eaton Corporation in Spencer, Iowa, manufactures pumps and motors for the industrial, agricultural and construction markets.
- Day Break Foods, Inc. of Graettinger and Estherville, Iowa, is an innovator and leader in the egg production and processing industry.
- Oh Shucks is fishing bait and tackle convenience store located in Milford, Iowa.
- Brown Medical Industries in Spirit Lake, Iowa, is one of today's most innovative manufacturers and marketers of orthopedic and wound care medical products.
- Dock & Drive in Spirit Lake, Iowa, used the new building lighting incentive program to assist the party who leases the building with their electric costs.
- City of Arnolds Park used the incentive to install more efficient lighting in their new building.

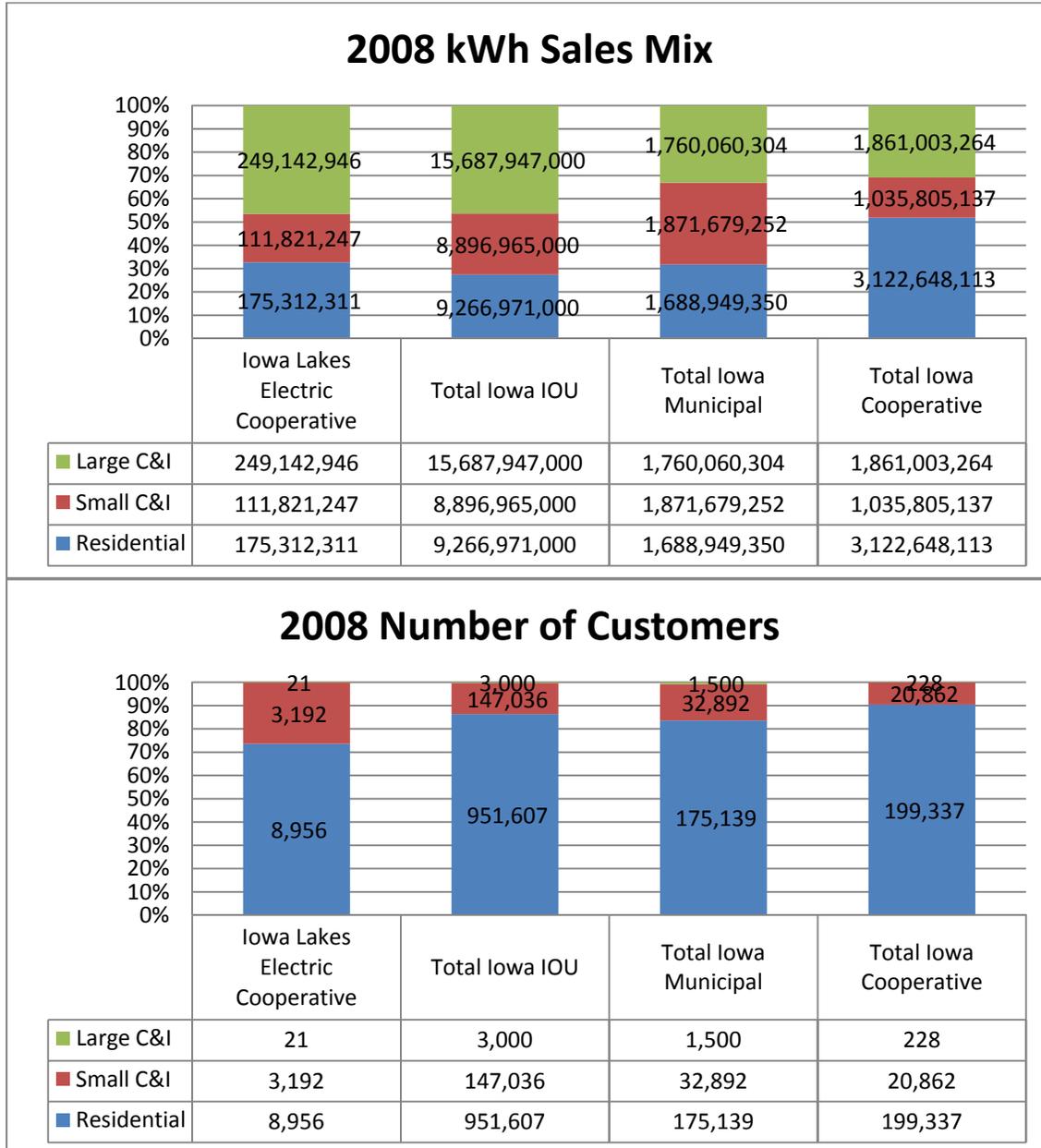
In addition, two ethanol plants in Iowa Lakes Electric Cooperative's territory have taken advantage of other energy efficient incentives. Global Ethanol, located in Kossuth County, Iowa, is a traditional dry-mill ethanol plant that utilizes approximately 34 million bushels of corn annually. They performed a compressed air audit to help guide Global Ethanol's staff as where system repairs and improvements needed to be done. Iowa Lakes helped fund the compressed air audit. Green Plains Renewable Energy (GPRE) is the fourth largest producer of ethanol in North America. One of the ethanol production plants is located in Superior, Iowa. GPRE recently completed a power factor correction study and Iowa Lakes was able to present the company with a rebate for the full cost of the study. Iowa Lakes will participate with the power factor correction once the system is installed at GPRE.

Rosenboom Machine & Tool, Inc. in Spirit Lake, Iowa, designs and produces hydraulic cylinders and machined parts for a wide variety of markets. Iowa Lakes provided them with a rebate after upgrading their motors.

Cycle Country located in Milford, Iowa, is one of the largest manufacturers of ATV accessories. The business installed a compressor to help lower their compressed air cost.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Lyon Rural Electric Cooperative itself. This illustrates that making any comparison of Lyon Rural Electric Cooperative energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Electricity is the most economical when the demand for power is predictable and even. To help keep the electric demand stable, Iowa Lakes Electric Cooperative works in coordination with our wholesale power provider, Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generation and transmission electric cooperative with the primary purpose to purchase and transmit reliable, economical and safe power to its member electric cooperatives, and provide other services its members require.

One of the services NIPCO provides for its electric cooperatives is operating a load management program for its electric cooperative members. In 1984, a program known as "Switch Makes Cents", was developed to promote energy efficient applications and voluntary load management. This allowed us to maximize the available power supply while keeping electric rates affordable for our member-consumers. Our management and staff worked closely with NIPCO to establish the goals of the program. The goals were, and continue to be, achieving efficient electric use, stabilize customer rates, and improve load factors and to reduce purchased power costs.

The load management system uses a centrally controlled and operated load management system. In its 25 year history, this load management system has proven to be a very popular and effective tool to help maximize power supply and control costs. The electric cooperatives in the NIPCO system currently provide load control for 35,900 qualifying customer loads and have saved the electric cooperative member-consumers over \$35 million in power supply costs.

The primary loads eligible to participate in this program are space heating and cooling, water heating, irrigation and several large commercial load applications. In addition to equipment incentives, the energy efficiency and load management program options and services used to educate the member-consumer on their program include information provided by our energy advisor staff, newspaper, web site development to provide easy access to program information, utilizing online services, direct mail, media, information meetings and open houses.

Iowa Lakes and NIPCO work hard to operate our electric systems efficiently by evaluating and making cost effective assessments when replacing or installing new electric and electronic supply side equipment. Several specific areas include electrical conductor installation, transformers, heat pumps used to provide heating and cooling in equipment buildings, replacing incandescent beacon lights with strobe lights, replace the tower incandescent obstruction lights with LED lights, CFL lighting applications in buildings and the installation, implementing an advanced metering infrastructure system and the use of our fiber optics system to better communicate and transport data that helps us to operate the electrical system more efficiently and effectively.

		2010-2014				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	149	\$25,197	585,982	116,826	41,856
	SEER 14.5 (and EER 12)	60	\$7,407	186,480	37,740	13,320
	SEER 15 +	62	\$11,502	247,614	49,352	17,687
	SEER 16 (and EER 13)	27	\$6,288	151,888	29,735	10,849
	ENERGY STAR Qualified Room Air Conditioner	15	\$453	11,838	3,683	1,315
	Geothermal Heat Pump	169	\$305,537	44,882,783	6,586,349	2,244,139
	Air Source Heat Pump	455	\$294,892	53,606,007	10,564,114	3,573,734
	Heat Recovery Ventilators	40	\$6,260	500,832	75,125	25,042
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	21,540	\$47,406	10,297,779	3,752,642	1,410,655
	Local CFL Rebate Program(s)	7,981	\$29,929	3,815,533	1,399,259	522,676
	ENERGY STAR LED lighting	664	\$2,490	888,870	118,025	49,382
Exterior Lighting						
	LED Holiday Lighting	1,360	\$3,400	1,268,064	296,037	105,672
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1,101	\$220,296	5,130,414	1,021,279	342,028
	50-79 gallon	468	\$61,878	1,620,778	322,308	108,052
	80 gallon+	633	\$158,418	3,509,637	698,970	233,976
	Heat Pump Water Heater - (Add-On)	65	\$24,375	1,251,803	325,469	125,180
	Flow Restrictors - Faucet	2,306	\$19,550	7,694,338	2,558,106	854,926
	Flow Restrictors - Shower	1,249	\$20,669	7,902,423	2,365,665	790,242
	Tank Insulation	140	\$1,084	239,316	71,795	23,932
	Pipe Insulation	140	\$1,084	249,417	49,883	16,628
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	142	\$9,062	346,764	86,802	31,524
	ENERGY STAR Qualified Dishwasher	536	\$16,751	693,723	168,254	63,066
	ENERGY STAR Qualified Refrigerator	424	\$13,254	670,662	119,264	44,711
	ENERGY STAR Qualified Freezer	629	\$19,660	701,681	124,793	46,779
	Appliance Recycling	1,011	\$55,861	8,852,575	2,950,744	985,321
	Refrigerator	499	\$27,596	5,393,781	1,791,922	599,309
	Freezer	487	\$26,791	3,439,647	1,147,334	382,183
	Window AC Unit	25	\$1,474	19,148	11,489	3,830
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	20	\$25,000	666,000	59,940	22,200
Additional Low Income						
	Energy Efficiency Kits	251	\$12,620	2,552,625	803,416	283,625
Building Shell - Existing Home Only						
	Weatherization Rebates	903	\$330,236	29,123,986	2,620,813	1,025,934
	Ceiling (Bring up to R-38) - Elect. Heat Only	87	\$40,205	3,974,821	347,226	132,494
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	80	\$16,500	383,616	31,968	12,787
	Wall (Bring Up to R19) - Elect. Heat Only	52	\$32,231	2,271,859	202,428	75,729
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	80	\$24,580	364,968	30,414	12,166
	Foundation (Bring Up to R-10)	254	\$160,020	16,434,283	1,380,307	547,809
	Infiltration Control	175	\$18,900	3,977,269	408,181	159,091
	Duct Insulation (in unconditioned space)	175	\$37,800	1,717,170	220,288	85,859

Residential Total 41,290 \$1,485,064 181,933,415 36,238,284 12,630,566
Residential Average kWh Sales (3 yr Ave actual and projected) 889,653,617
Residential kWh Savings as percentage of Residential kWh Sales 1.4%

		2010-2014				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	1,194	\$2,687	648,886	494,696	180,246
	High Efficiency Interior Lighting	1,585	\$22,257	3,143,051	1,495,865	497,227
	T-8 or 46" T5 - 4 ft	594	\$1,187	827,076	343,092	129,231
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	310	\$18,600	1,746,067	760,750	226,762
	CFL lamps - Energy Star- 9W and up	594	\$1,187	294,857	301,081	113,406
	Occupancy Sensors - Must control >150 Watts	32	\$600	170,496	58,608	17,050
	Metal Halide Lamps	20	\$245	13,320	8,325	2,775
	LED Exit Signs	35	\$438	91,235	24,009	8,003
Exterior Lighting						
	High Efficiency Exterior Lighting	100	\$250	117,749	147,186	49,062
	CFL Outdoor Light - 42 W min., Cold Start	100	\$250	117,749	147,186	49,062
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	2	\$2,468	34,721	5,208	1,736
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	5	\$3,085	130,869	26,174	8,725
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	65	\$15,120	349,983	72,305	23,332
	50-79 gallon	5	\$625	17,316	5,772	1,154
	80 gallon+	60	\$14,495	332,667	66,533	22,178
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	150	\$58,380	1,603,395	320,679	106,893
	Variable Speed Drive Motor Incentive	50	\$13,895	18,644,670	3,728,934	1,242,978
Agricultural						
	Livestock Ventilation Fans	60	\$3,096	383,616	106,560	31,968
	48"-49"	60	\$3,096	383,616	106,560	31,968
	Circulating Fans --- BESS Lab Ratings	60	\$3,600	287,712	79,920	23,976
	48"-52"	60	\$3,600	287,712	79,920	23,976
	Efficient Livestock Waterers	20	\$1,250	190,742	55,633	15,895
Ag, Commercial and Industrial Total		3,291	\$126,088	25,535,394	6,533,160	2,182,038
C & I Average kWh Sales (3 yr Ave actual and projected)**						1,024,106,235
C & I kWh Savings as percentage of C & I kWh Sales						0.2%

II. Demand Response Programs						
	Water Heater Load Control		3,711	\$34,860		
	Air Conditioning Load Control		2,441	\$30,534		
	Space Heating Load Control (Interruptible)		3,006	\$29,569		
	Dual-Fuel Space Heating		340	\$1,105		
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural		30	\$6,000		
	Expert Energy Services - C&I		20	\$6,000		
	Energy Audit Services - Residential *		110	\$11,000		
IV. Educational & Research Programs						
	Member Information and Education		47,270	\$43,800		
	Peak Alert		47,270	\$750		
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		5,735	\$207,290		
TOTAL			154,514	\$1,982,060	207,468,810	42,771,445
Total Average kWh Sales (3 yr Ave actual and projected)**						14,812,604
Total kWh Savings as percentage of Total kWh Sales						1,913,759,852
						0.8%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	24	\$3,841	93,520	6,680	7
	SEER 14.5 (and EER 12)	10	\$1,194	31,080	2,220	2
	SEER 15 +	10	\$1,794	39,938	2,853	3
	SEER 16 (and EER 13)	4	\$853	22,502	1,607	2
	ENERGY STAR Qualified Room Air Conditioner	3	\$93	2,368	263	0
	Geothermal Heat Pump	32	\$58,538	8,498,515	424,926	49
	Air Source Heat Pump	86	\$56,092	10,132,124	675,475	88
	Heat Recovery Ventilators	8	\$1,252	100,166	5,008	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,846	\$6,264	1,360,607	186,385	171
	Local CFL Rebate Program(s)	1,081	\$4,054	516,801	70,795	65
	ENERGY STAR LED lighting	52	\$195	69,610	3,867	2
Exterior Lighting						
	LED Holiday Lighting	218	\$545	203,263	16,939	55
Residential Water Heating (low income included)						
	High Efficiency Water Heater	217	\$43,529	1,011,671	67,445	9
	50-79 gallon	92	\$12,137	318,614	21,241	3
	80 gallon+	125	\$31,392	693,056	46,204	6
	Heat Pump Water Heater - (Add-On)	8	\$3,000	154,068	15,407	2
	Flow Restrictors - Faucet	457	\$3,875	1,524,854	169,428	9
	Flow Restrictors - Shower	248	\$4,104	1,569,096	156,910	12
	Tank Insulation	28	\$217	47,863	4,786	0
	Pipe Insulation	28	\$217	49,883	3,326	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	21	\$1,230	51,282	4,662	2
	ENERGY STAR Qualified Dishwasher	72	\$2,251	93,187	8,472	6
	ENERGY STAR Qualified Refrigerator	57	\$1,783	90,160	6,011	1
	ENERGY STAR Qualified Freezer	84	\$2,626	93,706	6,247	1
	Appliance Recycling	203	\$11,220	1,773,168	197,359	34
	Refrigerator	99	\$5,467	1,070,109	118,901	19
	Freezer	99	\$5,459	699,230	77,692	14
	Window AC Unit	5	\$294	3,830	766	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$3,750	99,900	3,330	1
Additional Low Income						
	Energy Efficiency Kits	41	\$2,132	416,963	46,329	5
Building Shell - Existing Home Only						
	Weatherization Rebates	100	\$36,479	3,216,292	113,511	6
	Ceiling (Bring up to R-38) - Elect. Heat Only	11	\$5,278	502,564	16,752	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	8	\$1,650	38,362	1,279	1
	Wall (Bring Up to R19) - Elect. Heat Only	7	\$4,234	305,827	10,194	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	8	\$2,458	36,497	1,217	1
	Foundation (Bring Up to R-10)	26	\$16,380	1,682,249	56,075	
	Infiltration Control	20	\$2,160	454,545	18,182	1
	Duct Insulation (in unconditioned space)	20	\$4,320	196,248	9,812	1
Residential Total		5,917	\$247,285	31,169,067	2,193,559	525
Residential Average kWh Sales (3 yr Ave actual and projected)					171,351,075	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%	

2010					
Estimated Achievable Potential Goals					
Iowa Lakes Electric Cooperative	Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
	Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	178	\$407	96,735	26,871	11
High Efficiency Interior Lighting	282	\$6,713	803,239	114,246	2
T-8 or 46" T5 - 4 ft	78	\$157	108,606	16,970	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	100	\$6,000	563,247	73,149	1
CFL lamps - Energy Star- 9W and up	78	\$157	38,719	14,892	0
Occupancy Sensors - Must control >150 Watts	12	\$225	63,936	6,394	
Metal Halide Lamps	4	\$49	2,664	555	0
LED Exit Signs	10	\$125	26,067	2,287	0
Exterior Lighting					
High Efficiency Exterior Lighting	20	\$50	23,550	9,812	0
CFL Outdoor Light - 42 W min., Cold Start	20	\$50	23,550	9,812	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	1	\$617	26,174	1,745	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	17	\$3,524	83,849	5,590	1
50-79 gallon	5	\$625	17,316	1,154	0
80 gallon+	12	\$2,899	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	30	\$11,676	320,679	21,379	3
Variable Speed Drive Motor Incentive	10	\$1,779	3,728,934	248,596	22
Agricultural					
Livestock Ventilation Fans	20	\$1,200	127,872	10,656	3
48"-49"	20	\$1,200	127,872	10,656	3
Circulating Fans --- BESS Lab Ratings	20	\$1,200	95,904	7,992	2
48"-52"	20	\$1,200	95,904	7,992	2
Efficient Livestock Waterers	5	\$313	47,686	3,974	
Ag, Commercial and Industrial Total	583	\$27,479	5,354,622	450,860	43
C & I Average kWh Sales (3 yr Ave actual and projected)**				199,165,237	
C & I kWh Savings as percentage of C & I kWh Sales				0.2%	

II. Demand Response Programs					
Water Heater Load Control	937	\$7,445			469
Air Conditioning Load Control	442	\$5,437			309
Space Heating Load Control (Interruptible)	561	\$5,423			2,525
Dual-Fuel Space Heating	68	\$221			408
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	6	\$1,200			
Expert Energy Services - C&I	4	\$1,200			
Energy Audit Services - Residential *	20	\$2,000			
IV. Educational & Research Programs					
Member Information and Education	9,454	\$8,760			
Peak Alert	9,454	\$150			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,143	\$41,458			
TOTAL	28,589	\$348,057	36,523,689	2,644,418	4,279
Total Average kWh Sales (3 yr Ave actual and projected)**				370,516,312	
Total kWh Savings as percentage of Total kWh Sales				0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	27	\$4,477	106,247	7,589	8
	SEER 14.5 (and EER 12)	11	\$1,338	34,188	2,442	3
	SEER 15 +	11	\$2,009	43,932	3,138	3
	SEER 16 (and EER 13)	5	\$1,130	28,127	2,009	2
	ENERGY STAR Qualified Room Air Conditioner	2	\$68	1,578	175	0
	Geothermal Heat Pump	32	\$56,727	8,498,515	424,926	49
	Air Source Heat Pump	90	\$58,121	10,603,386	706,892	92
	Heat Recovery Ventilators	8	\$1,252	100,166	5,008	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,577	\$7,871	1,710,081	234,258	215
	Local CFL Rebate Program(s)	1,339	\$5,021	640,145	87,691	80
	ENERGY STAR LED lighting	92	\$345	123,157	6,842	4
Exterior Lighting						
	LED Holiday Lighting	245	\$613	228,438	19,037	61
Residential Water Heating (low income included)						
	High Efficiency Water Heater	219	\$43,952	1,020,678	68,045	9
	50-79 gallon	93	\$12,275	322,078	21,472	3
	80 gallon+	126	\$31,677	698,601	46,573	6
	Heat Pump Water Heater - (Add-On)	10	\$3,750	192,585	19,259	2
	Flow Restrictors - Faucet	460	\$3,900	1,534,864	170,540	9
	Flow Restrictors - Shower	249	\$4,120	1,575,423	157,542	12
	Tank Insulation	28	\$217	47,863	4,786	0
	Pipe Insulation	28	\$217	49,883	3,326	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,620	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	89	\$2,778	115,189	10,472	8
	ENERGY STAR Qualified Refrigerator	70	\$2,191	110,723	7,382	1
	ENERGY STAR Qualified Freezer	105	\$3,283	117,133	7,809	1
	Appliance Recycling	200	\$10,959	1,751,980	195,005	33
	Refrigerator	99	\$5,468	1,070,109	118,901	19
	Freezer	96	\$5,196	678,041	75,338	13
	Window AC Unit	5	\$295	3,830	766	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$3,750	99,900	3,330	1
Additional Low Income						
	Energy Efficiency Kits	46	\$2,345	467,812	51,979	6
Building Shell - Existing Home Only						
	Weatherization Rebates	140	\$51,380	4,547,065	160,075	9
	Ceiling (Bring up to R-38) - Elect. Heat Only	14	\$6,476	639,626	21,321	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	12	\$2,475	57,542	1,918	1
	Wall (Bring Up to R19) - Elect. Heat Only	9	\$5,424	393,206	13,107	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	12	\$3,687	54,745	1,825	1
	Foundation (Bring Up to R-10)	39	\$24,570	2,523,374	84,112	
	Infiltration Control	27	\$2,916	613,636	24,545	2
	Duct Insulation (in unconditioned space)	27	\$5,832	264,935	13,247	1
Residential Total		7,084	\$268,956	33,703,862	2,357,518	603
Residential Average kWh Sales (3 yr Ave actual and projected)					175,209,821	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%	

2011					
Estimated Achievable Potential Goals					
Iowa Lakes Electric Cooperative	Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
	Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	198	\$447	107,604	29,890	12
High Efficiency Interior Lighting	270	\$4,199	565,386	88,283	1
T-8 or 46" T5 - 4 ft	98	\$197	136,454	21,321	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	60	\$3,600	337,948	43,889	1
CFL lamps - Energy Star- 9W and up	98	\$197	48,646	18,710	0
Occupancy Sensors - Must control >150 Watts	5	\$94	26,640	2,664	
Metal Halide Lamps	4	\$49	2,664	555	0
LED Exit Signs	5	\$63	13,034	1,143	0
Exterior Lighting					
High Efficiency Exterior Lighting	20	\$50	23,550	9,812	0
CFL Outdoor Light - 42 W min., Cold Start	20	\$50	23,550	9,812	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,234	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	1	\$617	26,174	1,745	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,899	66,533	4,436	1
50-79 gallon					
80 gallon+	12	\$2,899	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	30	\$11,676	320,679	21,379	3
Variable Speed Drive Motor Incentive	10	\$3,029	3,728,934	248,596	22
Agricultural					
Livestock Ventilation Fans	10	\$600	63,936	5,328	2
48"-49"	10	\$600	63,936	5,328	2
Circulating Fans --- BESS Lab Ratings	10	\$600	47,952	3,996	1
48"-52"	10	\$600	47,952	3,996	1
Efficient Livestock Waterers	5	\$313	47,686	3,974	
Ag, Commercial and Industrial Total	567	\$25,664	5,015,794	418,306	41
C & I Average kWh Sales (3 yr Ave actual and projected)**				196,845,949	
C & I kWh Savings as percentage of C & I kWh Sales				0.2%	

II. Demand Response Programs					
Water Heater Load Control	659	\$6,542			330
Air Conditioning Load Control	465	\$6,111			326
Space Heating Load Control (Interruptible)	581	\$5,888			2,615
Dual-Fuel Space Heating	68	\$221			408
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	6	\$1,200			
Expert Energy Services - C&I	4	\$1,200			
Energy Audit Services - Residential *	21	\$2,100			
IV. Educational & Research Programs					
Member Information and Education	9,454	\$8,760			
Peak Alert	9,454	\$150			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,145	\$41,458			
TOTAL	29,508	\$368,250	38,719,656	2,775,824	4,322
Total Average kWh Sales (3 yr Ave actual and projected)**				372,055,769	
Total kWh Savings as percentage of Total kWh Sales				0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	29	\$4,864	113,349	8,096	9
	SEER 14.5 (and EER 12)	12	\$1,481	37,296	2,664	3
	SEER 15 +	12	\$2,226	47,925	3,423	4
	SEER 16 (and EER 13)	5	\$1,157	28,127	2,009	2
	ENERGY STAR Qualified Room Air Conditioner	3	\$83	2,368	263	0
	Geothermal Heat Pump	34	\$61,621	9,029,672	451,484	52
	Air Source Heat Pump	91	\$58,884	10,721,201	714,747	93
	Heat Recovery Ventilators	8	\$1,252	100,166	5,008	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	4,302	\$9,469	2,056,687	281,738	258
	Local CFL Rebate Program(s)	1,594	\$5,978	762,055	104,391	96
	ENERGY STAR LED lighting	133	\$499	178,042	9,891	5
Exterior Lighting						
	LED Holiday Lighting	272	\$680	253,613	21,134	68
Residential Water Heating (low income included)						
	High Efficiency Water Heater	219	\$43,994	1,020,678	68,045	9
	50-79 gallon	93	\$12,288	322,078	21,472	3
	80 gallon+	126	\$31,706	698,601	46,573	6
	Heat Pump Water Heater - (Add-On)	13	\$4,875	250,361	25,036	3
	Flow Restrictors - Faucet	461	\$3,908	1,538,200	170,911	9
	Flow Restrictors - Shower	250	\$4,137	1,581,750	158,175	13
	Tank Insulation	28	\$217	47,863	4,786	0
	Pipe Insulation	28	\$217	49,883	3,326	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	29	\$1,733	70,818	6,438	2
	ENERGY STAR Qualified Dishwasher	107	\$3,348	138,486	12,590	10
	ENERGY STAR Qualified Refrigerator	85	\$2,662	134,449	8,963	1
	ENERGY STAR Qualified Freezer	126	\$3,941	140,559	9,371	1
	Appliance Recycling	202	\$11,183	1,769,852	196,991	34
	Refrigerator	100	\$5,531	1,080,918	120,102	19
	Freezer	97	\$5,357	685,104	76,123	14
	Window AC Unit	5	\$295	3,830	766	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$5,000	133,200	4,440	1
Additional Low Income						
	Energy Efficiency Kits	51	\$2,558	518,661	57,629	7
Building Shell - Existing Home Only						
	Weatherization Rebates	180	\$66,082	5,801,987	204,426	11
	Ceiling (Bring up to R-38) - Elect. Heat Only	17	\$8,036	776,689	25,890	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	16	\$3,300	76,723	2,557	2
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$6,360	436,896	14,563	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	16	\$4,916	72,994	2,433	2
	Foundation (Bring Up to R-10)	51	\$32,130	3,299,797	109,993	
	Infiltration Control	35	\$3,780	795,454	31,818	2
	Duct Insulation (in unconditioned space)	35	\$7,560	343,434	17,172	1
Residential Total		8,249	\$297,183	36,413,900	2,527,880	682
Residential Average kWh Sales (3 yr Ave actual and projected)					176,987,636	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

2012					
Estimated Achievable Potential Goals					
Iowa Lakes Electric Cooperative	Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
	Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	219	\$487	119,017	33,060	13
High Efficiency Interior Lighting	302	\$3,679	548,726	89,546	1
T-8 or 46" T5 - 4 ft	119	\$237	165,694	25,890	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	50	\$3,000	281,624	36,575	1
CFL lamps - Energy Star- 9W and up	119	\$237	59,071	22,719	0
Occupancy Sensors - Must control >150 Watts	5	\$94	26,640	2,664	
Metal Halide Lamps	4	\$49	2,664	555	0
LED Exit Signs	5	\$63	13,034	1,143	0
Exterior Lighting					
High Efficiency Exterior Lighting	20	\$50	23,550	9,812	0
CFL Outdoor Light - 42 W min., Cold Start	20	\$50	23,550	9,812	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	1	\$617	26,174	1,745	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,899	66,533	4,436	1
50-79 gallon					
80 gallon+	12	\$2,899	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	30	\$11,676	320,679	21,379	3
Variable Speed Drive Motor Incentive	10	\$3,029	3,728,934	248,596	22
Agricultural					
Livestock Ventilation Fans	10	\$600	63,936	5,328	2
48"-49"	10	\$600	63,936	5,328	2
Circulating Fans --- BESS Lab Ratings	10	\$600	47,952	3,996	1
48"-52"	10	\$600	47,952	3,996	1
Efficient Livestock Waterers	5	\$313	47,686	3,974	
Ag, Commercial and Industrial Total	619	\$23,950	4,993,186	421,871	43
C & I Average kWh Sales (3 yr Ave actual and projected)**				193,985,594	
C & I kWh Savings as percentage of C & I kWh Sales				0.2%	

II. Demand Response Programs					
Water Heater Load Control	681	\$6,613			341
Air Conditioning Load Control	488	\$6,186			342
Space Heating Load Control (Interruptible)	601	\$5,953			2,705
Dual-Fuel Space Heating	68	\$221			408
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	6	\$1,200			
Expert Energy Services - C&I	4	\$1,200			
Energy Audit Services - Residential *	22	\$2,200			
IV. Educational & Research Programs					
Member Information and Education	9,454	\$8,760			
Peak Alert	9,454	\$150			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,147	\$41,458			
TOTAL	30,793	\$395,074	41,407,086	2,949,751	4,519
Total Average kWh Sales (3 yr Ave actual and projected)**				370,973,230	
Total kWh Savings as percentage of Total kWh Sales				0.8%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	33	\$5,689	130,070	9,291	10
	SEER 14.5 (and EER 12)	13	\$1,625	40,404	2,886	3
	SEER 15 +	14	\$2,629	55,913	3,994	4
	SEER 16 (and EER 13)	6	\$1,435	33,753	2,411	3
	ENERGY STAR Qualified Room Air Conditioner	3	\$97	2,368	263	0
	Geothermal Heat Pump	35	\$64,364	9,295,251	464,763	54
	Air Source Heat Pump	94	\$60,826	11,074,648	738,310	96
	Heat Recovery Ventilators	8	\$1,252	100,166	5,008	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	5,042	\$11,097	2,410,464	330,201	303
	Local CFL Rebate Program(s)	1,856	\$6,960	887,311	121,549	111
	ENERGY STAR LED lighting	173	\$649	231,588	12,866	7
Exterior Lighting						
	LED Holiday Lighting	299	\$748	278,788	23,232	75
Residential Water Heating (low income included)						
	High Efficiency Water Heater	223	\$44,389	1,038,694	69,246	9
	50-79 gallon	95	\$12,582	329,004	21,934	3
	80 gallon+	128	\$31,807	709,690	47,313	6
	Heat Pump Water Heater - (Add-On)	16	\$6,000	308,136	30,814	3
	Flow Restrictors - Faucet	464	\$3,933	1,548,210	172,023	9
	Flow Restrictors - Shower	251	\$4,154	1,588,077	158,808	13
	Tank Insulation	28	\$217	47,863	4,786	0
	Pipe Insulation	28	\$217	49,883	3,326	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	32	\$2,036	78,144	7,104	3
	ENERGY STAR Qualified Dishwasher	125	\$3,907	161,783	14,708	11
	ENERGY STAR Qualified Refrigerator	99	\$3,090	156,593	10,440	1
	ENERGY STAR Qualified Freezer	146	\$4,560	162,870	10,858	1
	Appliance Recycling	202	\$11,187	1,769,852	196,991	34
	Refrigerator	100	\$5,533	1,080,918	120,102	19
	Freezer	97	\$5,359	685,104	76,123	14
	Window AC Unit	5	\$295	3,830	766	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	5	\$6,250	166,500	5,550	1
Additional Low Income						
	Energy Efficiency Kits	56	\$2,771	569,510	63,279	7
Building Shell - Existing Home Only						
	Weatherization Rebates	222	\$81,017	7,146,285	251,757	13
	Ceiling (Bring up to R-38) - Elect. Heat Only	21	\$9,611	959,440	31,981	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	20	\$4,125	95,904	3,197	2
	Wall (Bring Up to R19) - Elect. Heat Only	12	\$7,514	524,275	17,476	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	20	\$6,145	91,242	3,041	2
	Foundation (Bring Up to R-10)	63	\$39,690	4,076,220	135,874	
	Infiltration Control	43	\$4,644	977,272	39,091	3
	Duct Insulation (in unconditioned space)	43	\$9,288	421,933	21,097	2
Residential Total		9,440	\$325,408	39,203,054	2,705,171	763
Residential Average kWh Sales (3 yr Ave actual and projected)					181,238,741	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

2013					
Estimated Achievable Potential Goals					
Iowa Lakes Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	339	\$777	184,232	51,175	20
High Efficiency Interior Lighting	342	\$3,760	586,501	97,716	1
T-8 or 46" T5 - 4 ft	139	\$277	193,541	30,241	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	50	\$3,000	281,624	36,575	1
CFL lamps - Energy Star- 9W and up	139	\$277	68,998	26,538	0
Occupancy Sensors - Must control >150 Watts	5	\$94	26,640	2,664	
Metal Halide Lamps	4	\$49	2,664	555	0
LED Exit Signs	5	\$63	13,034	1,143	0
Exterior Lighting					
High Efficiency Exterior Lighting	20	\$50	23,550	9,812	0
CFL Outdoor Light - 42 W min., Cold Start	20	\$50	23,550	9,812	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,234	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	1	\$617	26,174	1,745	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,899	66,533	4,436	1
50-79 gallon					
80 gallon+	12	\$2,899	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	30	\$11,676	320,679	21,379	3
Variable Speed Drive Motor Incentive	10	\$3,029	3,728,934	248,596	22
Agricultural					
Livestock Ventilation Fans	10	\$600	63,936	5,328	2
48"-49"	10	\$600	63,936	5,328	2
Circulating Fans --- BESS Lab Ratings	10	\$600	47,952	3,996	1
48"-52"	10	\$600	47,952	3,996	1
Efficient Livestock Waterers	5	\$313	47,686	3,974	
Ag, Commercial and Industrial Total	780	\$25,554	5,113,537	449,024	50
C & I Average kWh Sales (3 yr Ave actual and projected)**				208,891,074	
C & I kWh Savings as percentage of C & I kWh Sales				0.2%	

II. Demand Response Programs					
Water Heater Load Control	705	\$7,091			353
Air Conditioning Load Control	511	\$6,261			358
Space Heating Load Control (Interruptible)	621	\$6,018			2,795
Dual-Fuel Space Heating	68	\$221			408
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	6	\$1,200			
Expert Energy Services - C&I	4	\$1,200			
Energy Audit Services - Residential *	23	\$2,300			
IV. Educational & Research Programs					
Member Information and Education	9,454	\$8,760			
Peak Alert	9,454	\$150			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,149	\$41,458			
TOTAL	32,215	\$425,621	44,316,591	3,154,195	4,725
Total Average kWh Sales (3 yr Ave actual and projected)**				390,129,815	
Total kWh Savings as percentage of Total kWh Sales				0.8%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Iowa Lakes Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	36	\$6,327	142,797	10,200	11
	SEER 14.5 (and EER 12)	14	\$1,769	43,512	3,108	3
	SEER 15 +	15	\$2,845	59,907	4,279	5
	SEER 16 (and EER 13)	7	\$1,713	39,378	2,813	3
	ENERGY STAR Qualified Room Air Conditioner	4	\$112	3,157	351	0
	Geothermal Heat Pump	36	\$64,288	9,560,830	478,041	55
	Air Source Heat Pump	94	\$60,969	11,074,648	738,310	96
	Heat Recovery Ventilators	8	\$1,252	100,166	5,008	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	5,773	\$12,705	2,759,939	378,074	346
	Local CFL Rebate Program(s)	2,111	\$7,916	1,009,221	138,249	127
	ENERGY STAR LED lighting	214	\$803	286,473	15,915	9
Exterior Lighting						
	LED Holiday Lighting	326	\$815	303,962	25,330	82
Residential Water Heating (low income included)						
	High Efficiency Water Heater	223	\$44,432	1,038,694	69,246	9
	50-79 gallon	95	\$12,596	329,004	21,934	3
	80 gallon+	128	\$31,836	709,690	47,313	6
	Heat Pump Water Heater - (Add-On)	18	\$6,750	346,653	34,665	4
	Flow Restrictors - Faucet	464	\$3,933	1,548,210	172,023	9
	Flow Restrictors - Shower	251	\$4,154	1,588,077	158,808	13
	Tank Insulation	28	\$217	47,863	4,786	0
	Pipe Insulation	28	\$217	49,883	3,326	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	35	\$2,443	85,470	7,770	3
	ENERGY STAR Qualified Dishwasher	143	\$4,467	185,079	16,825	13
	ENERGY STAR Qualified Refrigerator	113	\$3,529	178,738	11,916	1
	ENERGY STAR Qualified Freezer	168	\$5,250	187,412	12,494	2
	Appliance Recycling	204	\$11,312	1,787,724	198,976	34
	Refrigerator	101	\$5,597	1,091,727	121,303	19
	Freezer	98	\$5,420	692,167	76,907	14
	Window AC Unit	5	\$295	3,830	766	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	5	\$6,250	166,500	5,550	1
Additional Low Income						
	Energy Efficiency Kits	57	\$2,814	579,680	64,409	7
Building Shell - Existing Home Only						
	Weatherization Rebates	261	\$95,279	8,412,357	296,165	16
	Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$10,805	1,096,502	36,550	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	24	\$4,950	115,085	3,836	3
	Wall (Bring Up to R19) - Elect. Heat Only	14	\$8,700	611,654	20,388	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	24	\$7,374	109,490	3,650	3
	Foundation (Bring Up to R-10)	75	\$47,250	4,852,643	161,755	
	Infiltration Control	50	\$5,400	1,136,363	45,455	4
	Duct Insulation (in unconditioned space)	50	\$10,800	490,620	24,531	2
Residential Total		10,600	\$346,233	41,443,533	2,846,438	838
Residential Average kWh Sales (3 yr Ave actual and projected)					184,866,344	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

2014					
Estimated Achievable Potential Goals					
Iowa Lakes Electric Cooperative	Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
	Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	260	\$569	141,299	39,250	16
High Efficiency Interior Lighting	389	\$3,906	639,199	107,437	2
T-8 or 46" T5 - 4 ft	160	\$319	222,781	34,810	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	50	\$3,000	281,624	36,575	1
CFL lamps - Energy Star- 9W and up	160	\$319	79,423	30,547	0
Occupancy Sensors - Must control >150 Watts	5	\$94	26,640	2,664	
Metal Halide Lamps	4	\$49	2,664	555	0
LED Exit Signs	10	\$125	26,067	2,287	0
Exterior Lighting					
High Efficiency Exterior Lighting	20	\$50	23,550	9,812	0
CFL Outdoor Light - 42 W min., Cold Start	20	\$50	23,550	9,812	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	1	\$617	26,174	1,745	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,899	66,533	4,436	1
50-79 gallon					
80 gallon+	12	\$2,899	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	30	\$11,676	320,679	21,379	3
Variable Speed Drive Motor Incentive	10	\$3,029	3,728,934	248,596	22
Agricultural					
Livestock Ventilation Fans	10	\$96	63,936	5,328	2
48"-49"	10	\$96	63,936	5,328	2
Circulating Fans --- BESS Lab Ratings	10	\$600	47,952	3,996	1
48"-52"	10	\$600	47,952	3,996	1
Efficient Livestock Waterers					
Ag, Commercial and Industrial Total	742	\$23,442	5,058,256	441,978	45
C & I Average kWh Sales (3 yr Ave actual and projected)**				225,218,382	
C & I kWh Savings as percentage of C & I kWh Sales				0.2%	

II. Demand Response Programs					
Water Heater Load Control	729	\$7,169			365
Air Conditioning Load Control	535	\$6,539			375
Space Heating Load Control (Interruptible)	642	\$6,287			2,889
Dual-Fuel Space Heating	68	\$221			408
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	6	\$1,200			
Expert Energy Services - C&I	4	\$1,200			
Energy Audit Services - Residential *	24	\$2,400			
IV. Educational & Research Programs					
Member Information and Education	9,454	\$8,760			
Peak Alert	9,454	\$150			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,151	\$41,458			
TOTAL	33,409	\$445,059	46,501,788	3,288,416	4,920
Total Average kWh Sales (3 yr Ave actual and projected)**				410,084,727	
Total kWh Savings as percentage of Total kWh Sales				0.8%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis				Cost Effectiveness Analysis			
		Benefit/Cost Ratios - Corn Belt				Benefit/Cost Ratios - NIPCO			
Iowa Lakes Electric Cooperative		Rate Payer	Participant	Utility	Societal	Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies									
Residential Cooling & Heating (low income included)									
	ENERGY STAR Central Air Conditioning								
	SEER 14.5 (and EER 12)	1.16	1.16	3.20	1.72	1.14	1.16	3.13	1.69
	SEER 15 +	0.96	1.19	2.39	1.45	0.93	1.19	2.30	1.41
	SEER 16 (and EER 13)	0.86	1.08	2.35	1.20	0.82	1.08	2.13	1.14
	ENERGY STAR Qualified Room Air Conditioner	0.52	1.13	1.52	0.72	0.50	1.13	1.47	0.69
	Geothermal Heat Pump	0.44	1.96	4.70	0.95	0.39	2.01	3.18	0.87
	Air Source Heat Pump	0.48	6.55	6.62	3.55	0.44	6.62	5.24	3.27
	Heat Recovery Ventilators	0.23	1.05	1.41	0.33				
Residential Lighting (low income included)									
Interior Lighting									
	Change a Light Rebate Program (or similar program)	0.99	13.34	17.77	14.02	0.95	17.96	16.84	17.30
	Local CFL Rebate Program(s)	0.96	13.21	11.74	14.15				
	ENERGY STAR LED lighting	0.74	3.10	18.61	3.05				
Exterior Lighting									
	LED Holiday Lighting	0.90	4.67	25.26	5.19				
Residential Water Heating (low income included)									
High Efficiency Water Heater									
	50-79 gallon	1.43	0.90	4.19	1.70	1.06	1.16	2.09	1.59
	80 gallon+	1.27	1.71	3.29	2.71	1.24	1.71	3.15	2.62
	Heat Pump Water Heater - (Add-On)	0.35	2.05	1.60	0.84				
	Flow Restrictors - Faucet	0.30	57.34	3.57	4.40	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.36	20.76	5.08	6.32	0.29	20.76	4.95	6.16
	Tank Insulation	0.36	52.24	5.67	7.06	0.33	8.71	14.04	3.50
	Pipe Insulation	0.38	38.59	1.45	1.91	0.38	38.59	11.82	15.52
Residential Appliances (low income included)									
	ENERGY STAR Qualified Clothes Washer	0.45	1.15	1.69	0.65	0.43	1.15	1.72	0.62
	ENERGY STAR Qualified Dishwasher	0.74	2.68	3.00	2.31	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.35	2.72	1.59	1.16	0.32	2.72	1.47	1.07
	ENERGY STAR Qualified Freezer	0.38	3.13	1.39	1.43	0.35	3.13	1.22	1.27
Appliance Recycling									
	Refrigerator	0.53	4.87	6.90	3.01	0.50	4.87	7.35	2.93
	Freezer	0.54	3.29	4.80	2.09	0.52	3.29	5.12	2.05
	Window AC Unit	0.56	0.43	1.17	0.30	0.55	0.43	1.20	0.29
Efficient Home Incentives (low income included)									
	Energy Efficient Home Construction Rebates *	0.30	1.95	0.77	0.84				
Additional Low Income									
	Energy Efficiency Kits	0.36	30.97	9.33	11.49	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only									
Weatherization Rebates									
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.30	3.60	2.19	1.51	0.24	3.81	1.23	1.24
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.36	0.54	0.85	0.31				
	Wall (Bring Up to R19) - Elect. Heat Only	0.28	2.45	1.42	0.98	0.24	2.44	1.25	0.84
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.30	0.41	0.56	0.20				
	Foundation (Bring Up to R-10)	0.22	1.45	1.32	0.48				
	Infiltration Control	0.32	4.96	4.27	2.16				
	Duct Insulation (in unconditioned space)	0.27	1.32	1.20	0.49				

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

		Cost Effectiveness Analysis				Cost Effectiveness Analysis			
		Benefit/Cost Ratios - Corn Belt				Benefit/Cost Ratios - NIPCO			
Iowa Lakes Electric Cooperative		Rate Payer	Participant	Utility	Societal	Rate Payer	Participant	Utility	Societal
Agriculture/Commercial & Industrial Lighting									
Interior Lighting									
	Change a Light Rebate Program	0.87	8.82	12.32	8.00	0.67	10.95	10.63	7.47
	High Efficiency Interior Lighting								
	T-8 or 46" T5 - 4 ft	0.32	4.96	4.27	2.16	0.66	3.90	5.31	2.78
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.28	3.81	1.13	1.14				
	CFL lamps - Energy Star- 9W and up	0.34	9.20	3.78	3.07	0.67	10.95	10.63	7.47
	Occupancy Sensors - Must control >150 Watts	0.33	6.69	5.93	2.58				
	Metal Halide Lamps					0.71	2.25	3.97	1.80
	LED Exit Signs	0.47	3.44	9.70	1.97				
Exterior Lighting									
	High Efficiency Exterior Lighting								
	CFL Outdoor Light - 42 W min., Cold Start	0.36	4.83	2.83	1.79				
Ag/Commercial & Industrial Heating and Cooling									
	Geothermal Heat Pump	0.54	1.67	4.85	0.95	0.39	2.01	3.19	0.87
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.59	5.40	6.77	3.58	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Water Heating									
	High-Efficiency Water Heater								
	50-79 gallon	1.65	0.77	4.21	1.71				
	80 gallon+	1.43	1.48	3.22	2.67	1.24	1.71	3.16	2.63
Ag/Commercial & Industrial Motors									
	Premium Motors Rebate Program - NEMA	0.36	5.96	2.40	2.48	0.33	7.24	4.84	2.89
	Variable Speed Drive Motor Incentive	0.39	6.11	13.46	3.04	0.33	7.24	4.84	2.89
Agricultural									
	Livestock Ventilation Fans					0.00	0.00	0.00	0.00
	48"-49"	0.45	6.05	3.23	3.02				
	Circulating Fans --- BESS Lab Ratings								
	48"-52"	0.57	5.28	3.11	3.29				
	Efficient Livestock Waterers	0.31	6.06	3.08	2.17				

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs									
	Water Heater Load Control	#	#	#	#	#	#	#	#
	Air Conditioning Load Control	#	#	#	#	#	#	#	#
	Space Heating Load Control (Interruptible)	#	#	#	#	#	#	#	#
	Dual-Fuel Space Heating	#	#	#	#	#	#	#	#
III. Energy Audit & Technical Support Programs									
	Expert Energy Services - Agricultural								
	Expert Energy Services - C&I								
	Energy Audit Services - Residential *								
IV. Educational & Research Programs									
	Member Information and Education								
	Peak Alert								
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network								

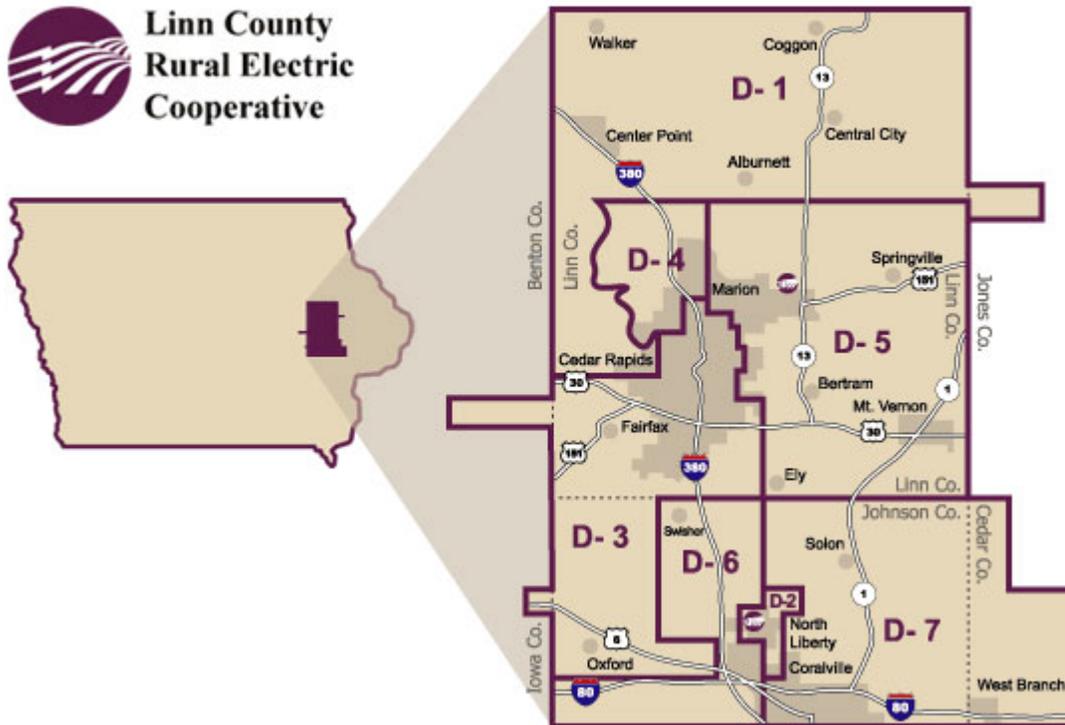
TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

Linn County Rural Electric Cooperative

BACKGROUND

Linn County Rural Electric Cooperative (Linn County REC) was organized in 1938, with its first members energized in 1939. We are a member-owned, not-for-profit cooperative that distributes electricity to 24,320 members. The headquarters for Linn County REC is in Marion, Iowa, with a satellite office in North Liberty, Iowa. Our service territory consists of rural and suburban areas of Linn and Johnson counties with line extensions into Jones, Cedar, Iowa and Benton counties. The governing board is comprised of seven member directors, one from each of the evenly weighted districts across our service territory (map D-1 to D-7).



Linn County REC serves the members with a staff of 60 employees. This makes Linn County REC's member to employee ratio (a measure of how lean you are run for staffing) in the upper 25% for cooperatives nationally. 4 (7%) of these employees are in the member services department that is responsible for energy efficiency incentives, marketing, and communications. We have 11.6 services per mile of line, the highest density per mile of line for cooperatives in Iowa. 39% of our line is underground.

Linn County REC has grown from 10,754 members in 1992 to 24,320 members in 2009. 56% of building stock falls under the Model Energy Code and IEEC Code with new equipment and better construction techniques as certified by builder or owner prior to permanent electrical service. 1992 is also the year that our first Energy Efficiency Plan was filed and implemented. Large C & I accounts (larger than 1000 KVA) have increased from 1 in 1992 to 11 in 2009. Commercial accounts between 75 KVA and 999 KVA have almost doubled going from 64 to 117 accounts. With this the cooperative's higher usage accounts also have better overall energy efficiency which changes our potential for saving on these accounts.

Linn County REC is a part owner in Central Iowa Power Cooperative (CIPCO), a consumer-owned, not-for-profit cooperative that generates and transmits power to their member owners. In addition to supplying all electric power requirements to their members, CIPCO provides assistance in energy efficiency, economic development, education, electrical safety, and community involvement programs. This allows for more uniform availability across its members cooperatives that distribute power to approximately 311,700 Iowans in 58 counties.

Education is the key of our success whether it is our web site, newsletter, trade show booths, radio/newspaper ads or availability of our staff to answer our member's daily questions. Linn County REC has consistently invested on average almost 2% of gross revenue in energy efficiency education and incentives for the benefit our membership. We look forward to promoting new technologies that continue to make our membership's energy dollar go even further.

The website for Linn County REC is <http://www.linncountyrec.com> which has become one of our best tools to get information and incentive forms into our member's hands.

Linn County REC also offers members optional rates such as Time of Day Interruptible and Heat Plus. If a member is interested in renewable energy we have net metering for Qualifying Facilities. Currently we have 5 members taking advantage of this opportunity.

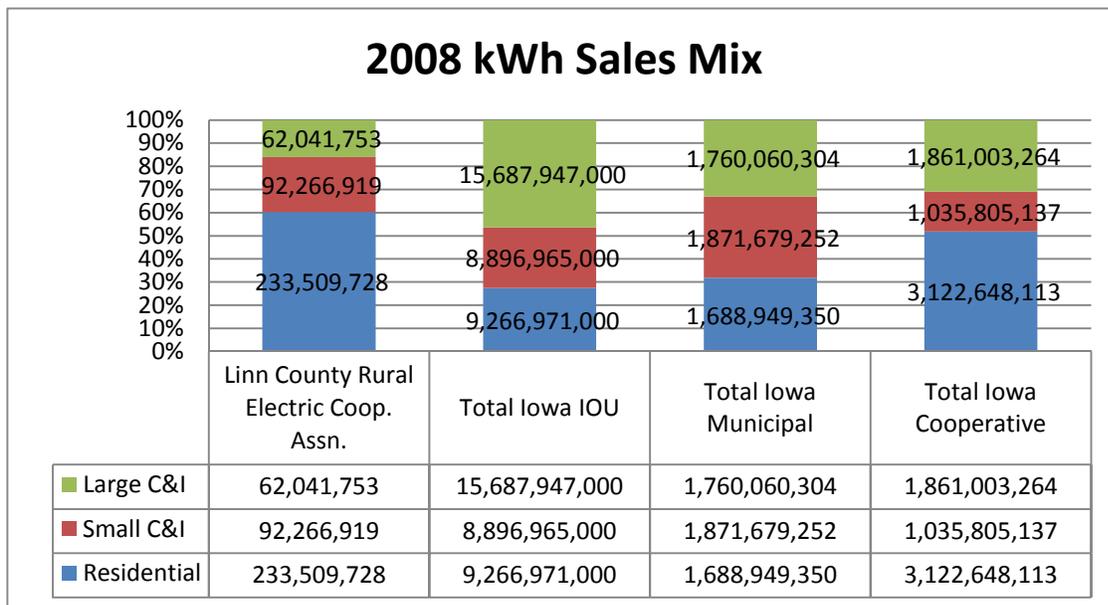
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

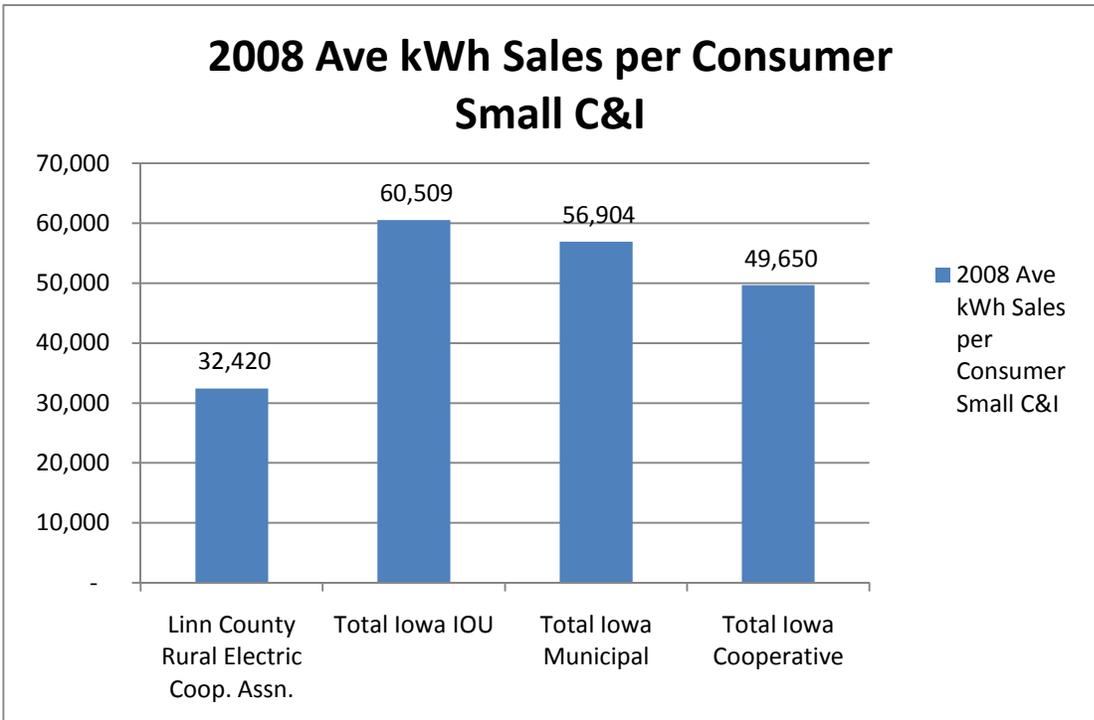
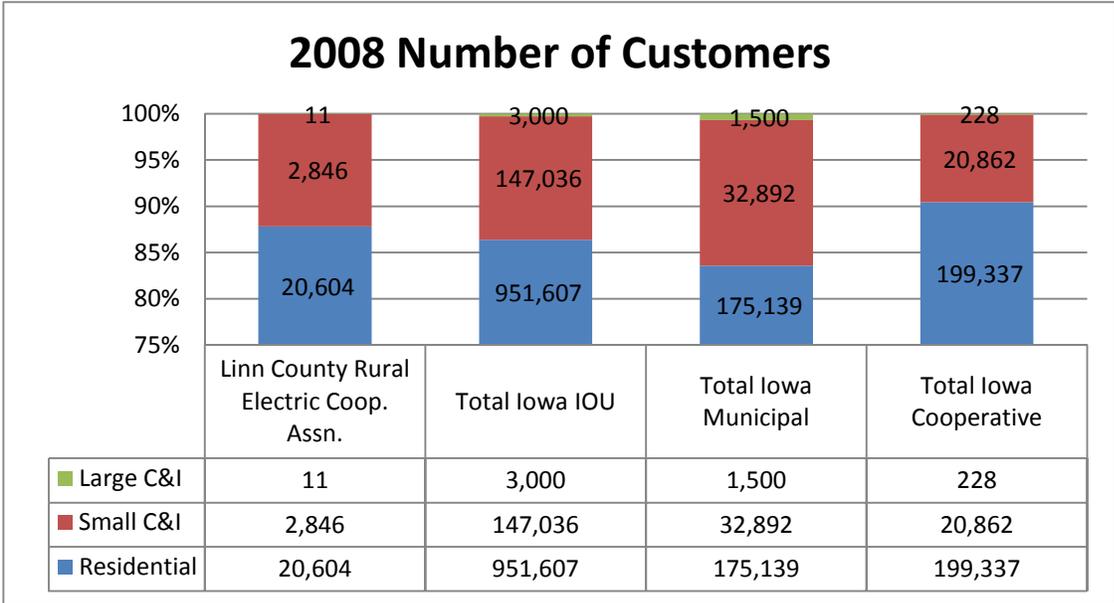
The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

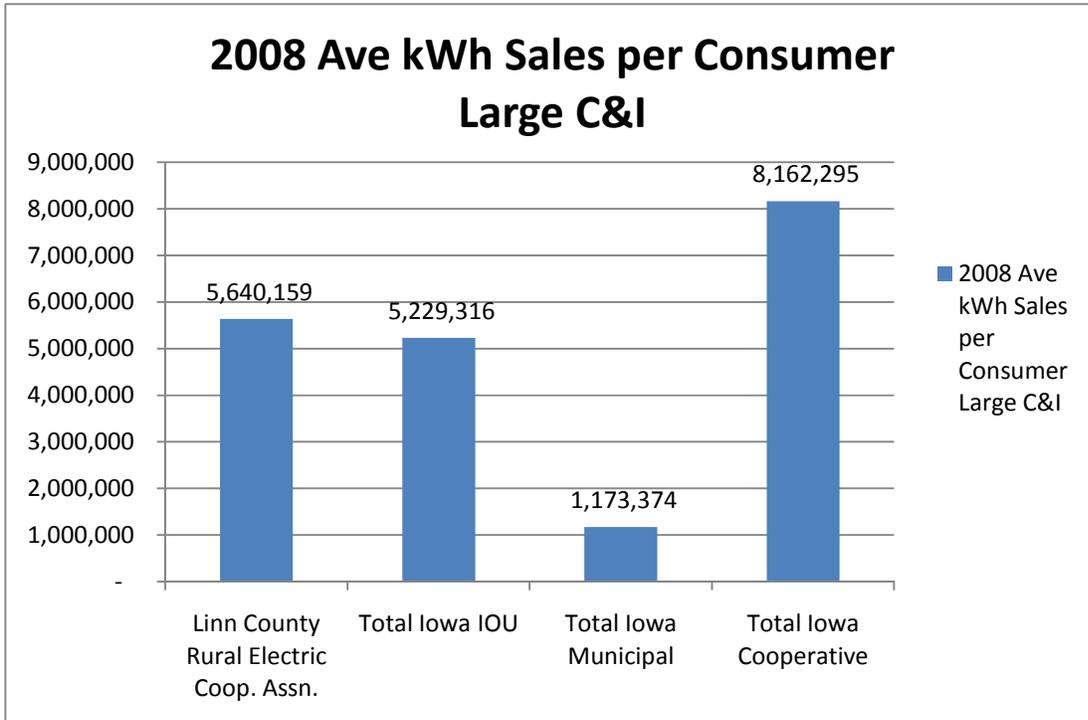
CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Linn County REC. This illustrates that making any comparison of Linn County REC’s energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.

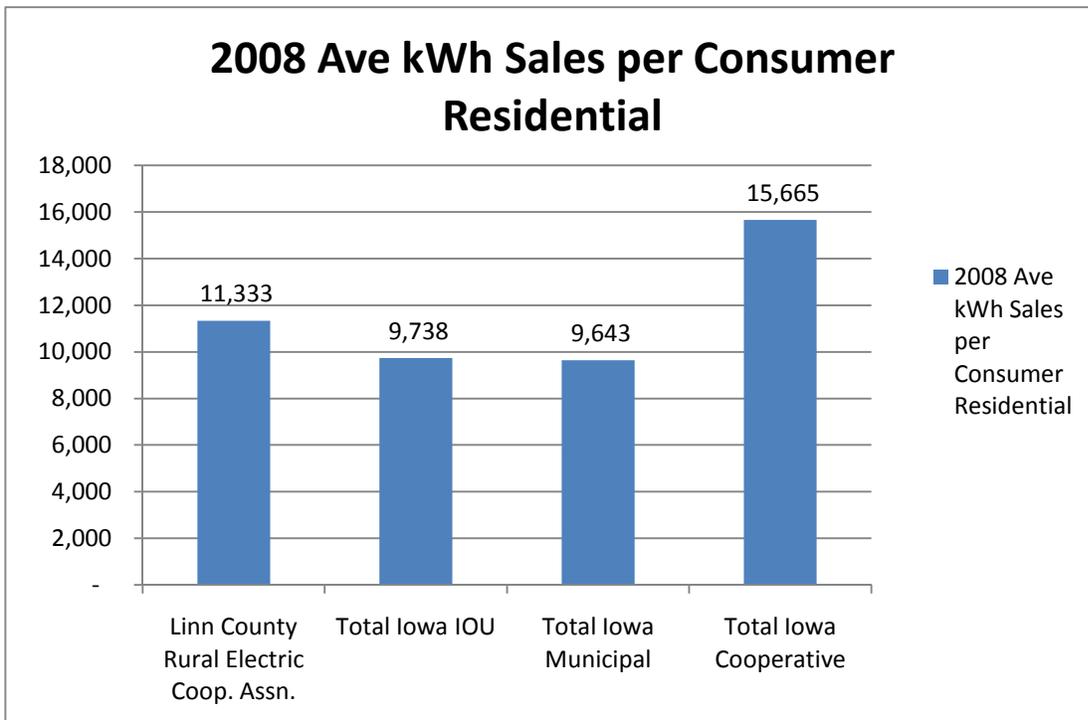




67% of our Small C&I accounts use less than 500 kWh's per month (6,000 kWh's annual).



Cooperatives have done a great job in the area of economic development and attracting larger load.



Residential does include farm/residential with unique applications for rural areas and less access to natural gas. Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Linn County REC has been an advocate for energy efficiency for over 30 years. We have invested in our member's future through incentives for purchasing energy efficient equipment and educating members of the long term benefits for their energy future. Looking forward Linn County REC envisions an even brighter future for 2010 through 2014. Some of the new energy efficiency incentive measures that will be available to members include solar water heaters, integrated heat pump water heaters, ENERGY STAR (ES) freezers, ES dehumidifiers, ES big screen TV's, ES room air conditioners, Commercial Refrigeration, Livestock waters, LED lighting and more.

Linn County REC takes part in a number of CIPCO-supported energy-efficiency programs available to their member cooperatives. The programs are selected and implemented at a local level to meet the needs and interests of our membership.

CIPCO has designed and maintains databases of energy-efficiency and demand response program participation that is used for a number of evaluation and reporting purposes. This information assists Linn County REC in program reviews and reports. Employees of CIPCO and their cooperatives are active in a variety of energy-related organizations and programs, including the Iowa Association for Energy Efficiency, Geothermal Heat Pump Association, and Iowa Energy Center, which provide additional value to all member cooperatives.

Member cooperatives and CIPCO collaborate in the energy efficiency program development process. All energy-efficiency programs are reviewed on an annual basis by CIPCO staff and updated as necessary to reflect changes in government, industry group, and ENERGY STAR ratings/standards. Input from member cooperatives, outside utility programs and market trends are also considered. CIPCO recommendations are presented to the member cooperatives for review, discussion and modification prior to implementation.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.

4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers electrical energy evaluation and audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	1,639	\$245,914	7,122,134	1,500,575	508,724
	SEER 14.5 (and EER 12)	1,129	\$146,587	3,919,453	825,500	279,961
	SEER 16 (and EER 13)	510	\$99,327	3,202,681	675,075	228,763
	ENERGY STAR Qualified Room Air Conditioner	500	\$16,235	441,391	147,130	49,043
	Geothermal Heat Pump	757	\$1,546,943	199,612,154	28,359,692	9,980,608
	Air Source Heat Pump	122	\$110,830	14,271,181	2,737,259	951,412
	Heat Recovery Ventilators	331	\$53,691	4,114,889	589,262	205,744
	Residential Contractor Rebates	879	\$175,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	16,346	\$42,492	7,759,029	3,307,571	1,062,881
	Local CFL Rebate Program(s)	21,340	\$55,473	10,129,553	4,318,042	1,387,610
	ENERGY STAR CFL Fixtures	2,718	\$28,205	5,931,105	831,184	296,555
	T8 or better Lighting Fixtures	1,420	\$18,552	917,386	158,678	55,938
	2 ft. T8 or better Fixture w/ electronic ballasts	264	\$1,370	23,858	4,133	1,455
	4 ft. T8 or better Fixture w/ electronic ballasts	1,003	\$13,013	688,889	119,232	42,005
	8 ft. T8 or better Fixture w/ electronic ballasts	153	\$4,168	204,639	35,313	12,478
	ENERGY STAR LED lighting	524	\$20,395	696,465	109,506	38,693
	ENERGY STAR Ceiling Fan	400	\$7,780	1,198,203	183,059	66,567
Exterior Lighting						
	High Efficiency Exterior Lighting	700	\$16,354	762,151	894,222	298,074
	High Pressure Sodium - 100+ W	40	\$1,559	39,764	27,112	9,037
	Metal Halide - 70 - 250 W	80	\$2,078	48,087	26,715	8,905
	Metal Halide - 250+ W (pulse start lamp and ballasts)	80	\$3,117	192,682	117,969	39,323
	CFL	500	\$9,600	481,618	722,427	240,809
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1,143	\$149,382	3,962,419	779,876	264,161
	40-49 gallon	10	\$649	14,878	2,976	992
	50-79 gallon	1,108	\$143,862	3,809,916	749,375	253,994
	80 gallon+	25	\$4,871	137,625	27,525	9,175
	Heat Pump Water Heater - (Add-On)	50	\$19,482	956,072	286,822	95,607
	Heat Pump Water Heater - (Integrated)	281	\$181,775	6,447,748	1,290,697	537,312
	Solar Water Heaters (w/ Electric auxiliary tank)	105	\$47,466	2,339,869	417,834	194,989
	Flow Restrictors - Faucet	854	\$33,231	2,829,227	878,658	314,359
	Flow Restrictors - Shower	854	\$55,385	5,364,802	1,499,506	536,480
	Tank Insulation	60	\$1,169	101,834	30,550	10,183
	Pipe Insulation	60	\$1,169	106,132	21,226	7,075
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	1,061	\$66,166	2,572,522	690,135	233,866
	ENERGY STAR Qualified Dishwasher	595	\$19,313	764,604	205,024	69,509
	ENERGY STAR Qualified Refrigerator	2,400	\$77,903	3,769,182	741,272	251,279
	ENERGY STAR Qualified Dehumidifier	790	\$25,643	2,225,404	546,961	185,450
	ENERGY STAR Qualified Freezer	790	\$25,643	875,012	172,049	58,334
	Appliance Recycling	2,330	\$178,176	25,006,142	8,752,746	2,778,460
	Refrigerator	2,330	\$178,176	25,006,142	8,752,746	2,778,460
	Efficient Television	591	\$30,676	1,172,414	279,382	97,701
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	461	\$299,102	15,242,043	1,452,568	508,068
	Advanced Lighting Package	255	\$66,081	2,192,077	288,409	109,604
Additional Low Income						
	Energy Efficiency Kits	78	\$3,559	790,695	313,124	87,855
	Weatherization Rebates	20	\$7,533	439,903	46,718	15,573
	Ceiling (Bring up to R-38) - Elect. Heat Only	5	\$4,286	257,065	25,706	8,569
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$974	23,805	2,381	794
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	5	\$974	22,648	2,265	755
	Infiltration Control	5	\$1,299	136,385	16,366	5,455
Building Shell - Existing Home Only						
	Weatherization Rebates	571	\$200,120	11,437,754	1,119,022	390,254
	Ceiling (Bring up to R-38) - Elect. Heat Only	68	\$43,676	3,084,646	293,344	102,822
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	174	\$27,943	828,427	79,192	27,614
	Wall (Bring Up to R19) - Elect. Heat Only	59	\$45,937	2,559,341	244,366	85,311
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	164	\$31,922	742,859	70,813	24,762
	Foundation (Bring Up to R-10)	47	\$36,601	3,019,346	291,228	100,645
	Infiltration Control	49	\$11,443	1,105,709	125,464	44,228
	Duct Insulation (in unconditioned space)	10	\$2,598	97,426	14,614	4,871
Residential Total		61,025	\$3,827,637	341,551,496	62,948,759	21,647,969
Residential Average kWh Sales (3 yr Ave actual and projected)						1,195,461,070
Residential kWh Savings as percentage of Residential kWh Sales						1.8%

		2010-2014				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program					
	High Efficiency Interior Lighting					
	T-8 or 46" T5 - 4 ft	4,736	\$122,871	6,547,398	2,874,034	1,023,031
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	270	\$31,521	1,509,944	549,797	196,097
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	537	\$33,436	2,693,230	982,222	349,770
	CFL lamps - Energy Star- 9W and up	4,905	\$9,547	2,417,474	2,661,629	929,798
	Occupancy Sensors - Must control >150 Watts	608	\$11,834	3,216,369	920,474	321,637
Exterior Lighting						
	High Efficiency Exterior Lighting					
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	341	\$8,855	421,703	253,643	86,062
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	165	\$6,427	386,715	231,981	78,921
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	75	\$1,461	83,029	50,834	16,945
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	430	\$16,750	476,036	286,932	97,150
	CFL Outdoor Light - 42 W min., Cold Start	55	\$1,072	64,301	80,376	26,792
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	413	\$13,406	607,648	119,568	40,510
	Air Cooled Chillers	267	\$6,933	823,930	121,275	41,196
	Geothermal Heat Pump	600	\$259,762	25,551,086	3,832,663	1,277,554
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	55	\$14,270	1,282,927	241,035	85,528
	Heat Recovery Ventilators	514	\$120,057	19,804,120	2,831,912	990,206
	Commercial Contractor Rebate (GS & AS)	655	\$34,025			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	60	\$7,793	307,486	76,871	25,624
	Commercial Solid Door Refrigerators - < 19 cu. ft.	30	\$1,948	53,562	13,391	4,464
	Commercial Solid Door Refrigerators - 61-90 cu. ft.	30	\$5,845	253,924	63,481	21,160
Ag/Commercial & Industrial Insulation						
	Building Envelope	29	\$44,266	2,690,387	336,603	112,696
	Insulation (wall, ceiling, foundation, infiltration control)	10	\$38,964	2,464,571	295,749	98,583
	Multi Family - Insulation & Sealing	19	\$5,302	225,816	40,855	14,113
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	60	\$9,731	636,793	120,283	42,453
	Variable Speed Drive Motor Incentive	117	\$182,201	43,318,018	8,293,364	2,887,868
Agricultural						
	Dairy Pre-coolers Incentive	5	\$3,896	730,279	146,056	48,685
	Dairy Heat Reclaimer	5	\$5,195	823,847	164,769	54,923
	Livestock Ventilation Fans	162	\$19,238	854,850	200,520	71,238
	36"-47"	162	\$19,238	854,850	200,520	71,238
	Ventilation Thermostat Controller	22	\$713	59,646	13,782	4,970
	Circulating Fans --- BESS Lab Ratings	99	\$4,704	391,479	91,279	32,623
	36"-47"	99	\$4,704	391,479	91,279	32,623
	Scroll compressor (milk cooling)	5	\$1,624	274,836	54,967	18,322
	Efficient Livestock Waterers	183	\$11,872	1,732,872	411,123	144,406
	Variable Speed Drive Motor - Dairy Vacuum Pump	5	\$2,598	1,102,315	194,526	64,842
	Hog Farrowing - Heat Lamps (<= 175W)	325	\$1,265	216,342	152,272	54,086
	Hog Farrowing - Single Crate Heating Pads (<=85W)	165	\$5,351	329,142	92,160	32,914
	Hog Farrowing - Heat Lamp or Pad Controller	5	\$325	38,679	7,075	2,358
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	100	\$587,357	47,846,327	10,853,445	3,617,815
Ag, Commercial and Industrial Total		17,117	\$1,583,329	167,856,499	37,780,915	12,948,491
C & I Average kWh Sales (3 yr Ave actual and projected)**						847,154,056
C & I kWh Savings as percentage of C & I kWh Sales						1.5%

II. Demand Response Programs						
	Residential Time-of-Day Price	1,496	\$57,000			
	Commercial and Industrial Time-of-Day Price	23	\$4,500			
	Industrial Interruptible Price	61	\$1,380,892			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	150	\$3,750			
	Expert Energy Services - C&I	150	\$75,000			
	Energy Audit Services - Residential *	2,500	\$225,000			
IV. Educational & Research Programs						
	Model Housing Education	10	\$62,500			
	Member Information and Education	130,000	\$275,000			
	Living with Energy in Iowa	130,000	\$1,650			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	130,000	\$200,000			
TOTAL		472,532	\$7,696,258	509,407,996	100,729,675	34,596,461
Total Average kWh Sales (3 yr Ave actual and projected)**						2,042,615,126
Total kWh Savings as percentage of Total kWh Sales						1.69%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	308	\$46,842	1,338,840	95,631	92
	SEER 14.5 (and EER 12)	212	\$27,895	735,982	52,570	51
	SEER 16 (and EER 13)	96	\$18,947	602,858	43,061	41
	ENERGY STAR Qualified Room Air Conditioner	100	\$3,289	88,278	9,809	9
	Geothermal Heat Pump	123	\$254,901	32,433,679	1,621,684	53
	Air Source Heat Pump	21	\$19,342	2,456,515	163,768	7
	Heat Recovery Ventilators	56	\$9,211	696,175	34,809	
	Residential Contractor Rebates	144	\$28,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,532	\$9,295	1,676,550	229,664	212
	Local CFL Rebate Program(s)	4,611	\$12,134	2,188,724	299,825	277
	ENERGY STAR CFL Fixtures	400	\$4,211	872,863	43,643	16
	T8 or better Lighting Fixtures	235	\$3,107	151,428	9,233	2
	2 ft. T8 or better Fixture w/ electronic ballasts	44	\$232	3,976	242	
	4 ft. T8 or better Fixture w/ electronic ballasts	166	\$2,184	114,014	6,952	2
	8 ft. T8 or better Fixture w/ electronic ballasts	25	\$691	33,438	2,039	1
	ENERGY STAR LED lighting	86	\$3,395	114,305	6,350	3
	ENERGY STAR Ceiling Fan	60	\$1,184	179,730	9,985	2
Exterior Lighting						
	High Efficiency Exterior Lighting	140	\$3,288	152,430	59,615	2
	High Pressure Sodium - 100+ W	8	\$316	7,953	1,807	0
	Metal Halide - 70 - 250 W	16	\$421	9,617	1,781	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	16	\$632	38,536	7,865	0
	CFL	100	\$1,920	96,324	48,162	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	218	\$28,882	756,035	50,402	7
	40-49 gallon	2	\$132	2,976	198	0
	50-79 gallon	211	\$27,763	725,534	48,369	6
	80 gallon+	5	\$987	27,525	1,835	0
	Heat Pump Water Heater - (Add-On)	10	\$3,947	191,214	19,121	2
	Heat Pump Water Heater - (Integrated)	25	\$16,447	573,643	47,804	5
	Solar Water Heaters (w/ Electric auxiliary tank)	5	\$2,303	111,422	9,285	1
	Flow Restrictors - Faucet	126	\$4,974	417,427	46,381	3
	Flow Restrictors - Shower	126	\$8,289	791,528	79,153	6
	Tank Insulation	12	\$237	20,367	2,037	0
	Pipe Insulation	12	\$237	21,226	1,415	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	202	\$12,757	489,773	44,525	16
	ENERGY STAR Qualified Dishwasher	113	\$3,717	145,210	13,201	10
	ENERGY STAR Qualified Refrigerator	456	\$15,000	716,145	47,743	5
	ENERGY STAR Qualified Dehumidifier	150	\$4,934	422,545	35,212	3
	ENERGY STAR Qualified Freezer	150	\$4,934	166,142	11,076	2
	Appliance Recycling	500	\$38,235	5,366,125	596,236	95
	Refrigerator	500	\$38,235	5,366,125	596,236	95
	Efficient Television	100	\$5,263	198,378	16,532	4
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	78	\$51,316	2,578,914	85,964	14
	Advanced Lighting Package	30	\$7,895	257,891	12,895	7
Additional Low Income						
	Energy Efficiency Kits	20	\$921	202,742	22,527	3
	Weatherization Rebates	4	\$1,526	87,981	3,115	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$868	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$197	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$197	4,530	151	0
	Infiltration Control	1	\$263	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	95	\$33,847	1,907,085	65,098	10
	Ceiling (Bring up to R-38) - Elect. Heat Only	11	\$7,164	498,987	16,633	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	29	\$4,722	138,071	4,602	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,895	433,787	14,460	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	27	\$5,329	122,300	4,077	3
	Foundation (Bring Up to R-10)	8	\$6,316	513,931	17,131	
	Infiltration Control	8	\$1,895	180,524	7,221	1
	Duct Insulation (in unconditioned space)	2	\$526	19,485	974	0
	Residential Total	12,248	\$644,660	57,771,312	3,793,737	868
	Residential Average kWh Sales (3 yr Ave actual and projected)				231,005,297	
	Residential kWh Savings as percentage of Residential kWh Sales				1.6%	
		12,104	\$ 615,860	57,771,312	3,793,737	868

		2010				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	247	\$650	133,278	37,022	15
	High Efficiency Interior Lighting	1,734	\$31,937	2,528,187	439,729	6
	T-8 or 46" T5 - 4 ft	706	\$18,579	976,027	152,504	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	40	\$4,737	223,695	29,051	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	80	\$5,053	401,226	52,107	1
	CFL lamps - Energy Star- 9W and up	808	\$1,595	398,230	153,165	2
	Occupancy Sensors - Must control >150 Watts	100	\$1,974	529,008	52,901	
Exterior Lighting						
	High Efficiency Exterior Lighting	204	\$6,684	273,284	58,506	2
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	65	\$1,711	80,383	16,405	1
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	31	\$1,224	72,656	14,828	1
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	15	\$296	16,606	3,389	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	82	\$3,237	90,779	18,526	1
	CFL Outdoor Light - 42 W min., Cold Start	11	\$217	12,860	5,358	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	78	\$2,566	114,762	7,651	5
	Air Cooled Chillers	50	\$1,316	154,294	7,715	4
	Geothermal Heat Pump	120	\$52,632	5,110,217	255,511	14
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	9	\$2,368	209,934	13,996	1
	Heat Recovery Ventilators	87	\$20,605	3,352,059	167,603	50
	Commercial Contractor Rebate (GS & AS)	129	\$6,789			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	12	\$1,579	61,497	5,125	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	6	\$395	10,712	893	0
	Commercial Solid Door Refrigerators - 61-90 cu. ft.	6	\$1,184	50,785	4,232	0
Ag/Commercial & Industrial Insulation						
	Building Envelope	5	\$8,743	528,569	21,945	2
	Insulation (wall, ceiling, foundation, infiltration control)	2	\$7,895	492,914	19,717	2
	Multi Family - Insulation & Sealing	3	\$849	35,655	2,228	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	10	\$1,645	106,132	7,075	1
	Variable Speed Drive Motor Incentive	20	\$31,579	7,404,789	493,653	43
Agricultural						
	Dairy Pre-coolers Incentive	1	\$789	146,056	9,737	5
	Dairy Heat Reclaimer	1	\$1,053	164,769	10,985	5
	Livestock Ventilation Fans	25	\$3,011	131,921	10,993	3
	36"-47"	25	\$3,011	131,921	10,993	3
	Ventilation Thermostat Controller	3	\$99	8,133	678	0
	Circulating Fans --- BESS Lab Ratings	15	\$723	59,315	4,943	2
	36"-47"	15	\$723	59,315	4,943	2
	Scroll compressor (milk cooling)	1	\$329	54,967	3,664	0
	Efficient Livestock Waterers	30	\$1,974	284,077	23,673	
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$526	220,463	12,968	1
	Hog Farrowing - Heat Lamps (<= 175W)	50	\$197	33,283	8,321	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	25	\$822	49,870	4,987	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$66	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	20	\$119,007	9,569,265	723,563	72
Ag, Commercial and Industrial Total		2,878	\$297,690	30,706,860	2,330,514	232
C & I Average kWh Sales (3 yr Ave actual and projected)**					156,582,981	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	
		2,878	\$297,690	30,706,860	2,330,514	232
II. Demand Response Programs						
	Residential Time-of-Day Price	279	\$9,500			
	Commercial and Industrial Time-of-Day Price	2	\$550			
	Industrial Interruptible Price	9	\$230,188			3,179
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	30	\$750			
	Expert Energy Services - C&I	30	\$15,000			
	Energy Audit Services - Residential *	500	\$45,000			
IV. Educational & Research Programs						
	Model Housing Education	2	\$12,500			
	Member Information and Education	25,000	\$55,000			
	Living with Energy in Iowa	25,000	\$330			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	25,000	\$38,000			
TOTAL		90,978	\$1,349,168	88,478,172	6,124,251	4,278
Total Average kWh Sales (3 yr Ave actual and projected)**					387,588,277	
Total kWh Savings as percentage of Total kWh Sales					1.58%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	321	\$48,497	1,395,203	99,657	96
	SEER 14.5 (and EER 12)	221	\$28,889	767,227	54,802	53
	SEER 16 (and EER 13)	100	\$19,608	627,977	44,855	43
	ENERGY STAR Qualified Room Air Conditioner	100	\$3,268	88,278	9,809	9
	Geothermal Heat Pump	142	\$292,353	37,443,759	1,872,188	61
	Air Source Heat Pump	23	\$21,046	2,690,469	179,365	7
	Heat Recovery Ventilators	62	\$10,131	770,765	38,538	
	Residential Contractor Rebates	165	\$33,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,532	\$9,234	1,676,550	229,664	212
	Local CFL Rebate Program(s)	4,611	\$12,055	2,188,724	299,825	277
	ENERGY STAR CFL Fixtures	500	\$5,229	1,091,079	54,554	20
	T8 or better Lighting Fixtures	259	\$3,412	167,478	10,212	3
	2 ft. T8 or better Fixture w/ electronic ballasts	48	\$251	4,338	265	
	4 ft. T8 or better Fixture w/ electronic ballasts	183	\$2,392	125,690	7,664	2
	8 ft. T8 or better Fixture w/ electronic ballasts	28	\$769	37,450	2,284	1
	ENERGY STAR LED lighting	95	\$3,725	126,268	7,015	4
	ENERGY STAR Ceiling Fan	70	\$1,373	209,686	11,649	2
Exterior Lighting						
	High Efficiency Exterior Lighting	140	\$3,279	152,430	59,615	2
	High Pressure Sodium - 100+ W	8	\$314	7,953	1,807	0
	Metal Halide - 70 - 250 W	16	\$418	9,617	1,781	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	16	\$627	38,536	7,865	0
	CFL	100	\$1,920	96,324	48,162	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	223	\$29,346	773,228	51,549	7
	40-49 gallon	2	\$131	2,976	198	0
	50-79 gallon	216	\$28,235	742,727	49,515	6
	80 gallon+	5	\$980	27,525	1,835	0
	Heat Pump Water Heater - (Add-On)	10	\$3,922	191,214	19,121	2
	Heat Pump Water Heater - (Integrated)	40	\$26,144	917,829	76,486	8
	Solar Water Heaters (w/ Electric auxiliary tank)	10	\$4,575	222,845	18,570	2
	Flow Restrictors - Faucet	158	\$6,196	523,440	58,160	3
	Flow Restrictors - Shower	158	\$10,327	992,551	99,255	8
	Tank Insulation	12	\$235	20,367	2,037	0
	Pipe Insulation	12	\$235	21,226	1,415	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	207	\$12,993	501,896	45,627	17
	ENERGY STAR Qualified Dishwasher	116	\$3,791	149,066	13,551	10
	ENERGY STAR Qualified Refrigerator	468	\$15,294	734,990	48,999	5
	ENERGY STAR Qualified Dehumidifier	154	\$5,033	433,813	36,151	3
	ENERGY STAR Qualified Freezer	154	\$5,033	170,572	11,371	2
	Appliance Recycling	600	\$45,882	6,439,350	715,483	114
	Refrigerator	600	\$45,882	6,439,350	715,483	114
	Efficient Television	110	\$5,752	218,216	18,185	4
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	86	\$56,209	2,843,418	94,781	15
	Advanced Lighting Package	41	\$10,719	352,452	17,623	9
Additional Low Income						
	Energy Efficiency Kits	24	\$1,098	243,291	27,032	3
	Weatherization Rebates	4	\$1,516	87,981	3,115	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$863	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$196	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$196	4,530	151	0
	Infiltration Control	1	\$261	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	108	\$38,155	2,165,158	73,851	11
	Ceiling (Bring up to R-38) - Elect. Heat Only	13	\$8,412	589,712	19,657	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	33	\$5,338	157,115	5,237	4
	Wall (Bring Up to R19) - Elect. Heat Only	11	\$8,627	477,165	15,906	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	31	\$6,078	140,419	4,681	4
	Foundation (Bring Up to R-10)	9	\$7,059	578,173	19,272	
	Infiltration Control	9	\$2,118	203,089	8,124	1
	Duct Insulation (in unconditioned space)	2	\$523	19,485	974	0
	Residential Total	12,715	\$729,057	66,003,591	4,304,453	918
	Residential Average kWh Sales (3 yr Ave actual and projected)				234,465,357	
	Residential kWh Savings as percentage of Residential kWh Sales				1.8%	
		12,550	\$ 696,057	66,003,591	4,304,453	918

		2011				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	247	\$646	133,278	37,022	15
	High Efficiency Interior Lighting	2,077	\$39,318	3,068,102	529,125	7
	T-8 or 46" T5 - 4 ft	883	\$23,085	1,220,725	190,738	3
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	50	\$5,882	279,619	36,314	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	100	\$6,275	501,533	65,134	1
	CFL lamps - Energy Star- 9W and up	929	\$1,822	457,866	176,102	3
	Occupancy Sensors - Must control >150 Watts	115	\$2,255	608,359	60,836	
Exterior Lighting						
	High Efficiency Exterior Lighting	208	\$6,784	279,078	59,689	2
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	66	\$1,725	81,620	16,657	1
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	32	\$1,255	74,999	15,306	1
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	15	\$294	16,606	3,389	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	84	\$3,294	92,993	18,978	1
	CFL Outdoor Light - 42 W min., Cold Start	11	\$216	12,860	5,358	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	81	\$2,647	119,176	7,945	5
	Air Cooled Chillers	52	\$1,359	160,466	8,023	4
	Geothermal Heat Pump	120	\$52,288	5,110,217	255,511	14
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	10	\$2,614	233,259	15,551	1
	Heat Recovery Ventilators	96	\$22,588	3,698,824	184,941	56
	Commercial Contractor Rebate (GS & AS)	130	\$6,797			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	12	\$1,569	61,497	5,125	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	6	\$392	10,712	893	0
	Commercial Solid Door Refrigerators - 61-90 cu. ft.	6	\$1,176	50,785	4,232	0
Ag/Commercial & Industrial Insulation						
	Building Envelope	6	\$8,967	540,454	22,688	2
	Insulation (wall, ceiling, foundation, infiltration control)	2	\$7,843	492,914	19,717	2
	Multi Family - Insulation & Sealing	4	\$1,124	47,540	2,971	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	11	\$1,797	116,745	7,783	1
	Variable Speed Drive Motor Incentive	22	\$34,510	8,145,268	543,018	47
Agricultural						
	Dairy Pre-coolers Incentive	1	\$784	146,056	9,737	5
	Dairy Heat Reclaimer	1	\$1,046	164,769	10,985	5
	Livestock Ventilation Fans	30	\$3,590	158,306	13,192	4
	36"-47"	30	\$3,590	158,306	13,192	4
	Ventilation Thermostat Controller	4	\$131	10,845	904	0
	Circulating Fans --- BESS Lab Ratings	18	\$862	71,178	5,932	2
	36"-47"	18	\$862	71,178	5,932	2
	Scroll compressor (milk cooling)	1	\$327	54,967	3,664	0
	Efficient Livestock Waterers	34	\$2,222	321,954	26,830	
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$523	220,463	12,968	1
	Hog Farrowing - Heat Lamps (<= 175W)	60	\$235	39,940	9,985	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	30	\$980	59,844	5,984	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	20	\$118,229	9,569,265	723,563	72
Ag, Commercial and Industrial Total		3,273	\$310,880	32,491,690	2,500,635	244
C & I Average kWh Sales (3 yr Ave actual and projected)**					162,447,018	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	
		3,273	\$310,880	32,491,690	2,500,635	244
II. Demand Response Programs						
	Residential Time-of-Day Price	289	\$9,500			
	Commercial and Industrial Time-of-Day Price	3	\$650			
	Industrial Interruptible Price	10	\$244,386			3,292
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	30	\$750			
	Expert Energy Services - C&I	30	\$15,000			
	Energy Audit Services - Residential *	500	\$45,000			
IV. Educational & Research Programs						
	Model Housing Education	2	\$12,500			
	Member Information and Education	25,500	\$55,000			
	Living with Energy in Iowa	25,500	\$330			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	25,500	\$39,000			
TOTAL		93,352	\$1,462,053	98,495,281	6,805,089	4,454
Total Average kWh Sales (3 yr Ave actual and projected)**					396,912,375	
Total kWh Savings as percentage of Total kWh Sales					1.71%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	331	\$49,675	1,438,344	102,739	99
	SEER 14.5 (and EER 12)	228	\$29,610	791,528	56,538	55
	SEER 16 (and EER 13)	103	\$20,065	646,816	46,201	44
	ENERGY STAR Qualified Room Air Conditioner	100	\$3,247	88,278	9,809	9
	Geothermal Heat Pump	156	\$319,091	41,135,398	2,056,770	67
	Air Source Heat Pump	25	\$22,727	2,924,422	194,961	8
	Heat Recovery Ventilators	68	\$11,039	845,355	42,268	
	Residential Contractor Rebates	181	\$36,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,355	\$8,714	1,592,533	218,155	201
	Local CFL Rebate Program(s)	4,380	\$11,377	2,079,074	284,805	263
	ENERGY STAR CFL Fixtures	600	\$6,234	1,309,295	65,465	24
	T8 or better Lighting Fixtures	290	\$3,788	187,143	11,411	3
	2 ft. T8 or better Fixture w/ electronic ballasts	54	\$281	4,880	298	
	4 ft. T8 or better Fixture w/ electronic ballasts	205	\$2,662	140,800	8,585	2
	8 ft. T8 or better Fixture w/ electronic ballasts	31	\$845	41,463	2,528	1
	ENERGY STAR LED lighting	107	\$4,169	142,217	7,901	4
	ENERGY STAR Ceiling Fan	80	\$1,558	239,641	13,313	2
Exterior Lighting						
	High Efficiency Exterior Lighting	140	\$3,271	152,430	59,615	2
	High Pressure Sodium - 100+ W	8	\$312	7,953	1,807	0
	Metal Halide - 70 - 250 W	16	\$416	9,617	1,781	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	16	\$623	38,536	7,865	0
	CFL	100	\$1,920	96,324	48,162	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	228	\$29,805	790,421	52,695	7
	40-49 gallon	2	\$130	2,976	198	0
	50-79 gallon	221	\$28,701	759,920	50,661	7
	80 gallon+	5	\$974	27,525	1,835	0
	Heat Pump Water Heater - (Add-On)	10	\$3,896	191,214	19,121	2
	Heat Pump Water Heater - (Integrated)	52	\$33,766	1,193,178	99,431	11
	Solar Water Heaters (w/ Electric auxiliary tank)	20	\$9,091	445,689	37,141	4
	Flow Restrictors - Faucet	182	\$7,091	602,950	66,994	4
	Flow Restrictors - Shower	182	\$11,818	1,143,319	114,332	9
	Tank Insulation	12	\$234	20,367	2,037	0
	Pipe Insulation	12	\$234	21,226	1,415	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	212	\$13,227	514,019	46,729	17
	ENERGY STAR Qualified Dishwasher	119	\$3,864	152,921	13,902	11
	ENERGY STAR Qualified Refrigerator	480	\$15,584	753,836	50,256	5
	ENERGY STAR Qualified Dehumidifier	158	\$5,130	445,081	37,090	3
	ENERGY STAR Qualified Freezer	158	\$5,130	175,002	11,667	2
	Appliance Recycling	400	\$30,588	4,292,900	476,989	76
	Refrigerator	400	\$30,588	4,292,900	476,989	76
	Efficient Television	121	\$6,286	240,037	20,003	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	94	\$61,039	3,107,922	103,597	17
	Advanced Lighting Package	55	\$14,286	472,801	23,640	12
Additional Low Income						
	Energy Efficiency Kits	19	\$864	192,605	21,401	2
	Weatherization Rebates	4	\$1,506	87,981	3,115	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$857	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$195	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$195	4,530	151	0
	Infiltration Control	1	\$260	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	118	\$41,409	2,368,578	80,782	12
	Ceiling (Bring up to R-38) - Elect. Heat Only	14	\$9,000	635,074	21,169	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	36	\$5,786	171,399	5,713	4
	Wall (Bring Up to R19) - Elect. Heat Only	12	\$9,351	520,544	17,351	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	34	\$6,623	154,007	5,134	4
	Foundation (Bring Up to R-10)	10	\$7,792	642,414	21,414	
	Infiltration Control	10	\$2,338	225,655	9,026	1
	Duct Insulation (in unconditioned space)	2	\$519	19,485	974	0
	Residential Total	12,449	\$775,938	69,346,177	4,349,548	883
	Residential Average kWh Sales (3 yr Ave actual and projected)				237,536,592	
	Residential kWh Savings as percentage of Residential kWh Sales				1.8%	
		12,268	\$ 739,738	69,346,177	4,349,548	883

2012					
Estimated Achievable Potential Goals					
Linn County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	235	\$610	126,803	35,223	14
High Efficiency Interior Lighting	2,337	\$44,777	3,479,874	597,196	8
T-8 or 46" T5 - 4 ft	1,015	\$26,364	1,403,211	219,252	3
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	58	\$6,779	324,358	42,124	1
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	115	\$7,169	576,763	74,904	1
CFL lamps - Energy Star- 9W and up	1,022	\$1,991	503,702	193,732	3
Occupancy Sensors - Must control >150 Watts	127	\$2,474	671,840	67,184	
Exterior Lighting					
High Efficiency Exterior Lighting	213	\$6,909	286,109	61,124	2
Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	68	\$1,766	84,093	17,162	1
Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	33	\$1,286	77,343	15,784	1
High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	15	\$292	16,606	3,389	0
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	86	\$3,351	95,207	19,430	1
CFL Outdoor Light - 42 W min., Cold Start	11	\$214	12,860	5,358	0
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	83	\$2,695	122,118	8,141	5
Air Cooled Chillers	54	\$1,403	166,638	8,332	4
Geothermal Heat Pump	120	\$51,948	5,110,217	255,511	14
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	11	\$2,857	256,585	17,106	1
Heat Recovery Ventilators	105	\$24,545	4,045,589	202,279	61
Commercial Contractor Rebate (GS & AS)	131	\$6,805			
Ag/Commercial & Industrial Appliances					
Commercial ENERGY STAR Refrigerators and Freezers	12	\$1,558	61,497	5,125	1
Commercial Solid Door Refrigerators - < 19 cu. ft.	6	\$390	10,712	893	0
Commercial Solid Door Refrigerators - 61-90 cu. ft.	6	\$1,169	50,785	4,232	0
Ag/Commercial & Industrial Insulation					
Building Envelope	6	\$8,909	540,454	22,688	2
Insulation (wall, ceiling, foundation, infiltration control)	2	\$7,792	492,914	19,717	2
Multi Family - Insulation & Sealing	4	\$1,117	47,540	2,971	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	12	\$1,948	127,359	8,491	1
Variable Speed Drive Motor Incentive	24	\$37,403	8,885,747	592,383	52
Agricultural					
Dairy Pre-coolers Incentive	1	\$779	146,056	9,737	5
Dairy Heat Reclaimer	1	\$1,039	164,769	10,985	5
Livestock Ventilation Fans	34	\$4,042	179,413	14,951	4
36"-47"	34	\$4,042	179,413	14,951	4
Ventilation Thermostat Controller	5	\$162	13,556	1,130	0
Circulating Fans --- BESS Lab Ratings	21	\$999	83,041	6,920	2
36"-47"	21	\$999	83,041	6,920	2
Scroll compressor (milk cooling)	1	\$325	54,967	3,664	0
Efficient Livestock Waterers	38	\$2,468	359,831	29,986	
Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$519	220,463	12,968	1
Hog Farrowing - Heat Lamps (<= 175W)	69	\$269	45,931	11,483	
Hog Farrowing - Single Crate Heating Pads (<=85W)	35	\$1,136	69,818	6,982	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	20	\$117,462	9,569,265	723,563	72
Ag, Commercial and Industrial Total	3,570	\$321,633	34,123,839	2,646,439	255
C & I Average kWh Sales (3 yr Ave actual and projected)**				170,061,754	
C & I kWh Savings as percentage of C & I kWh Sales				1.6%	
	3,570	\$321,633	34,123,839	2,646,439	255
II. Demand Response Programs					
Residential Time-of-Day Price	389	\$19,000			
Commercial and Industrial Time-of-Day Price	4	\$800			
Industrial Interruptible Price	12	\$273,334			3,593
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	30	\$750			
Expert Energy Services - C&I	30	\$15,000			
Energy Audit Services - Residential *	500	\$45,000			
IV. Educational & Research Programs					
Model Housing Education	2	\$12,500			
Member Information and Education	26,000	\$55,000			
Living with Energy in Iowa	26,000	\$330			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	26,000	\$40,000			
TOTAL	94,986	\$1,559,284	103,470,016	6,995,987	4,731
Total Average kWh Sales (3 yr Ave actual and projected)**				407,598,345	
Total kWh Savings as percentage of Total kWh Sales				1.72%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	338	\$50,387	1,468,262	104,876	101
	SEER 14.5 (and EER 12)	233	\$30,065	808,886	57,778	56
	SEER 16 (and EER 13)	105	\$20,323	659,375	47,098	45
	ENERGY STAR Qualified Room Air Conditioner	100	\$3,226	88,278	9,809	9
	Geothermal Heat Pump	164	\$333,290	43,244,905	2,162,245	71
	Air Source Heat Pump	26	\$23,484	3,041,399	202,760	8
	Heat Recovery Ventilators	71	\$11,452	882,650	44,132	
	Residential Contractor Rebates	190	\$38,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,087	\$7,966	1,465,320	200,729	185
	Local CFL Rebate Program(s)	4,030	\$10,400	1,912,938	262,046	242
	ENERGY STAR CFL Fixtures	600	\$6,194	1,309,295	65,465	24
	T8 or better Lighting Fixtures	313	\$4,072	202,506	12,348	3
	2 ft. T8 or better Fixture w/ electronic ballasts	58	\$299	5,242	320	
	4 ft. T8 or better Fixture w/ electronic ballasts	221	\$2,852	151,789	9,255	2
	8 ft. T8 or better Fixture w/ electronic ballasts	34	\$921	45,475	2,773	1
	ENERGY STAR LED lighting	116	\$4,490	154,179	8,566	5
	ENERGY STAR Ceiling Fan	90	\$1,742	269,596	14,978	3
Exterior Lighting						
	High Efficiency Exterior Lighting	140	\$3,262	152,430	59,615	2
	High Pressure Sodium - 100+ W	8	\$310	7,953	1,807	0
	Metal Halide - 70 - 250 W	16	\$413	9,617	1,781	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	16	\$619	38,536	7,865	0
	CFL	100	\$1,920	96,324	48,162	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	234	\$30,387	811,052	54,070	7
	40-49 gallon	2	\$129	2,976	198	0
	50-79 gallon	227	\$29,290	780,551	52,037	7
	80 gallon+	5	\$968	27,525	1,835	0
	Heat Pump Water Heater - (Add-On)	10	\$3,871	191,214	19,121	2
	Heat Pump Water Heater - (Integrated)	70	\$45,161	1,606,201	133,850	15
	Solar Water Heaters (w/ Electric auxiliary tank)	30	\$13,548	668,534	55,711	6
	Flow Restrictors - Faucet	191	\$7,394	632,766	70,307	4
	Flow Restrictors - Shower	191	\$12,323	1,199,856	119,986	10
	Tank Insulation	12	\$232	20,367	2,037	0
	Pipe Insulation	12	\$232	21,226	1,415	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	217	\$13,458	526,143	47,831	17
	ENERGY STAR Qualified Dishwasher	122	\$3,935	156,776	14,252	11
	ENERGY STAR Qualified Refrigerator	492	\$15,871	772,682	51,512	5
	ENERGY STAR Qualified Dehumidifier	162	\$5,226	456,349	38,029	3
	ENERGY STAR Qualified Freezer	162	\$5,226	179,433	11,962	2
	Appliance Recycling	410	\$31,353	4,400,222	488,914	78
	Refrigerator	410	\$31,353	4,400,222	488,914	78
	Efficient Television	127	\$6,555	251,940	20,995	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	99	\$63,871	3,273,237	109,108	18
	Advanced Lighting Package	63	\$16,258	541,572	27,079	14
Additional Low Income						
	Energy Efficiency Kits	10	\$452	101,371	11,263	1
	Weatherization Rebates	4	\$1,497	87,981	3,115	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$852	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$194	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$194	4,530	151	0
	Infiltration Control	1	\$258	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	125	\$43,494	2,498,466	85,262	13
	Ceiling (Bring up to R-38) - Elect. Heat Only	15	\$9,581	680,437	22,681	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	38	\$6,068	180,921	6,031	5
	Wall (Bring Up to R19) - Elect. Heat Only	13	\$10,065	563,923	18,797	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	36	\$6,968	163,067	5,436	4
	Foundation (Bring Up to R-10)	10	\$7,742	642,414	21,414	
	Infiltration Control	11	\$2,555	248,220	9,929	1
	Duct Insulation (in unconditioned space)	2	\$516	19,485	974	0
	Residential Total	12,008	\$818,308	72,589,147	4,513,387	864
	Residential Average kWh Sales (3 yr Ave actual and projected)				243,095,535	
	Residential kWh Savings as percentage of Residential kWh Sales				1.9%	
		11,818	\$ 780,308	72,589,147	4,513,387	864

		2013				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	216	\$557	116,551	32,375	13
	High Efficiency Interior Lighting	2,454	\$46,739	3,654,126	627,141	8
	T-8 or 46" T5 - 4 ft	1,066	\$27,510	1,473,718	230,268	3
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	61	\$7,084	341,136	44,303	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	121	\$7,494	606,855	78,812	1
	CFL lamps - Energy Star- 9W and up	1,073	\$2,077	528,838	203,399	3
	Occupancy Sensors - Must control >150 Watts	133	\$2,574	703,581	70,358	
Exterior Lighting						
	High Efficiency Exterior Lighting	218	\$7,032	293,141	62,559	2
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	70	\$1,806	86,567	17,667	1
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	34	\$1,316	79,687	16,263	1
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	15	\$290	16,606	3,389	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	88	\$3,406	97,421	19,882	1
	CFL Outdoor Light - 42 W min., Cold Start	11	\$213	12,860	5,358	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	85	\$2,742	125,061	8,337	5
	Air Cooled Chillers	55	\$1,419	169,723	8,486	4
	Geothermal Heat Pump	120	\$51,613	5,110,217	255,511	14
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	12	\$3,097	279,911	18,661	1
	Heat Recovery Ventilators	110	\$25,548	4,238,236	211,912	64
	Commercial Contractor Rebate (GS & AS)	132	\$6,813			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	12	\$1,548	61,497	5,125	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	6	\$387	10,712	893	0
	Commercial Solid Door Refrigerators - 61-90 cu. ft.	6	\$1,161	50,785	4,232	0
Ag/Commercial & Industrial Insulation						
	Building Envelope	6	\$8,852	540,454	22,688	2
	Insulation (wall, ceiling, foundation, infiltration control)	2	\$7,742	492,914	19,717	2
	Multi Family - Insulation & Sealing	4	\$1,110	47,540	2,971	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	13	\$2,097	137,972	9,198	1
	Variable Speed Drive Motor Incentive	25	\$38,710	9,255,987	617,066	54
Agricultural						
	Dairy Pre-coolers Incentive	1	\$774	146,056	9,737	5
	Dairy Heat Reclaimer	1	\$1,032	164,769	10,985	5
	Livestock Ventilation Fans	36	\$4,252	189,967	15,831	5
	36"-47"	36	\$4,252	189,967	15,831	5
	Ventilation Thermostat Controller	5	\$161	13,556	1,130	0
	Circulating Fans --- BESS Lab Ratings	22	\$1,040	86,995	7,250	2
	36"-47"	22	\$1,040	86,995	7,250	2
	Scroll compressor (milk cooling)	1	\$323	54,967	3,664	0
	Efficient Livestock Waterers	40	\$2,581	378,770	31,564	
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$516	220,463	12,968	1
	Hog Farrowing - Heat Lamps (<= 175W)	72	\$279	47,928	11,982	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	37	\$1,194	73,808	7,381	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	20	\$116,704	9,569,265	723,563	72
Ag, Commercial and Industrial Total		3,695	\$325,687	34,937,157	2,715,585	260
C & I Average kWh Sales (3 yr Ave actual and projected)**					175,907,468	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	
		3,695	\$325,687	34,937,157	2,715,585	260
II. Demand Response Programs						
	Residential Time-of-Day Price	539	\$19,000			
	Commercial and Industrial Time-of-Day Price	6	\$1,100			
	Industrial Interruptible Price	14	\$302,106			3,874
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	30	\$750			
	Expert Energy Services - C&I	30	\$15,000			
	Energy Audit Services - Residential *	500	\$45,000			
IV. Educational & Research Programs						
	Model Housing Education	2	\$12,500			
	Member Information and Education	26,500	\$55,000			
	Living with Energy in Iowa	26,500	\$330			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	26,500	\$41,000			
TOTAL		96,324	\$1,635,781	107,526,304	7,228,972	4,999
Total Average kWh Sales (3 yr Ave actual and projected)**					419,003,003	
Total kWh Savings as percentage of Total kWh Sales					1.73%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	341	\$50,513	1,481,485	105,820	102
	SEER 14.5 (and EER 12)	235	\$30,128	815,830	58,274	56
	SEER 16 (and EER 13)	106	\$20,385	665,655	47,547	46
	ENERGY STAR Qualified Room Air Conditioner	100	\$3,205	88,278	9,809	9
	Geothermal Heat Pump	172	\$347,308	45,354,413	2,267,721	74
	Air Source Heat Pump	27	\$24,231	3,158,376	210,558	8
	Heat Recovery Ventilators	74	\$11,859	919,945	45,997	
	Residential Contractor Rebates	199	\$39,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,840	\$7,282	1,348,075	184,668	170
	Local CFL Rebate Program(s)	3,708	\$9,508	1,760,093	241,109	222
	ENERGY STAR CFL Fixtures	618	\$6,338	1,348,574	67,429	25
	T8 or better Lighting Fixtures	323	\$4,173	208,832	12,734	3
	2 ft. T8 or better Fixture w/ electronic ballasts	60	\$308	5,422	331	
	4 ft. T8 or better Fixture w/ electronic ballasts	228	\$2,923	156,597	9,549	2
	8 ft. T8 or better Fixture w/ electronic ballasts	35	\$942	46,813	2,854	1
	ENERGY STAR LED lighting	120	\$4,615	159,496	8,861	5
	ENERGY STAR Ceiling Fan	100	\$1,923	299,551	16,642	3
Exterior Lighting						
	High Efficiency Exterior Lighting	140	\$3,253	152,430	59,615	2
	High Pressure Sodium - 100+ W	8	\$308	7,953	1,807	0
	Metal Halide - 70 - 250 W	16	\$410	9,617	1,781	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	16	\$615	38,536	7,865	0
	CFL	100	\$1,920	96,324	48,162	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	240	\$30,962	831,683	55,446	7
	40-49 gallon	2	\$128	2,976	198	0
	50-79 gallon	233	\$29,872	801,183	53,412	7
	80 gallon+	5	\$962	27,525	1,835	0
	Heat Pump Water Heater - (Add-On)	10	\$3,846	191,214	19,121	2
	Heat Pump Water Heater - (Integrated)	94	\$60,256	2,156,898	179,741	20
	Solar Water Heaters (w/ Electric auxiliary tank)	40	\$17,949	891,378	74,282	8
	Flow Restrictors - Faucet	197	\$7,577	652,644	72,516	4
	Flow Restrictors - Shower	197	\$12,628	1,237,548	123,755	10
	Tank Insulation	12	\$231	20,367	2,037	0
	Pipe Insulation	12	\$231	21,226	1,415	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	223	\$13,731	540,690	49,154	18
	ENERGY STAR Qualified Dishwasher	125	\$4,006	160,631	14,603	11
	ENERGY STAR Qualified Refrigerator	504	\$16,154	791,528	52,769	5
	ENERGY STAR Qualified Dehumidifier	166	\$5,321	467,617	38,968	3
	ENERGY STAR Qualified Freezer	166	\$5,321	183,863	12,258	2
	Appliance Recycling	420	\$32,118	4,507,545	500,838	80
	Refrigerator	420	\$32,118	4,507,545	500,838	80
	Efficient Television	133	\$6,821	263,843	21,987	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	104	\$66,667	3,438,552	114,618	19
	Advanced Lighting Package	66	\$16,923	567,361	28,368	15
Additional Low Income						
	Energy Efficiency Kits	5	\$224	50,686	5,632	1
	Weatherization Rebates	4	\$1,487	87,981	3,115	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$846	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$192	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$192	4,530	151	0
	Infiltration Control	1	\$256	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	125	\$43,215	2,498,466	85,262	13
	Ceiling (Bring up to R-38) - Elect. Heat Only	15	\$9,519	680,437	22,681	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	38	\$6,029	180,921	6,031	5
	Wall (Bring Up to R19) - Elect. Heat Only	13	\$10,000	563,923	18,797	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	36	\$6,923	163,067	5,436	4
	Foundation (Bring Up to R-10)	10	\$7,692	642,414	21,414	
	Infiltration Control	11	\$2,538	248,220	9,929	1
	Duct Insulation (in unconditioned space)	2	\$513	19,485	974	0
	Residential Total	11,605	\$859,675	75,841,269	4,686,844	848
	Residential Average kWh Sales (3 yr Ave actual and projected)				249,358,290	
	Residential kWh Savings as percentage of Residential kWh Sales				1.9%	
		11,406	\$ 819,875	75,841,269	4,686,844	848

		2014				
		Estimated Achievable Potential Goals				
Linn County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	199	\$510	107,378	29,827	12
	High Efficiency Interior Lighting	2,454	\$46,439	3,654,126	627,141	8
	T-8 or 46" T5 - 4 ft	1,066	\$27,333	1,473,718	230,268	3
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	61	\$7,038	341,136	44,303	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	121	\$7,446	606,855	78,812	1
	CFL lamps - Energy Star- 9W and up	1,073	\$2,063	528,838	203,399	3
	Occupancy Sensors - Must control >150 Watts	133	\$2,558	703,581	70,358	
Exterior Lighting						
	High Efficiency Exterior Lighting	223	\$7,154	300,172	63,993	2
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	72	\$1,846	89,040	18,171	1
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	35	\$1,346	82,030	16,741	1
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	15	\$288	16,606	3,389	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	90	\$3,462	99,635	20,334	1
	CFL Outdoor Light - 42 W min., Cold Start	11	\$212	12,860	5,358	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	86	\$2,756	126,532	8,435	5
	Air Cooled Chillers	56	\$1,436	172,809	8,640	4
	Geothermal Heat Pump	120	\$51,282	5,110,217	255,511	14
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	13	\$3,333	303,237	20,216	1
	Heat Recovery Ventilators	116	\$26,769	4,469,412	223,471	67
	Commercial Contractor Rebate (GS & AS)	133	\$6,821			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	12	\$1,538	61,497	5,125	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	6	\$385	10,712	893	0
	Commercial Solid Door Refrigerators - 61-90 cu. ft.	6	\$1,154	50,785	4,232	0
Ag/Commercial & Industrial Insulation						
	Building Envelope	6	\$8,795	540,454	22,688	2
	Insulation (wall, ceiling, foundation, infiltration control)	2	\$7,692	492,914	19,717	2
	Multi Family - Insulation & Sealing	4	\$1,103	47,540	2,971	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	14	\$2,244	148,585	9,906	1
	Variable Speed Drive Motor Incentive	26	\$40,000	9,626,226	641,748	56
Agricultural						
	Dairy Pre-coolers Incentive	1	\$769	146,056	9,737	5
	Dairy Heat Reclaimer	1	\$1,026	164,769	10,985	5
	Livestock Ventilation Fans	37	\$4,342	195,244	16,270	5
	36"-47"	37	\$4,342	195,244	16,270	5
	Ventilation Thermostat Controller	5	\$160	13,556	1,130	0
	Circulating Fans --- BESS Lab Ratings	23	\$1,080	90,950	7,579	2
	36"-47"	23	\$1,080	90,950	7,579	2
	Scroll compressor (milk cooling)	1	\$321	54,967	3,664	0
	Efficient Livestock Waterers	41	\$2,628	388,239	32,353	
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$513	220,463	12,968	1
	Hog Farrowing - Heat Lamps (<= 175W)	74	\$285	49,259	12,315	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	38	\$1,218	75,802	7,580	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$64	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	20	\$115,956	9,569,265	723,563	72
Ag, Commercial and Industrial Total		3,701	\$327,439	35,596,954	2,755,319	265
C & I Average kWh Sales (3 yr Ave actual and projected)**					182,154,836	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	
		3,701	\$327,439	35,596,954	2,755,319	265
II. Demand Response Programs						
	Residential Time-of-Day Price					
	Commercial and Industrial Time-of-Day Price	8	\$1,400			
	Industrial Interruptible Price	16	\$330,878			4,139
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	30	\$750			
	Expert Energy Services - C&I	30	\$15,000			
	Energy Audit Services - Residential *	500	\$45,000			
IV. Educational & Research Programs						
	Model Housing Education	2	\$12,500			
	Member Information and Education	27,000	\$55,000			
	Living with Energy in Iowa	27,000	\$330			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	27,000	\$42,000			
TOTAL		96,892	\$1,689,972	111,438,223	7,442,163	5,252
Total Average kWh Sales (3 yr Ave actual and projected)**					431,513,126	
Total kWh Savings as percentage of Total kWh Sales					1.72%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Linn County Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	0.44	1.39	1.29	0.77
	SEER 16 (and EER 13)	0.46	1.20	1.51	0.71
	ENERGY STAR Qualified Room Air Conditioner	0.44	1.33	1.44	0.71
	Geothermal Heat Pump	0.46	2.24	4.86	1.18
	Air Source Heat Pump	0.47	7.61	5.34	3.95
	Heat Recovery Ventilators	0.43	1.28	2.96	0.77
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.54	14.00	8.44	6.71
	Local CFL Rebate Program(s)	0.54	13.58	8.44	7.40
	ENERGY STAR CFL Fixtures	0.50	8.87	8.50	5.58
	T8 or better Lighting Fixtures				
	2 ft. T8 or better Fixture w/ electronic ballasts	0.32	2.23	0.74	0.84
	4 ft. T8 or better Fixture w/ electronic ballasts	0.41	6.42	2.09	2.82
	8 ft. T8 or better Fixture w/ electronic ballasts	0.42	5.07	2.01	2.36
	ENERGY STAR LED lighting	0.40	4.51	1.47	2.02
	ENERGY STAR Ceiling Fan	0.46	2.94	6.04	1.81
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.25	2.68	0.55	0.55
	Metal Halide - 70 - 250 W	0.29	1.50	0.81	0.49
	Metal Halide - 250+ W (pulse start lamp and ballasts)	0.37	3.31	1.92	1.27
	CFL	0.36	6.52	1.86	2.12
Residential Water Heating (low income included)					
High Efficiency Water Heater					
	40-49 gallon	0.34	1.37	0.96	0.59
	50-79 gallon	0.30	2.38	0.75	0.76
	80 gallon+	0.33	3.75	0.92	1.18
	Heat Pump Water Heater - (Add-On)	0.39	2.26	1.94	1.04
	Heat Pump Water Heater - (Integrated)	0.37	3.14	1.42	1.30
	Solar Water Heaters (w/ Electric auxiliary tank)	0.40	1.32	2.00	0.66
	Flow Restrictors - Faucet	0.41	94.62	3.36	4.16
	Flow Restrictors - Shower	0.43	16.19	3.89	4.88
	Tank Insulation	0.41	20.15	2.87	3.61
	Pipe Insulation	0.45	20.28	3.74	4.98
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.36	0.99	1.39	0.45
	ENERGY STAR Qualified Dishwasher	0.44	2.85	1.87	1.35
	ENERGY STAR Qualified Refrigerator	0.40	3.07	1.95	1.48
	ENERGY STAR Qualified Dehumidifier	0.43	8.70	3.49	3.90
	ENERGY STAR Qualified Freezer	0.37	3.50	1.41	1.50
	Appliance Recycling				
	Refrigerator	0.42	3.19	2.96	1.48
	Efficient Television	0.38	Infinite	1.59	8.49
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.40	1.86	1.80	1.10
	Advanced Lighting Package	0.39	2.48	1.39	1.24
Additional Low Income					
	Energy Efficiency Kits	0.46	25.55	9.06	11.23
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.39	5.10	2.01	2.61
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.45	0.58	1.19	0.42
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.44	0.38	1.13	0.27
	Infiltration Control	0.44	7.33	3.79	4.06
Building Shell - Existing Home Only					
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.40	4.40	2.35	2.41
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.43	0.55	1.30	0.38
	Wall (Bring Up to R19) - Elect. Heat Only	0.39	2.93	1.86	1.60
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.40	0.38	1.04	0.25
	Foundation (Bring Up to R-10)	0.41	1.68	2.69	1.03
	Infiltration Control	0.43	6.11	3.41	3.34
	Duct Insulation (in unconditioned space)	0.36	1.59	1.40	0.78

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Cost Effectiveness Analysis					
Benefit/Cost Ratios					
Linn County Rural Electric Cooperative	Rate Payer	Participant	Utility	Societal	
	Agriculture/Commercial & Industrial Lighting				
Interior Lighting					
Change a Light Rebate Program	0.52	13.05	8.20	6.01	
High Efficiency Interior Lighting					
T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16	
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57	
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55	
CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64	
Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79	
Exterior Lighting					
High Efficiency Exterior Lighting					
Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	0.40	2.37	1.70	0.89	
Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	0.39	3.23	2.00	1.24	
High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	0.42	3.08	2.06	1.17	
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	0.35	2.68	1.03	0.82	
CFL Outdoor Light - 42 W min., Cold Start	0.38	6.59	1.99	2.12	
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	0.81	1.31	3.76	0.80	
Air Cooled Chillers	0.76	2.60	7.71	1.80	
Geothermal Heat Pump	0.45	3.29	5.61	2.00	
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.43	6.32	3.54	3.13	
Heat Recovery Ventilators	0.44	3.96	6.06	2.36	
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Appliances					
Commercial ENERGY STAR Refrigerators and Freezers					
Commercial Solid Door Refrigerators - < 19 cu. ft.	0.42	1.52	1.37	0.66	
Commercial Solid Door Refrigerators - 61-90 cu. ft.	0.39	1.58	1.79	0.76	
Ag/Commercial & Industrial Insulation					
Building Envelope					
Insulation (wall, ceiling, foundation, infiltration control)	0.39	3.08	2.20	1.68	
Multi Family - Insulation & Sealing	0.38	3.29	1.69	1.49	
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	0.42	5.29	2.66	2.47	
Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78	
Agricultural					
Dairy Pre-coolers Incentive	0.45	3.58	7.22	2.49	
Dairy Heat Reclaimer	0.44	5.49	6.11	3.64	
Livestock Ventilation Fans					
36"-47"	0.38	5.42	1.75	2.24	
Ventilation Thermostat Controller	0.42	3.36	3.33	1.66	
Circulating Fans --- BESS Lab Ratings					
36"-47"	0.46	7.42	3.64	3.73	
Scroll compressor (milk cooling)	0.45	6.32	6.57	3.59	
Efficient Livestock Waterers	0.50	5.62	6.38	2.88	
Variable Speed Drive Motor - Dairy Vacuum Pump	0.46	5.16	16.07	3.28	
Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97	
Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54	
Hog Farrowing - Heat Lamp or Pad Controller	0.47	3.31	4.82	1.81	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	0.41	4.35	2.88	2.14	

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
Residential Time-of-Day Price	#	#	#	#	
Commercial and Industrial Time-of-Day Price	#	#	#	#	
Industrial Interruptible Price	#	#	#	#	
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural					
Expert Energy Services - C&I					
Energy Audit Services - Residential *					
IV. Educational & Research Programs					
Model Housing Education					
Member Information and Education					
Living with Energy in Iowa					
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network					

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Lyon Rural Electric Cooperative

BACKGROUND

Lyon Rural Electric Cooperative, formed in 1938, provides reliable electric service to a rural region in extreme northwest Iowa. Lyon Rural Electric Cooperative service area is bordered by Minnesota on the north and South Dakota on the West.

Lyon Rural Electric Cooperative is a small town not-for-profit cooperative, based out of Rock Rapids, Iowa. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates.

Lyon Rural Electric Cooperative is governed by a nine-member Board of Directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Lyon and small portions of Osceola and Sioux counties. The cooperative provides electric service to 1,579 member-consumers using 2,040 meters.

1,530 member-consumers using 1,976 meters are single phase users and mostly are served under Lyon Rural Electric Cooperative's Farm and Residential Rate. The remaining 49 members-consumers are served by 64 meters and use multi phase services. The multi phase services are broken down as follows:

Golf Courses	2
Resale	1
Feed Mills, Cattle & Grain Farms	14
Water Pumping and Treatment	9
Public School Districts	2
Metal Fabrication	3
LP Gas Pumping	2
Hog Farrowing & Finishing	11
Dairy	7
Irrigation	3
Grain Elevators	3
Chicken Growing & Egg Laying	2
Radio Broadcasting Tower	1
Animal Serum Manufacturing	3
Gravel Pit Operations	1

Lyon Rural Electric Cooperative serves the members with a staff of 11 employees. Lyon Rural Electric Cooperative has 1.81 members and 2.34 meters per mile of distribution line.

Lyon Rural Electric Cooperative purchases power supply from L & O Power Cooperative under an All Power Requirement Contract until 2050. L & O Power Cooperative purchases power from the Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (Basin Electric). The WAPA power purchased is generated by hydroelectric generators on the Missouri River operated by the U.S. Corp of Engineers. The Basin Electric power is purchased under an All Supplemental Requirement Contract until 2050. Basin Electric's base load generating resources include coal, nuclear, wind and waste heat recovery. Peaking resources include natural gas, diesel, and fuel oil.

The Website for Lyon Rural Electric Cooperative is <http://www.lyonrec.coop>. The website is one of the mechanisms used to promote energy efficiency programs.

Through its purchased power, Lyon Rural Electric Cooperative provides energy from a number of different generating facilities including:

- Hydroelectric generation from the dams on the Missouri River.
- Wind Farms owned and operated by Basin Electric Power Cooperative in North Dakota and South Dakota.
- Purchase of power generated from wind farms in North Dakota and South Dakota as well as purchase from single wind turbines in South Dakota and Minnesota.
- Waste Heat recovered from large gas compressors in North Dakota and South Dakota.

In 2005, the membership of Basin Electric Power Cooperative has instructed the Board and Management to have 10% of the membership's demand be provided by renewable resources by 2010. Basin Electric Power Cooperative has completed construction and placed three 1.5 megawatt (MW) turbines in service as project known as Minot Wind 2. By the end of 2009, Basin Electric Power Cooperative expects to have a project called PrairieWinds 1, a 77 1.5 MW turbine wind farm, in service. These two projects will have a combined generating capacity of 120 MW, enough capacity to meet the needs of about 35,000 residential homes.

Ron Rebenitsch, Basin Electric Power Cooperative's manager of alternative technologies, stated that by the end of 2010, Basin Electric is on track to have renewable generation with an installed capacity equal to 20 percent of current member load. "Through direct investments and annual payments under power purchase

agreements from other renewable sources, these projects represent a capital investment of more than \$1 billion in renewable energy.”

Basin Electric Power Cooperative continues to expand its renewable energy generating resources through PrairieWinds SD 1, a subsidiary of Basin Electric Cooperative. This project is a 151.5 MW wind farm in central South Dakota with 101 wind turbines. This project is currently in the planning and permitting process with construction planned for mid-2010 and online by the early 2011.

Lyon Rural Electric Cooperative has a program, Prairie Winds that allows members to purchase renewable energy by paying a fixed amount per 100 kWh each month. In addition, Lyon Rural Electric Cooperative has made several sales of Renewable Energy Credits to one member in excess of 5,000 Credits.

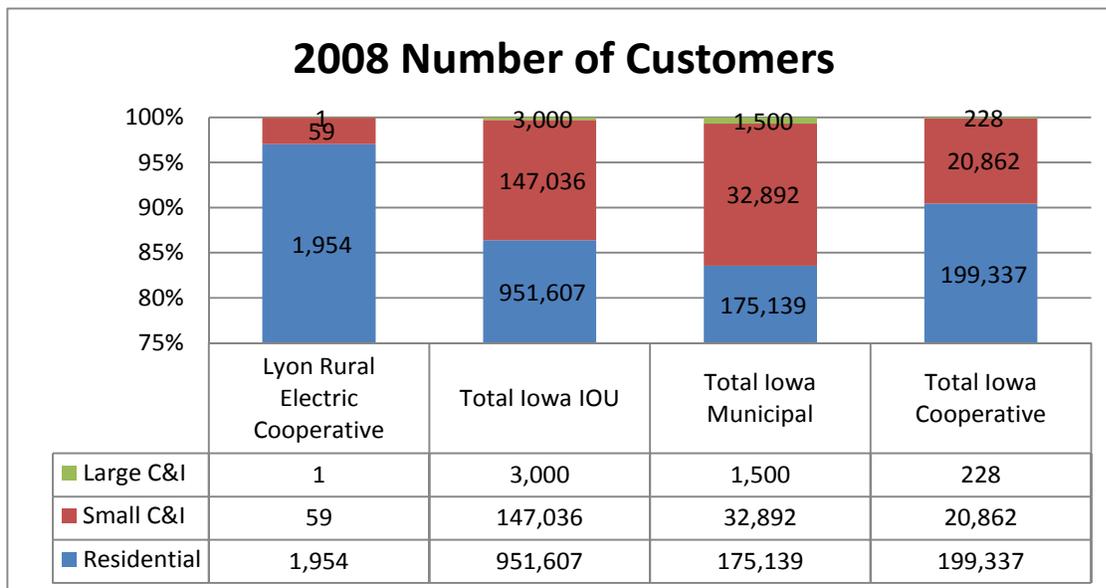
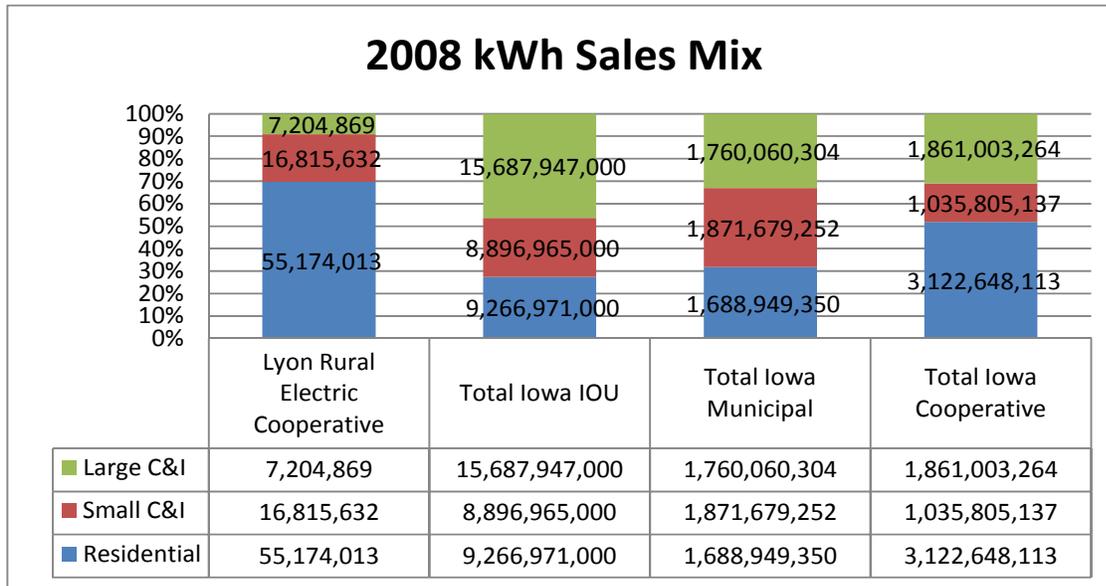
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Lyon Rural Electric Cooperative itself. This illustrates that making any comparison of Lyon Rural Electric Cooperative energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Lyon Rural Electric Cooperative has been committed to supply side and demand side energy efficiency for many years. Lyon Rural Electric Cooperative has invested \$205,178 in demand side energy efficiency programs in 2006 replacing a system that began in 1984 with investments of \$162,591. Going forward, Lyon Rural Electric Cooperative will be studying additional demand side opportunities and will make additional investments as necessary. Some of the new energy efficiency measures offered to members include:

- Appliance Rebates.
- Appliance Recycling.
- High Efficient Central Air Conditioning Rebates.
- Energy Star Room Air Conditioning Rebates.
- Increasing Insulation in Ceiling and Wall Rebates (Electric Heat Only).
- Custom rebate programs for Commercial and Agricultural members.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies.
2. Participate in educational energy efficiency programs.
3. Participate in research programs related to energy efficiency.
4. Offer member-consumers demand response programs.
5. Offer member-consumers energy audit & technical support programs.

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Lyon Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	25	\$4,563	85,392	15,205	6,099
	SEER 14.5 (and EER 12)	9	\$1,125	23,077	4,029	1,648
	SEER 15 +	9	\$1,688	29,790	5,201	2,128
	SEER 16 (and EER 13)	7	\$1,750	32,525	5,974	2,323
	ENERGY STAR Qualified Room Air Conditioner	24	\$750	15,584	4,618	1,732
	Geothermal Heat Pump	110	\$269,500	29,213,646	4,328,931	1,460,682
	Air Source Heat Pump	48	\$36,000	5,655,139	1,107,465	377,009
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	10,069	\$25,173	4,813,757	1,906,741	659,419
	Local CFL Rebate Program(s)	7,500	\$18,750	3,585,578	1,473,525	491,175
Exterior Lighting						
	High Efficiency Exterior Lighting	250	\$62,500	557,081	303,863	101,288
	High Pressure Sodium - 100+ W	250	\$62,500	557,081	303,863	101,288
Residential Water Heating (low income included)						
	High Efficiency Water Heater	143	\$35,750	792,856	153,766	52,857
	80 gallon+	143	\$35,750	792,856	153,766	52,857
	Flow Restrictors - Faucet	210	\$3,938	700,699	233,566	77,855
	Flow Restrictors - Shower	210	\$3,938	1,328,670	398,601	132,867
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	15	\$938	36,630	8,658	3,330
	ENERGY STAR Qualified Dishwasher	85	\$2,656	110,012	26,121	10,001
	ENERGY STAR Qualified Refrigerator	82	\$2,563	129,704	22,461	8,647
	ENERGY STAR Qualified Freezer	123	\$3,844	137,213	23,650	9,148
	Appliance Recycling	164	\$12,113	1,473,006	488,600	163,667
	Refrigerator	84	\$6,194	907,971	300,255	100,886
	Freezer	80	\$5,919	565,034	188,345	62,782
Additional Low Income						
	Energy Efficiency Kits	150	\$3,750	1,525,473	508,491	169,497
Building Shell - Existing Home Only						
	Weatherization Rebates	19	\$9,252	854,078	70,378	28,469
	Ceiling (Bring up to R-38) - Elect. Heat Only	12	\$4,950	548,251	44,165	18,275
	Wall (Bring Up to R19) - Elect. Heat Only	7	\$4,302	305,827	26,214	10,194
Residential Total		19,227	\$437,118	51,014,518	11,074,639	3,753,743
Residential Average kWh Sales (3 yr Ave actual and projected)						276,460,956
Residential kWh Savings as percentage of Residential kWh Sales						1.4%
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	1,608	\$4,020	1,207,882	976,927	326,455
Exterior Lighting						
	High Efficiency Exterior Lighting	15	\$563	30,594	18,731	6,244
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	15	\$563	30,594	18,731	6,244
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	25	\$61,250	6,510,150	976,523	325,508
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	15	\$11,250	1,766,732	353,346	117,782
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	10	\$750	106,893	21,379	7,126
	Variable Speed Drive Motor Incentive	5	\$2,500	1,632,116	326,423	108,808
Agricultural						
	Livestock Ventilation Fans	40	\$3,500	185,947	46,487	15,496
	36"-47"	40	\$3,500	185,947	46,487	15,496
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	50	\$50,000	2,452,545	735,764	245,255
Ag, Commercial and Industrial Total		1,768	\$133,833	13,892,859	3,455,580	1,152,672
C & I Average kWh Sales (3 yr Ave actual and projected)**						144,886,574
C & I kWh Savings as percentage of C & I kWh Sales						0.8%
II. Demand Response Programs						
	Water Heater Load Control	4,650	\$418,500			
Crop Drying						
	Load Control	60	\$5,400			
Irrigation						
	Load Control	5	\$450			
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	320	\$100,000			
IV. Educational & Research Programs						
	Member Information and Education	7,925	\$8,040			
	Living with Energy in Iowa	7,925	\$949			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,925	\$26,425			
TOTAL		49,805	\$1,130,714	64,907,377	14,530,218	4,906,414
Total Average kWh Sales (3 yr Ave actual and projected)**						421,347,530
Total kWh Savings as percentage of Total kWh Sales						1.2%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2010					
Estimated Achievable Potential Goals					
Lyon Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	3	\$563	10,521	751	1
SEER 14.5 (and EER 12)	1	\$125	2,564	183	0
SEER 15 +	1	\$188	3,310	236	0
SEER 16 (and EER 13)	1	\$250	4,646	332	0
ENERGY STAR Qualified Room Air Conditioner	3	\$94	1,948	216	0
Geothermal Heat Pump	21	\$51,450	5,577,151	278,858	32
Air Source Heat Pump	9	\$6,750	1,060,339	70,689	9
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	1,823	\$4,558	871,534	119,388	109
Local CFL Rebate Program(s)	1,500	\$3,750	717,116	98,235	90
Exterior Lighting					
High Efficiency Exterior Lighting	50	\$12,500	111,416	20,258	5
High Pressure Sodium - 100+ W	50	\$12,500	111,416	20,258	5
Residential Water Heating (low income included)					
High Efficiency Water Heater	26	\$6,500	144,156	9,610	1
80 gallon+	26	\$6,500	144,156	9,610	1
Flow Restrictors - Faucet	42	\$788	140,140	15,571	1
Flow Restrictors - Shower	42	\$788	265,734	26,573	2
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	2	\$125	4,884	444	0
ENERGY STAR Qualified Dishwasher	11	\$344	14,237	1,294	1
ENERGY STAR Qualified Refrigerator	10	\$313	15,818	1,055	0
ENERGY STAR Qualified Freezer	15	\$469	16,733	1,116	0
Appliance Recycling	32	\$2,150	285,954	31,773	5
Refrigerator	16	\$1,075	172,947	19,216	3
Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income					
Energy Efficiency Kits	30	\$750	305,095	33,899	4
Building Shell - Existing Home Only					
Weatherization Rebates	2	\$1,027	89,377	2,979	0
Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$413	45,688	1,523	0
Wall (Bring Up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
Residential Total	3,621	\$34,060	9,632,151	712,710	262
Residential Average kWh Sales (3 yr Ave actual and projected)				54,059,543	
Residential kWh Savings as percentage of Residential kWh Sales				1.3%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	322	\$805	241,877	65,372	19
Exterior Lighting					
High Efficiency Exterior Lighting	3	\$113	6,119	1,249	0
Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	3	\$113	6,119	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	5	\$12,250	1,302,030	65,102	9
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,250	353,346	23,556	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	2	\$150	21,379	1,425	0
Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Agricultural					
Livestock Ventilation Fans	8	\$700	37,189	3,099	1
36"-47"	8	\$700	37,189	3,099	1
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	10	\$10,000	490,509	49,051	10
Ag, Commercial and Industrial Total	354	\$26,768	2,778,872	230,616	43
C & I Average kWh Sales (3 yr Ave actual and projected)**				24,186,436	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	

II. Demand Response Programs					
Water Heater Load Control	930	\$83,700			465
Crop Drying					
Load Control	12	\$1,080			24
Irrigation					
Load Control	1	\$90			7
III. Energy Audit & Technical Support Programs					
Energy Audit Services - Residential *	64	\$20,000			
IV. Educational & Research Programs					
Member Information and Education	1,585	\$1,608			
Living with Energy in Iowa	1,585	\$190			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,585	\$5,285			
TOTAL	9,737	\$172,780	12,411,023	943,326	801
Total Average kWh Sales (3 yr Ave actual and projected)**				78,245,978	
Total kWh Savings as percentage of Total kWh Sales				1.2%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Lyon Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	3	\$563	10,521	751	1
	SEER 14.5 (and EER 12)	1	\$125	2,564	183	0
	SEER 15 +	1	\$188	3,310	236	0
	SEER 16 (and EER 13)	1	\$250	4,646	332	0
	ENERGY STAR Qualified Room Air Conditioner	4	\$125	2,597	289	0
	Geothermal Heat Pump	22	\$53,900	5,842,729	292,136	34
	Air Source Heat Pump	9	\$6,750	1,060,339	70,689	9
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,877	\$4,693	897,351	122,925	113
	Local CFL Rebate Program(s)	1,500	\$3,750	717,116	98,235	90
Exterior Lighting						
	High Efficiency Exterior Lighting	50	\$12,500	111,416	20,258	5
	High Pressure Sodium - 100+ W	50	\$12,500	111,416	20,258	5
Residential Water Heating (low income included)						
	High Efficiency Water Heater	27	\$6,750	149,700	9,980	1
	80 gallon+	27	\$6,750	149,700	9,980	1
	Flow Restrictors - Faucet	42	\$788	140,140	15,571	1
	Flow Restrictors - Shower	42	\$788	265,734	26,573	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	2	\$125	4,884	444	0
	ENERGY STAR Qualified Dishwasher	13	\$406	16,825	1,530	1
	ENERGY STAR Qualified Refrigerator	13	\$406	20,563	1,371	0
	ENERGY STAR Qualified Freezer	19	\$594	21,195	1,413	0
	Appliance Recycling	33	\$2,219	296,763	32,974	5
	Refrigerator	17	\$1,144	183,756	20,417	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	30	\$750	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	3	\$1,440	135,065	4,502	0
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$825	91,375	3,046	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
	Residential Total	3,689	\$96,545	9,998,032	733,540	268
	Residential Average kWh Sales (3 yr Ave actual and projected)				55,601,396	
	Residential kWh Savings as percentage of Residential kWh Sales				1.3%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	318	\$795	238,872	64,560	19
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$113	6,119	1,249	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	3	\$113	6,119	1,249	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$12,250	1,302,030	65,102	9
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,250	353,346	23,556	1
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$150	21,379	1,425	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Agricultural						
	Livestock Ventilation Fans	8	\$700	37,189	3,099	1
	36"-47"	8	\$700	37,189	3,099	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$10,000	490,509	49,051	10
	Ag, Commercial and Industrial Total	350	\$26,758	2,775,868	229,804	43
	C & I Average kWh Sales (3 yr Ave actual and projected)**				25,345,923	
	C & I kWh Savings as percentage of C & I kWh Sales				0.9%	

II. Demand Response Programs						
	Water Heater Load Control	930	\$83,700			465
Crop Drying						
	Load Control	12	\$1,080			24
Irrigation						
	Load Control	1	\$90			7
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	64	\$20,000			
IV. Educational & Research Programs						
	Member Information and Education	1,585	\$1,608			
	Living with Energy in Iowa	1,585	\$190			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,585	\$5,285			
	TOTAL	9,801	\$235,255	12,773,899	963,344	806
	Total Average kWh Sales (3 yr Ave actual and projected)**				80,947,319	
	Total kWh Savings as percentage of Total kWh Sales				1.2%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Lyon Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	5	\$875	16,395	1,171	2
	SEER 14.5 (and EER 12)	2	\$250	5,128	366	0
	SEER 15 +	2	\$375	6,620	473	1
	SEER 16 (and EER 13)	1	\$250	4,646	332	0
	ENERGY STAR Qualified Room Air Conditioner	5	\$156	3,247	361	0
	Geothermal Heat Pump	22	\$53,900	5,842,729	292,136	34
	Air Source Heat Pump	10	\$7,500	1,178,154	78,544	10
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,000	\$5,000	956,154	130,980	120
	Local CFL Rebate Program(s)	1,500	\$3,750	717,116	98,235	90
Exterior Lighting						
	High Efficiency Exterior Lighting	50	\$12,500	111,416	20,258	5
	High Pressure Sodium - 100+ W	50	\$12,500	111,416	20,258	5
Residential Water Heating (low income included)						
	High Efficiency Water Heater	29	\$7,250	160,789	10,719	1
	80 gallon+	29	\$7,250	160,789	10,719	1
	Flow Restrictors - Faucet	42	\$788	140,140	15,571	1
	Flow Restrictors - Shower	42	\$788	265,734	26,573	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	3	\$188	7,326	666	0
	ENERGY STAR Qualified Dishwasher	17	\$531	22,002	2,000	2
	ENERGY STAR Qualified Refrigerator	16	\$500	25,308	1,687	0
	ENERGY STAR Qualified Freezer	24	\$750	26,773	1,785	0
	Appliance Recycling	33	\$2,219	296,763	32,974	5
	Refrigerator	17	\$1,144	183,756	20,417	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	30	\$750	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	3	\$1,440	135,065	4,502	0
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$825	91,375	3,046	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
	Residential Total	3,831	\$98,883	10,210,205	752,062	277
	Residential Average kWh Sales (3 yr Ave actual and projected)				55,675,509	
	Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	320	\$800	240,374	64,966	19
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$113	6,119	1,249	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	3	\$113	6,119	1,249	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$12,250	1,302,030	65,102	9
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,250	353,346	23,556	1
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$150	21,379	1,425	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Agricultural						
	Livestock Ventilation Fans	8	\$700	37,189	3,099	1
	36"-47"	8	\$700	37,189	3,099	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$10,000	490,509	49,051	10
	Ag, Commercial and Industrial Total	352	\$26,763	2,777,370	230,210	43
	C & I Average kWh Sales (3 yr Ave actual and projected)**				27,972,299	
	C & I kWh Savings as percentage of C & I kWh Sales				0.8%	

II. Demand Response Programs						
	Water Heater Load Control	930	\$83,700			465
Crop Drying						
	Load Control	12	\$1,080			24
Irrigation						
	Load Control	1	\$90			7
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	64	\$20,000			
IV. Educational & Research Programs						
	Member Information and Education	1,585	\$1,608			
	Living with Energy in Iowa	1,585	\$190			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,585	\$5,285			
	TOTAL	9,945	\$237,598	12,987,575	982,271	816
	Total Average kWh Sales (3 yr Ave actual and projected)**				83,647,808	
	Total kWh Savings as percentage of Total kWh Sales				1.2%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Lyon Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	6	\$1,125	21,041	1,503	2
	SEER 14.5 (and EER 12)	2	\$250	5,128	366	0
	SEER 15 +	2	\$375	6,620	473	1
	SEER 16 (and EER 13)	2	\$500	9,293	664	1
	ENERGY STAR Qualified Room Air Conditioner	6	\$188	3,896	433	1
	Geothermal Heat Pump	22	\$53,900	5,842,729	292,136	34
	Air Source Heat Pump	10	\$7,500	1,178,154	78,544	10
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,123	\$5,308	1,014,957	139,035	127
	Local CFL Rebate Program(s)	1,500	\$3,750	717,116	98,235	90
Exterior Lighting						
	High Efficiency Exterior Lighting	50	\$12,500	111,416	20,258	5
	High Pressure Sodium - 100+ W	50	\$12,500	111,416	20,258	5
Residential Water Heating (low income included)						
	High Efficiency Water Heater	30	\$7,500	166,334	11,089	2
	80 gallon+	30	\$7,500	166,334	11,089	2
	Flow Restrictors - Faucet	42	\$788	140,140	15,571	1
	Flow Restrictors - Shower	42	\$788	265,734	26,573	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	4	\$250	9,768	888	0
	ENERGY STAR Qualified Dishwasher	20	\$625	25,885	2,353	2
	ENERGY STAR Qualified Refrigerator	20	\$625	31,635	2,109	0
	ENERGY STAR Qualified Freezer	30	\$938	33,467	2,231	0
	Appliance Recycling	33	\$2,219	296,763	32,974	5
	Refrigerator	17	\$1,144	183,756	20,417	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	30	\$750	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	5	\$2,467	224,442	7,481	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	3	\$1,238	137,063	4,569	0
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,229	87,379	2,913	0
	Residential Total	3,973	\$101,218	10,388,571	765,313	286
	Residential Average kWh Sales (3 yr Ave actual and projected)				55,478,092	
	Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	322	\$805	241,877	65,372	19
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$113	6,119	1,249	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	3	\$113	6,119	1,249	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$12,250	1,302,030	65,102	9
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,250	353,346	23,556	1
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$150	21,379	1,425	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Agricultural						
	Livestock Ventilation Fans	8	\$700	37,189	3,099	1
	36"-47"	8	\$700	37,189	3,099	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$10,000	490,509	49,051	10
	Ag, Commercial and Industrial Total	354	\$26,768	2,778,872	230,616	43
	C & I Average kWh Sales (3 yr Ave actual and projected)**				31,901,579	
	C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs						
	Water Heater Load Control	930	\$83,700			465
Crop Drying						
	Load Control	12	\$1,080			24
Irrigation						
	Load Control	1	\$90			7
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	64	\$20,000			
IV. Educational & Research Programs						
	Member Information and Education	1,585	\$1,608			
	Living with Energy in Iowa	1,585	\$190			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,585	\$5,285			
	TOTAL	10,089	\$239,938	13,167,443	995,928	825
	Total Average kWh Sales (3 yr Ave actual and projected)**				87,379,671	
	Total kWh Savings as percentage of Total kWh Sales				1.1%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
Lyon Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,438	26,915	1,923	3
SEER 14.5 (and EER 12)	3	\$375	7,692	549	1
SEER 15 +	3	\$563	9,930	709	1
SEER 16 (and EER 13)	2	\$500	9,293	664	1
ENERGY STAR Qualified Room Air Conditioner	6	\$188	3,896	433	1
Geothermal Heat Pump	23	\$56,350	6,108,308	305,415	35
Air Source Heat Pump	10	\$7,500	1,178,154	78,544	10
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,246	\$5,615	1,073,761	147,091	135
Local CFL Rebate Program(s)	1,500	\$3,750	717,116	98,235	90
Exterior Lighting					
High Efficiency Exterior Lighting	50	\$12,500	111,416	20,258	5
High Pressure Sodium - 100+ W	50	\$12,500	111,416	20,258	5
Residential Water Heating (low income included)					
High Efficiency Water Heater	31	\$7,750	171,878	11,459	2
80 gallon+	31	\$7,750	171,878	11,459	2
Flow Restrictors - Faucet	42	\$788	140,140	15,571	1
Flow Restrictors - Shower	42	\$788	265,734	26,573	2
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	4	\$250	9,768	888	0
ENERGY STAR Qualified Dishwasher	24	\$750	31,062	2,824	2
ENERGY STAR Qualified Refrigerator	23	\$719	36,380	2,425	0
ENERGY STAR Qualified Freezer	35	\$1,094	39,044	2,603	0
Appliance Recycling	33	\$3,306	296,763	32,974	5
Refrigerator	17	\$1,688	183,756	20,417	3
Freezer	16	\$1,619	113,007	12,556	2
Additional Low Income					
Energy Efficiency Kits	30	\$750	305,095	33,899	4
Building Shell - Existing Home Only					
Weatherization Rebates	6	\$2,879	270,130	9,004	1
Ceiling (Bring up to R-38) - Elect. Heat Only	4	\$1,650	182,750	6,092	0
Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,229	87,379	2,913	0
Residential Total	4,113	\$106,413	10,785,559	790,118	296
Residential Average kWh Sales (3 yr Ave actual and projected)				55,646,416	
Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	326	\$815	244,882	66,184	20
Exterior Lighting					
High Efficiency Exterior Lighting	3	\$113	6,119	1,249	0
Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	3	\$113	6,119	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	5	\$12,250	1,302,030	65,102	9
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,250	353,346	23,556	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	2	\$150	21,379	1,425	0
Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Agricultural					
Livestock Ventilation Fans	8	\$700	37,189	3,099	1
36"-47"	8	\$700	37,189	3,099	1
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	10	\$10,000	490,509	49,051	10
Ag, Commercial and Industrial Total	358	\$26,778	2,781,877	231,428	43
C & I Average kWh Sales (3 yr Ave actual and projected)**				35,480,337	
C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs					
Water Heater Load Control	930	\$83,700			465
Crop Drying					
Load Control	12	\$1,080			24
Irrigation					
Load Control	1	\$90			7
III. Energy Audit & Technical Support Programs					
Energy Audit Services - Residential *	64	\$20,000			
IV. Educational & Research Programs					
Member Information and Education	1,585	\$1,608			
Living with Energy in Iowa	1,585	\$190			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	1,585	\$5,285			
TOTAL	10,233	\$245,143	13,567,436	1,021,546	835
Total Average kWh Sales (3 yr Ave actual and projected)**				91,126,753	
Total kWh Savings as percentage of Total kWh Sales				1.1%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Lyon Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	1.25	1.02	3.08	1.65
	SEER 15 +	1.02	1.05	2.30	1.39
	SEER 16 (and EER 13)	0.89	0.95	2.05	1.10
	ENERGY STAR Qualified Room Air Conditioner	0.53	0.99	1.36	0.64
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.95	13.75	15.16	13.54
	Local CFL Rebate Program(s)	0.95	13.75	15.16	13.54
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.34	2.48	0.87	0.90
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	80 gallon+	1.15	1.82	2.62	2.56
	Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.29	20.76	4.95	6.16
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.66	0.61
	ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.32	2.72	1.46	1.07
	ENERGY STAR Qualified Freezer	0.35	3.13	1.21	1.27
	Appliance Recycling				
	Refrigerator	0.49	4.87	6.40	2.80
	Freezer	0.51	3.29	4.47	1.96
Additional Low Income					
	Energy Efficiency Kits	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.25	3.60	1.87	1.30
	Wall (Bring Up to R19) - Elect. Heat Only	0.24	2.46	1.21	0.84

Residential Total

Residential Average kWh Sales (3 yr Ave actual and projected)
Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.67	10.95	10.63	7.47
Exterior Lighting					
	High Efficiency Exterior Lighting				
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	0.23	3.05	1.16	0.75
Ag/Commercial & Industrial Heating and Cooling					
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.43	7.03	4.70	3.56
	Variable Speed Drive Motor Incentive	0.26	6.65	12.02	2.19
Agricultural					
	Livestock Ventilation Fans				
	36"-47"	0.34	5.77	2.67	2.25
Ag/Commercial & Industrial Custom Rebates					
	Custom Rebate Program	0.41	2.13	1.94	1.07

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
Crop Drying					
	Load Control	#	#	#	#
Irrigation					
	Load Control	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

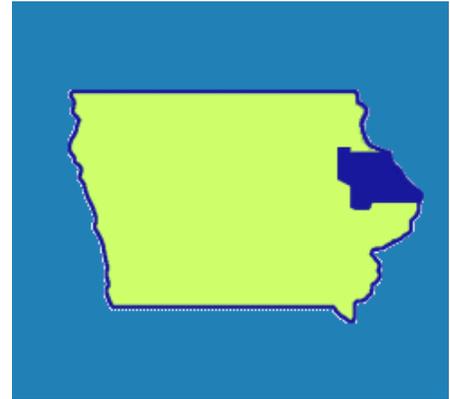
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details



Maquoketa Valley Electric Cooperative

® Your Touchstone Energy® Cooperative 



Who We Are

Maquoketa Valley Electric Cooperative (MVEC) is a not-for-profit, member-owned utility that provides electric service and other services to almost 15,000 homes, farms and businesses in east-central Iowa. Electric service extends from Dubuque, south along the Mississippi River to Sabula, east to Anamosa and north to Manchester and Strawberry Point. Membership is spread through Delaware, Dubuque, Jackson and Jones counties and portions of five adjoining counties.

The Cooperative's headquarters is located in Anamosa, in the southwest corner of the assigned service area. The Cooperative maintains six outposts where two or more linemen are stationed to maintain high service reliability levels. The Cooperative is governed by a nine-member board of directors elected by and from the members served by the cooperative. MVEC employs 59 people.

In addition to electricity distribution, MVEC actively promotes and encourages energy efficiency and renewable energy to its membership as well as the general public. Other services include personal emergency response, economic development financing and assistance, renewable energy, energy efficiency and electrical safety education in the community and community involvement.

As a not-for-profit utility organized, owned, and governed by its members, MVEC allocates profits (margin allocations) that result after expenses are tabulated and audited at the end of each year. These margin allocations (also called patronage dividends) are held for up to 15 years by the Cooperative to serve as resources for reinvestment in the distribution system.

Cooperative 2008 Statistics

- Number of connected accounts: 14,914
- Number of members: 12,333
- Number of miles energized line: 3,198
- Members per mile of line: 4.70
- Counties served: Delaware, Dubuque, Jackson, Jones and portions of Buchanan, Cedar, Clayton, Clinton and Linn counties
- Revenue: \$27,166,622

MVEC's service area is highly residential-based at 86% of connected accounts. Commercial and industrial accounts make up 12% of connected accounts with only 2 retail accounts considered large users. Commercial and industrial accounts include convenience stores, small business owners, manufacturers and large farming operations.

Cooperative Practices

During 2008 and 2009 MVEC converted its entire system to automated metering infrastructure (AMI) as an additional means of providing value to its membership. This technology enhances outage management processes and improves line losses. The Cooperative is currently exploring options to utilize the AMI system for end-use load management purposes. The ability to remotely read meters has significantly reduced travel time to member locations to manually read meters. Members appreciate consistent 30-day billing cycles to better help them track their energy use. AMI software allows graphing of member energy usage over given time periods and greatly assists Cooperative staff in helping members understand ways they can reduce their energy use.

MVEC practices what they preach with regard to efficiencies. The cooperative has replaced a boiler system with more efficient air source heat pumps in several areas of the office. A large office area was recently remodeled and included replacement of fiberglass insulation with spray foam insulation, a new roof and improved insulation and energy efficient windows to allow increased natural lighting. Electric wiring was enhanced and improved throughout the building. A large warehouse/truck bay received a new roof with improved insulation and the ceiling was finished in a lighter color and energy efficient lighting was added. Additional remodeling is scheduled for 2010.

The Cooperative's vehicle fleet includes two hybrid cars. Employees are discouraged from leaving vehicles running when they are not in them.

MVEC is environmentally conscious as well. Recycling bins are utilized for paper, newspaper, cardboard and plastic waste. Community donations include paper cups versus styrofoam. The breakroom/kitchen area is equipped with washable plates and utensils to discourage use of paper products. Lighting is turned off in rooms that are not in use and employees are encouraged to turn off computers and other electronics at night.

Member Energy Efficiency Utilization

Several commercial accounts have utilized the Cooperative's commercial lighting incentives and geothermal is becoming more popular with small commercial businesses. Dairy farmers appreciate the agriculture-related incentives. Residential incentives continue to be extremely popular. During the past four years MVEC has encouraged the replacement of water heaters more than ten years old thru a special incentive program whereby the Cooperative purchased and installed a new high-efficient electric water heater and disposed of the old unit. Almost 1000 households have participated in this offer. MVEC also educates members on the value of replacing incandescent light bulbs with compact fluorescent light bulbs. This education included the free distribution of 25,000 CFL's since 2005. Recognizing the significant number of rural accounts using propane, MVEC originated an interest buy-down program to further incent non-electric heat members to make their homes energy efficient. The interest buy-down program allows a member to work with their bank to obtain a home equity loan for up to \$10,000 in Energy Star rated home improvements such as adding insulation, window replacement or high efficiency furnace and air conditioning installation. Since 2006 16 members have participated in this offer, receiving an average of \$613 towards their loan.

Weatherization

In 2009 MVEC initiated a weatherization program and teamed with AmeriCorps Iowa Green Energy unit to weatherize 56 homes. Another 60 homes will be weatherized by Cooperative staff. All Cooperative members participating in the State's LIHEAP program were eligible for this weatherization. MVEC trained AmeriCorps members on energy efficiency and weatherization practices. Each home was weatherized according to need including caulking, window sealing, insulation of hot water heater pipes and water heaters, outlet insulators, low-flow showerheads and faucet aerators and up to 12 compact fluorescent lightbulbs. Data was collected at each site for further analysis by the cooperative to determine additional means of helping each member.

Energy Efficiency Education

MVEC is currently in the process of training and certifying two employees for energy audit certification either as a Building Professional Analyst or a Home Energy Rater or both. As part of this training, the employees are utilizing a recently purchased blower door system and an infrared camera as well as their own experience and knowledge in calculating energy bills and determining efficiencies to help homeowners become as energy efficient as possible.

Energy efficiency is also promoted at K-12 school presentations as invited by area schools. Schools are also encouraged to bring students to the Cooperative's headquarters for presentations on the Cooperative's renewable energy program as well as general electricity and energy efficiency information.

General public education continues through our annual "Start Smart" workshops where people can hear professional speakers on specific energy efficient topics, including insulation levels, geothermal systems, air infiltration and more. A local county conservation organization has included MVEC's display featuring a miniature energy efficient home showing insulation options, the value of CFL's over incandescent lighting, demonstration of the geothermal concept and interactive games and programs to further educate visitors. This facility receives thousands of visitors annually and the Cooperative works to maintain the interactive display, update brochures and other display features as needed.

The Cooperative's monthly newsletter, *Watts Current*, is mailed monthly to all members and always includes energy efficiency tips under our "Make Very Efficient Choices" tagline. Energy efficiency articles are a regular part of each newsletter. MVEC has also begun promotion of an e-newsletter, *Watts Smart*, where members can pick up additional energy-saving pointers. The Cooperative's website, www.mvec.coop continues to be a popular site for downloading incentive applications and linking to a variety of energy efficiency resources. The Cooperative is a Touchstone Energy Cooperative and is part of the nationwide marketing campaign, "Together We Save" where the general public can login and learn where their home's energy is being used and the savings they can experience with efficiency improvements. Visit www.togetherwesave to see this educational tool.

Renewable Energy

The Cooperative's headquarter display featuring a 2 KW residential wind turbine and 2 KW photo voltaic system continues to be promoted on the website and through high school class education. The display is connected to a weather station and results are posted live at www.mvec.coop whereby the public can understand the actual power generated in relation to the weather for any given time period.

MVEC will also install an anemometer at a member's location for 30 days free of charge. Data obtained is then calculated over time and presented to the member to provide estimated wind speeds as a means of helping them with their decision-making process.

Assessment of Potential Process

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

		2010-2014				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	411	\$68,215	2,064,284	475,350	147,449
	SEER 14.5 (and EER 12)	184	\$23,891	638,777	134,897	45,627
	SEER 16 (and EER 13)	227	\$44,324	1,425,507	340,453	101,822
	ENERGY STAR Qualified Room Air Conditioner	55	\$1,786	48,553	16,184	5,395
	Geothermal Heat Pump	738	\$1,508,103	194,602,073	27,634,549	9,730,104
	Air Source Heat Pump	130	\$96,989	15,206,996	2,885,430	1,013,800
	Heat Recovery Ventilators	127	\$20,603	1,578,824	227,500	78,941
	Residential Contractor Rebates	518	\$103,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	18,021	\$46,845	8,554,109	3,646,540	1,171,796
	Local CFL Rebate Program(s)	11,256	\$29,324	5,342,936	2,523,187	731,909
	ENERGY STAR CFL Fixtures	15	\$155	32,732	4,910	1,637
	T8 or better Lighting Fixtures	183	\$3,813	187,667	32,526	11,443
	2 ft. T8 or better Fixture w/ electronic ballasts	15	\$78	1,356	248	83
	4 ft. T8 or better Fixture w/ electronic ballasts	59	\$766	40,523	7,078	2,471
	8 ft. T8 or better Fixture w/ electronic ballasts	109	\$2,970	145,788	25,201	8,890
	ENERGY STAR LED lighting	20	\$779	26,583	4,430	1,477
	ENERGY STAR Ceiling Fan	114	\$2,219	341,488	53,919	18,972
Exterior Lighting						
	High Efficiency Exterior Lighting	420	\$16,360	834,778	512,559	173,245
	High Pressure Sodium - 100+ W	125	\$4,868	124,262	82,465	28,241
	Metal Halide - 250+ W (pulse start lamp and ballasts)	295	\$11,492	710,516	430,095	145,003
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1,845	\$242,152	6,426,786	1,264,726	428,452
	50-79 gallon	1,805	\$234,359	6,206,586	1,220,686	413,772
	80 gallon+	40	\$7,793	220,200	44,040	14,680
	Heat Pump Water Heater - (Integrated)	123	\$80,133	2,822,324	820,310	235,194
	Solar Water Heaters (w/ Electric auxiliary tank)	5	\$2,273	111,422	27,856	9,285
	Flow Restrictors - Faucet	142	\$5,545	470,434	173,744	52,270
	Flow Restrictors - Shower	142	\$9,241	892,040	296,509	89,204
	Tank Insulation	111	\$2,656	188,393	56,857	18,839
	Pipe Insulation	136	\$2,656	240,566	54,245	16,038
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	950	\$69,300	2,303,389	617,176	209,399
	ENERGY STAR Qualified Dishwasher	455	\$14,770	584,697	157,126	53,154
	ENERGY STAR Qualified Refrigerator	1,301	\$42,231	2,043,211	402,151	136,214
	ENERGY STAR Qualified Dehumidifier	370	\$12,010	1,042,278	255,875	86,857
	ENERGY STAR Qualified Freezer	330	\$10,711	365,511	71,625	24,367
	Appliance Recycling	1,336	\$102,165	14,338,286	4,698,340	1,593,143
	Refrigerator	1,336	\$102,165	14,338,286	4,698,340	1,593,143
	Efficient Television	591	\$30,676	1,172,414	279,382	97,701
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	20	\$12,988	661,260	66,126	22,042
	Advanced Lighting Package	19	\$4,922	163,331	21,061	8,167
Additional Low Income						
	Energy Efficiency Kits	121	\$5,520	1,226,591	484,329	136,288
	Weatherization Rebates	84	\$28,431	1,356,310	136,810	46,120
	Ceiling (Bring up to R-38) - Elect. Heat Only	5	\$4,286	257,065	25,706	8,569
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	32	\$6,228	152,354	14,442	5,078
	Wall (Bring Up to R19) - Elect. Heat Only	5	\$5,195	245,823	24,582	8,194
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	32	\$6,228	144,948	13,740	4,832
	Foundation (Bring Up to R-10)	5	\$5,195	419,735	41,973	13,991
	Infiltration Control	5	\$1,299	136,385	16,366	5,455
Building Shell - Existing Home Only						
	Weatherization Rebates	727	\$215,673	11,064,478	1,233,057	374,442
	Ceiling (Bring up to R-38) - Elect. Heat Only	92	\$59,547	4,173,344	560,982	139,111
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	274	\$44,000	1,304,534	124,423	43,484
	Wall (Bring Up to R19) - Elect. Heat Only	37	\$28,808	1,605,010	153,271	53,500
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	255	\$49,634	1,155,056	110,070	38,502
	Foundation (Bring Up to R-10)	32	\$24,912	2,055,725	194,866	68,524
	Infiltration Control	32	\$7,474	722,096	82,138	28,884
	Duct Insulation (in unconditioned space)	5	\$1,299	48,713	7,307	2,436
Residential Total		40,816	\$2,792,845	276,294,744	49,134,392	16,723,341
Residential Average kWh Sales (3 yr Ave actual and projected)						693,888,327
Residential kWh Savings as percentage of Residential kWh Sales						2.4%

		2010-2014				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	3,566	\$9,270	1,924,171	1,662,831	534,492
	High Efficiency Interior Lighting	7,246	\$126,531	8,758,735	4,757,812	1,680,870
	T-8 or 46" T5 - 4 ft	3,327	\$86,315	4,599,492	2,018,844	718,671
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	129	\$15,060	721,418	262,915	93,691
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	275	\$17,123	1,379,215	502,835	179,119
	CFL lamps - Energy Star- 9W and up	3,447	\$6,710	1,698,885	1,870,590	653,417
	Occupancy Sensors - Must control >150 Watts	68	\$1,324	359,725	102,628	35,973
Exterior Lighting						
	High Efficiency Exterior Lighting	15	\$584	16,606	10,167	3,389
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	15	\$584	16,606	10,167	3,389
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	134	\$4,349	197,155	38,646	13,144
	Geothermal Heat Pump	95	\$43,112	4,045,589	553,607	202,279
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	33	\$8,532	769,756	116,630	51,317
	Commercial Contractor Rebate (GS & AS)	128	\$6,633			
Ag/Commercial & Industrial Insulation						
	Building Envelope	10	\$20,878	1,291,711	159,016	53,005
	Insulation (wall, ceiling, foundation, infiltration control)	5	\$19,482	1,232,286	147,874	49,291
	Multi Family - Insulation & Sealing	5	\$1,396	59,425	11,142	3,714
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	5	\$812	53,066	10,613	3,538
	Variable Speed Drive Motor Incentive	20	\$31,171	7,404,789	1,480,958	493,653
Agricultural						
	Dairy Pre-coolers Incentive	27	\$21,015	3,943,507	740,016	262,900
	Dairy Heat Reclaimer	10	\$10,390	1,647,695	329,539	109,846
	Livestock Ventilation Fans	374	\$44,416	1,973,544	463,484	164,462
	36"-47"	374	\$44,416	1,973,544	463,484	164,462
	Ventilation Thermostat Controller	37	\$1,200	100,313	23,949	8,359
	Circulating Fans --- BESS Lab Ratings	141	\$6,700	557,561	131,152	46,463
	36"-47"	141	\$6,700	557,561	131,152	46,463
	Scroll compressor (milk cooling)	59	\$19,141	3,243,067	619,298	216,204
	Efficient Livestock Waterers	102	\$6,618	965,863	229,629	80,489
	Variable Speed Drive Motor - Dairy Vacuum Pump	55	\$28,540	12,125,464	2,010,104	713,263
	Hog Farrowing - Heat Lamps (<= 175W)	509	\$1,981	338,825	238,309	84,706
	Hog Farrowing - Single Crate Heating Pads (<=85W)	66	\$2,140	131,657	36,904	13,166
	Hog Farrowing - Heat Lamp or Pad Controller	22	\$1,427	170,189	28,774	10,377
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	15	\$98,436	8,018,637	1,818,945	606,315
Ag, Commercial and Industrial Total		12,669	\$493,878	57,677,900	15,460,382	5,352,239
C & I Average kWh Sales (3 yr Ave actual and projected)**						612,761,395
C & I kWh Savings as percentage of C & I kWh Sales						0.9%

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	10				
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	54	\$5,400			
	Expert Energy Services - C&I	5	\$7,500			
	Energy Audit Services - Residential *	5,884	\$145,600			
IV. Educational & Research Programs						
	Member Information and Education	63,350	\$1,013,600			
	Peak Alert	63,350	\$1,125			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	63,350	\$147,158			
TOTAL		249,488	\$4,607,105	333,972,644	64,594,774	22,075,580
Total Average kWh Sales (3 yr Ave actual and projected)**						1,306,649,723
Total kWh Savings as percentage of Total kWh Sales						1.69%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	113	\$20,000	611,328	43,666	42
	SEER 14.5 (and EER 12)	35	\$4,605	121,507	8,679	8
	SEER 16 (and EER 13)	78	\$15,395	489,822	34,987	34
	ENERGY STAR Qualified Room Air Conditioner	11	\$362	9,711	1,079	1
	Geothermal Heat Pump	120	\$248,684	31,642,614	1,582,131	52
	Air Source Heat Pump	22	\$16,645	2,573,492	171,566	7
	Heat Recovery Ventilators	22	\$3,618	273,497	13,675	
	Residential Contractor Rebates	84	\$16,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,894	\$10,247	1,848,382	253,203	234
	Local CFL Rebate Program(s)	4,000	\$10,526	1,898,698	260,096	240
	ENERGY STAR CFL Fixtures	3	\$32	6,546	327	0
	T8 or better Lighting Fixtures	31	\$645	31,215	1,903	1
	2 ft. T8 or better Fixture w/ electronic ballasts	3	\$16	271	17	
	4 ft. T8 or better Fixture w/ electronic ballasts	10	\$132	6,868	419	0
	8 ft. T8 or better Fixture w/ electronic ballasts	18	\$497	24,075	1,468	1
	ENERGY STAR LED lighting	4	\$158	5,317	295	0
	ENERGY STAR Ceiling Fan	19	\$375	56,915	3,162	1
Exterior Lighting						
	High Efficiency Exterior Lighting	80	\$3,158	160,150	33,214	1
	High Pressure Sodium - 100+ W	23	\$908	22,864	5,196	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	57	\$2,250	137,286	28,018	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	351	\$46,711	1,223,463	81,564	11
	50-79 gallon	343	\$45,132	1,179,423	78,628	10
	80 gallon+	8	\$1,579	44,040	2,936	0
	Heat Pump Water Heater - (Integrated)	58	\$38,158	1,330,852	110,904	12
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$461	22,284	1,857	0
	Flow Restrictors - Faucet	50	\$1,974	165,646	18,405	1
	Flow Restrictors - Shower	50	\$3,289	314,099	31,410	3
	Tank Insulation	25	\$987	42,431	4,243	0
	Pipe Insulation	50	\$987	88,444	5,896	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	180	\$13,309	436,432	39,676	14
	ENERGY STAR Qualified Dishwasher	87	\$2,862	111,799	10,164	8
	ENERGY STAR Qualified Refrigerator	248	\$8,158	389,482	25,965	2
	ENERGY STAR Qualified Dehumidifier	70	\$2,303	197,188	16,432	1
	ENERGY STAR Qualified Freezer	62	\$2,039	68,672	4,578	1
	Appliance Recycling	254	\$19,424	2,725,991	302,888	48
	Refrigerator	254	\$19,424	2,725,991	302,888	48
	Efficient Television	100	\$5,263	198,378	16,532	4
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$2,632	132,252	4,408	1
	Advanced Lighting Package	2	\$526	17,193	860	0
Additional Low Income						
	Energy Efficiency Kits	30	\$1,382	304,113	33,790	4
	Weatherization Rebates	14	\$5,211	258,255	8,790	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$868	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$987	23,805	794	1
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$1,053	49,165	1,639	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	5	\$987	22,648	755	1
	Foundation (Bring Up to R-10)	1	\$1,053	83,947	2,798	
	Infiltration Control	1	\$263	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	161	\$62,873	3,694,201	124,055	18
	Ceiling (Bring up to R-38) - Elect. Heat Only	57	\$37,125	2,585,659	86,189	7
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	45	\$7,327	214,248	7,142	5
	Wall (Bring Up to R19) - Elect. Heat Only	6	\$4,737	260,272	8,676	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	42	\$8,289	190,245	6,341	5
	Foundation (Bring Up to R-10)	5	\$3,947	321,207	10,707	
	Infiltration Control	5	\$1,184	112,827	4,513	0
	Duct Insulation (in unconditioned space)	1	\$263	9,743	487	0
Residential Total		10,200	\$549,796	50,839,038	3,206,735	710
Residential Average kWh Sales (3 yr Ave actual and projected)					170,978,061	
Residential kWh Savings as percentage of Residential kWh Sales					1.9%	

		2010				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	770	\$2,026	415,483	115,412	46
	High Efficiency Interior Lighting	1,135	\$19,230	1,335,726	261,136	4
	T-8 or 46" T5 - 4 ft	496	\$13,053	685,707	107,142	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	19	\$2,250	106,255	13,799	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	41	\$2,589	205,628	26,705	0
	CFL lamps - Energy Star- 9W and up	568	\$1,121	279,944	107,671	2
	Occupancy Sensors - Must control >150 Watts	11	\$217	58,191	5,819	
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$118	3,321	678	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	3	\$118	3,321	678	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	25	\$822	36,783	2,452	2
	Geothermal Heat Pump	15	\$6,908	638,777	31,939	2
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$789	69,978	4,665	0
	Commercial Contractor Rebate (GS & AS)	18	\$947			
Ag/Commercial & Industrial Insulation						
	Building Envelope	2	\$4,230	258,342	10,601	1
	Insulation (wall, ceiling, foundation, infiltration control)	1	\$3,947	246,457	9,858	1
	Multi Family - Insulation & Sealing	1	\$283	11,885	743	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$164	10,613	708	0
	Variable Speed Drive Motor Incentive	4	\$6,316	1,480,958	98,731	9
Agricultural						
	Dairy Pre-coolers Incentive	4	\$3,158	584,223	38,948	19
	Dairy Heat Reclaimer	2	\$2,105	329,539	21,969	11
	Livestock Ventilation Fans	58	\$6,986	306,058	25,505	8
	36"-47"	58	\$6,986	306,058	25,505	8
	Ventilation Thermostat Controller	6	\$197	16,267	1,356	0
	Circulating Fans --- BESS Lab Ratings	22	\$1,060	86,995	7,250	2
	36"-47"	22	\$1,060	86,995	7,250	2
	Scroll compressor (milk cooling)	10	\$3,289	549,672	36,645	5
	Efficient Livestock Waterers	17	\$1,118	160,977	13,415	
	Variable Speed Drive Motor - Dairy Vacuum Pump	9	\$4,737	1,984,167	116,716	10
	Hog Farrowing - Heat Lamps (<= 175W)	78	\$308	51,922	12,981	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	10	\$329	19,948	1,995	
	Hog Farrowing - Heat Lamp or Pad Controller	3	\$197	23,208	1,415	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	3	\$19,945	1,603,727	121,263	12
Ag, Commercial and Industrial Total		2,198	\$84,983	9,966,684	925,777	129
C & I Average kWh Sales (3 yr Ave actual and projected)**					89,271,069	
C & I kWh Savings as percentage of C & I kWh Sales					1.0%	

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	2				
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	12	\$1,200			
	Expert Energy Services - C&I	1	\$1,500			
	Energy Audit Services - Residential *	784	\$80,000			
IV. Educational & Research Programs						
	Member Information and Education	12,450	\$199,200			
	Peak Alert	12,450	\$225			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,450	\$28,920			
TOTAL		50,547	\$945,825	60,805,722	4,132,512	840
Total Average kWh Sales (3 yr Ave actual and projected)**			1,580,604		260,249,129	
Total kWh Savings as percentage of Total kWh Sales					1.59%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	72	\$11,765	351,050	25,075	24
	SEER 14.5 (and EER 12)	36	\$4,706	124,978	8,927	9
	SEER 16 (and EER 13)	36	\$7,059	226,072	16,148	15
	ENERGY STAR Qualified Room Air Conditioner	11	\$359	9,711	1,079	1
	Geothermal Heat Pump	138	\$284,118	36,389,006	1,819,450	59
	Air Source Heat Pump	24	\$18,039	2,807,445	187,163	7
	Heat Recovery Ventilators	24	\$3,922	298,361	14,918	
	Residential Contractor Rebates	97	\$19,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,894	\$10,180	1,848,382	253,203	234
	Local CFL Rebate Program(s)	2,000	\$5,229	949,349	130,048	120
	ENERGY STAR CFL Fixtures	3	\$31	6,546	327	0
	T8 or better Lighting Fixtures	34	\$708	34,576	2,108	1
	2 ft. T8 or better Fixture w/ electronic ballasts	3	\$16	271	17	
	4 ft. T8 or better Fixture w/ electronic ballasts	11	\$144	7,555	461	0
	8 ft. T8 or better Fixture w/ electronic ballasts	20	\$549	26,750	1,631	1
	ENERGY STAR LED lighting	4	\$157	5,317	295	0
	ENERGY STAR Ceiling Fan	21	\$412	62,906	3,495	1
Exterior Lighting						
	High Efficiency Exterior Lighting	82	\$3,216	163,553	33,931	1
	High Pressure Sodium - 100+ W	24	\$941	23,858	5,422	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	58	\$2,275	139,695	28,509	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	360	\$47,582	1,254,410	83,627	11
	50-79 gallon	352	\$46,013	1,210,370	80,691	11
	80 gallon+	8	\$1,569	44,040	2,936	0
	Heat Pump Water Heater - (Integrated)	10	\$6,536	229,457	19,121	2
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$458	22,284	1,857	0
	Flow Restrictors - Faucet	20	\$784	66,258	7,362	0
	Flow Restrictors - Shower	20	\$1,307	125,639	12,564	1
	Tank Insulation	20	\$392	33,945	3,394	0
	Pipe Insulation	20	\$392	35,377	2,358	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	185	\$13,588	448,555	40,778	15
	ENERGY STAR Qualified Dishwasher	89	\$2,908	114,369	10,397	8
	ENERGY STAR Qualified Refrigerator	254	\$8,301	398,905	26,594	3
	ENERGY STAR Qualified Dehumidifier	72	\$2,353	202,822	16,902	1
	ENERGY STAR Qualified Freezer	64	\$2,092	70,887	4,726	1
	Appliance Recycling	260	\$19,882	2,790,385	310,043	49
	Refrigerator	260	\$19,882	2,790,385	310,043	49
	Efficient Television	110	\$5,752	218,216	18,185	4
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$2,614	132,252	4,408	1
	Advanced Lighting Package	3	\$784	25,789	1,289	1
Additional Low Income						
	Energy Efficiency Kits	38	\$1,739	385,210	42,801	5
	Weatherization Rebates	16	\$5,569	267,546	9,100	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$863	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,176	28,566	952	1
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$1,046	49,165	1,639	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	6	\$1,176	27,178	906	1
	Foundation (Bring Up to R-10)	1	\$1,046	83,947	2,798	
	Infiltration Control	1	\$261	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	128	\$34,869	1,662,132	56,469	14
	Ceiling (Bring up to R-38) - Elect. Heat Only	8	\$5,176	362,899	12,097	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	52	\$8,412	247,576	8,253	6
	Wall (Bring Up to R19) - Elect. Heat Only	7	\$5,490	303,651	10,122	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	48	\$9,412	217,422	7,247	6
	Foundation (Bring Up to R-10)	6	\$4,706	385,448	12,848	
	Infiltration Control	6	\$1,412	135,393	5,416	0
	Duct Insulation (in unconditioned space)	1	\$261	9,743	487	0
Residential Total		8,078	\$515,437	51,410,641	3,143,070	568
Residential Average kWh Sales (3 yr Ave actual and projected)					151,014,897	
Residential kWh Savings as percentage of Residential kWh Sales					2.1%	

		2011				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	770	\$2,013	415,483	115,412	46
	High Efficiency Interior Lighting	1,361	\$23,768	1,637,741	315,237	4
	T-8 or 46" T5 - 4 ft	620	\$16,209	857,134	133,927	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	24	\$2,824	134,217	17,431	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	51	\$3,200	255,782	33,218	1
	CFL lamps - Energy Star- 9W and up	653	\$1,280	321,837	123,783	2
	Occupancy Sensors - Must control >150 Watts	13	\$255	68,771	6,877	
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$118	3,321	678	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	3	\$118	3,321	678	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	26	\$850	38,254	2,550	2
	Geothermal Heat Pump	15	\$6,863	638,777	31,939	2
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$784	69,978	4,665	0
	Commercial Contractor Rebate (GS & AS)	18	\$941			
Ag/Commercial & Industrial Insulation						
	Building Envelope	2	\$4,203	258,342	10,601	1
	Insulation (wall, ceiling, foundation, infiltration control)	1	\$3,922	246,457	9,858	1
	Multi Family - Insulation & Sealing	1	\$281	11,885	743	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$163	10,613	708	0
	Variable Speed Drive Motor Incentive	4	\$6,275	1,480,958	98,731	9
Agricultural						
	Dairy Pre-coolers Incentive	5	\$3,922	730,279	48,685	24
	Dairy Heat Reclaimer	2	\$2,092	329,539	21,969	11
	Livestock Ventilation Fans	69	\$8,257	364,103	30,342	9
	36"-47"	69	\$8,257	364,103	30,342	9
	Ventilation Thermostat Controller	7	\$229	18,978	1,582	0
	Circulating Fans --- BESS Lab Ratings	26	\$1,245	102,813	8,568	3
	36"-47"	26	\$1,245	102,813	8,568	3
	Scroll compressor (milk cooling)	11	\$3,595	604,640	40,309	5
	Efficient Livestock Waterers	19	\$1,242	179,916	14,993	
	Variable Speed Drive Motor - Dairy Vacuum Pump	10	\$5,229	2,204,630	129,684	11
	Hog Farrowing - Heat Lamps (<= 175W)	94	\$369	62,573	15,643	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	12	\$392	23,938	2,394	
	Hog Farrowing - Heat Lamp or Pad Controller	4	\$261	30,943	1,887	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	3	\$19,814	1,603,727	121,263	12
Ag, Commercial and Industrial Total		2,465	\$92,623	10,809,545	1,017,839	138
C & I Average kWh Sales (3 yr Ave actual and projected)**					111,132,804	
C & I kWh Savings as percentage of C & I kWh Sales					0.9%	

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	2				
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	12	\$1,200			
	Expert Energy Services - C&I	1	\$1,500			
	Energy Audit Services - Residential *	950	\$16,600			
IV. Educational & Research Programs						
	Member Information and Education	12,560	\$200,960			
	Peak Alert	12,560	\$225			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,560	\$29,175			

TOTAL 49,188 \$857,720 62,220,186 4,160,909 707
Total Average kWh Sales (3 yr Ave actual and projected)** 262,147,701
Total kWh Savings as percentage of Total kWh Sales 1.59%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	74	\$12,013	360,801	25,772	25
	SEER 14.5 (and EER 12)	37	\$4,805	128,450	9,175	9
	SEER 16 (and EER 13)	37	\$7,208	232,351	16,597	16
	ENERGY STAR Qualified Room Air Conditioner	11	\$357	9,711	1,079	1
	Geothermal Heat Pump	152	\$310,909	40,080,644	2,004,032	65
	Air Source Heat Pump	26	\$19,416	3,041,399	202,760	8
	Heat Recovery Ventilators	26	\$4,221	323,224	16,161	
	Residential Contractor Rebates	107	\$21,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,699	\$9,608	1,755,821	240,523	222
	Local CFL Rebate Program(s)	1,900	\$4,935	901,881	123,545	114
	ENERGY STAR CFL Fixtures	3	\$31	6,546	327	0
	T8 or better Lighting Fixtures	37	\$771	37,938	2,313	1
	2 ft. T8 or better Fixture w/ electronic ballasts	3	\$16	271	17	
	4 ft. T8 or better Fixture w/ electronic ballasts	12	\$156	8,242	503	0
	8 ft. T8 or better Fixture w/ electronic ballasts	22	\$600	29,425	1,794	1
	ENERGY STAR LED lighting	4	\$156	5,317	295	0
	ENERGY STAR Ceiling Fan	23	\$448	68,897	3,828	1
Exterior Lighting						
	High Efficiency Exterior Lighting	84	\$3,273	166,956	34,649	1
	High Pressure Sodium - 100+ W	25	\$974	24,852	5,648	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	59	\$2,299	142,103	29,001	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	369	\$48,442	1,285,357	85,690	11
	50-79 gallon	361	\$46,883	1,241,317	82,754	11
	80 gallon+	8	\$1,558	44,040	2,936	0
	Heat Pump Water Heater - (Integrated)	13	\$8,442	298,294	24,858	3
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$455	22,284	1,857	0
	Flow Restrictors - Faucet	23	\$896	76,197	8,466	0
	Flow Restrictors - Shower	23	\$1,494	144,485	14,449	1
	Tank Insulation	21	\$409	35,642	3,564	0
	Pipe Insulation	21	\$409	37,146	2,476	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	190	\$13,864	460,678	41,880	15
	ENERGY STAR Qualified Dishwasher	91	\$2,955	116,939	10,631	8
	ENERGY STAR Qualified Refrigerator	260	\$8,442	408,328	27,222	3
	ENERGY STAR Qualified Dehumidifier	74	\$2,403	208,456	17,371	1
	ENERGY STAR Qualified Freezer	66	\$2,143	73,102	4,873	1
	Appliance Recycling	267	\$20,418	2,865,511	318,390	51
	Refrigerator	267	\$20,418	2,865,511	318,390	51
	Efficient Television	121	\$6,286	240,037	20,003	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$2,597	132,252	4,408	1
	Advanced Lighting Package	4	\$1,039	34,386	1,719	1
Additional Low Income						
	Energy Efficiency Kits	30	\$1,364	304,113	33,790	4
	Weatherization Rebates	18	\$5,922	276,836	9,410	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$857	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	7	\$1,364	33,328	1,111	1
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$1,039	49,165	1,639	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	7	\$1,364	31,707	1,057	1
	Foundation (Bring Up to R-10)	1	\$1,039	83,947	2,798	
	Infiltration Control	1	\$260	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	142	\$38,856	1,884,134	64,020	16
	Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$5,786	408,262	13,609	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	57	\$9,161	271,381	9,046	7
	Wall (Bring Up to R19) - Elect. Heat Only	8	\$6,234	347,029	11,568	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	53	\$10,325	240,070	8,002	6
	Foundation (Bring Up to R-10)	7	\$5,455	449,690	14,990	
	Infiltration Control	7	\$1,636	157,958	6,318	0
	Duct Insulation (in unconditioned space)	1	\$260	9,743	487	0
Residential Total		7,884	\$554,369	55,663,313	3,350,364	563
Residential Average kWh Sales (3 yr Ave actual and projected)					129,936,773	
Residential kWh Savings as percentage of Residential kWh Sales					2.6%	

2012					
Estimated Achievable Potential Goals					
Maquoketa Valley Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	732	\$1,901	394,979	109,716	44
High Efficiency Interior Lighting	1,532	\$27,142	1,866,129	356,292	5
T-8 or 46" T5 - 4 ft	713	\$18,519	985,704	154,016	2
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	28	\$3,273	156,587	20,336	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	59	\$3,678	295,904	38,429	1
CFL lamps - Energy Star- 9W and up	718	\$1,399	353,873	136,105	2
Occupancy Sensors - Must control >150 Watts	14	\$273	74,061	7,406	
Exterior Lighting					
High Efficiency Exterior Lighting	3	\$117	3,321	678	0
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	3	\$117	3,321	678	0
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	27	\$877	39,725	2,648	2
Geothermal Heat Pump	20	\$9,091	851,703	42,585	2
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$1,558	139,956	9,330	1
Commercial Contractor Rebate (GS & AS)	26	\$1,351			
Ag/Commercial & Industrial Insulation					
Building Envelope	2	\$4,175	258,342	10,601	1
Insulation (wall, ceiling, foundation, infiltration control)	1	\$3,896	246,457	9,858	1
Multi Family - Insulation & Sealing	1	\$279	11,885	743	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	1	\$162	10,613	708	0
Variable Speed Drive Motor Incentive	4	\$6,234	1,480,958	98,731	9
Agricultural					
Dairy Pre-coolers Incentive	6	\$4,675	876,335	58,422	29
Dairy Heat Reclaimer	2	\$2,078	329,539	21,969	11
Livestock Ventilation Fans	79	\$9,392	416,872	34,739	10
36"-47"	79	\$9,392	416,872	34,739	10
Ventilation Thermostat Controller	8	\$260	21,689	1,807	0
Circulating Fans --- BESS Lab Ratings	30	\$1,427	118,630	9,886	3
36"-47"	30	\$1,427	118,630	9,886	3
Scroll compressor (milk cooling)	12	\$3,896	659,607	43,974	5
Efficient Livestock Waterers	21	\$1,364	198,854	16,571	
Variable Speed Drive Motor - Dairy Vacuum Pump	11	\$5,714	2,425,093	142,653	12
Hog Farrowing - Heat Lamps (<= 175W)	108	\$421	71,892	17,973	
Hog Farrowing - Single Crate Heating Pads (<=85W)	14	\$455	27,927	2,793	
Hog Farrowing - Heat Lamp or Pad Controller	5	\$325	38,679	2,358	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	3	\$19,686	1,603,727	121,263	12
Ag, Commercial and Industrial Total	2,652	\$102,300	11,834,570	1,105,698	146
C & I Average kWh Sales (3 yr Ave actual and projected)**				131,188,206	
C & I kWh Savings as percentage of C & I kWh Sales				0.8%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	2				
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$1,000			
Expert Energy Services - C&I	1	\$1,500			
Energy Audit Services - Residential *	1,125	\$17,500			
IV. Educational & Research Programs					
Member Information and Education	12,670	\$202,720			
Peak Alert	12,670	\$225			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,670	\$29,432			
TOTAL	49,684	\$909,046	67,497,884	4,456,063	708
Total Average kWh Sales (3 yr Ave actual and projected)**				261,124,979	
Total kWh Savings as percentage of Total kWh Sales				1.71%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	76	\$12,258	370,552	26,468	25
	SEER 14.5 (and EER 12)	38	\$4,903	131,921	9,423	9
	SEER 16 (and EER 13)	38	\$7,355	238,631	17,045	16
	ENERGY STAR Qualified Room Air Conditioner	11	\$355	9,711	1,079	1
	Geothermal Heat Pump	160	\$325,161	42,190,151	2,109,508	69
	Air Source Heat Pump	28	\$20,774	3,275,353	218,357	9
	Heat Recovery Ventilators	27	\$4,355	335,656	16,783	
	Residential Contractor Rebates	112	\$22,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,403	\$8,782	1,615,317	221,276	204
	Local CFL Rebate Program(s)	1,748	\$4,511	829,731	113,662	105
	ENERGY STAR CFL Fixtures	3	\$31	6,546	327	0
	T8 or better Lighting Fixtures	40	\$834	41,300	2,518	1
	2 ft. T8 or better Fixture w/ electronic ballasts	3	\$15	271	17	
	4 ft. T8 or better Fixture w/ electronic ballasts	13	\$168	8,929	544	0
	8 ft. T8 or better Fixture w/ electronic ballasts	24	\$650	32,100	1,957	1
	ENERGY STAR LED lighting	4	\$155	5,317	295	0
	ENERGY STAR Ceiling Fan	25	\$484	74,888	4,160	1
Exterior Lighting						
	High Efficiency Exterior Lighting	86	\$3,329	170,358	35,366	1
	High Pressure Sodium - 100+ W	26	\$1,006	25,846	5,874	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	60	\$2,323	144,512	29,492	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	378	\$49,290	1,316,304	87,754	12
	50-79 gallon	370	\$47,742	1,272,264	84,818	11
	80 gallon+	8	\$1,548	44,040	2,936	0
	Heat Pump Water Heater - (Integrated)	18	\$11,613	413,023	34,419	4
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$452	22,284	1,857	0
	Flow Restrictors - Faucet	24	\$929	79,510	8,834	0
	Flow Restrictors - Shower	24	\$1,548	150,767	15,077	1
	Tank Insulation	22	\$426	37,339	3,734	0
	Pipe Insulation	22	\$426	38,915	2,594	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	195	\$14,135	472,801	42,982	16
	ENERGY STAR Qualified Dishwasher	93	\$3,000	119,510	10,865	8
	ENERGY STAR Qualified Refrigerator	266	\$8,581	417,751	27,850	3
	ENERGY STAR Qualified Dehumidifier	76	\$2,452	214,090	17,841	2
	ENERGY STAR Qualified Freezer	68	\$2,194	75,318	5,021	1
	Appliance Recycling	274	\$20,953	2,940,636	326,737	52
	Refrigerator	274	\$20,953	2,940,636	326,737	52
	Efficient Television	127	\$6,555	251,940	20,995	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$2,581	132,252	4,408	1
	Advanced Lighting Package	5	\$1,290	42,982	2,149	1
Additional Low Income						
	Energy Efficiency Kits	15	\$677	152,057	16,895	2
	Weatherization Rebates	18	\$5,884	276,836	9,410	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$852	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	7	\$1,355	33,328	1,111	1
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$1,032	49,165	1,639	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	7	\$1,355	31,707	1,057	1
	Foundation (Bring Up to R-10)	1	\$1,032	83,947	2,798	
	Infiltration Control	1	\$258	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	148	\$39,665	1,912,006	64,949	16
	Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$5,748	408,262	13,609	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	60	\$9,581	285,664	9,522	7
	Wall (Bring Up to R19) - Elect. Heat Only	8	\$6,194	347,029	11,568	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	56	\$10,839	253,659	8,455	7
	Foundation (Bring Up to R-10)	7	\$5,419	449,690	14,990	
	Infiltration Control	7	\$1,626	157,958	6,318	0
	Duct Insulation (in unconditioned space)	1	\$258	9,743	487	0
Residential Total		7,501	\$576,078	57,991,201	3,454,171	543
Residential Average kWh Sales (3 yr Ave actual and projected)					121,803,633	
Residential kWh Savings as percentage of Residential kWh Sales					2.8%	

		2013				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	674	\$1,739	363,682	101,023	40
	High Efficiency Interior Lighting	1,609	\$28,286	1,959,570	374,102	5
	T-8 or 46" T5 - 4 ft	749	\$19,329	1,035,473	161,793	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	29	\$3,368	162,179	21,062	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	62	\$3,840	310,950	40,383	1
	CFL lamps - Energy Star- 9W and up	754	\$1,459	371,616	142,929	2
	Occupancy Sensors - Must control >150 Watts	15	\$290	79,351	7,935	
Exterior Lighting						
	High Efficiency Exterior Lighting	3	\$116	3,321	678	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	3	\$116	3,321	678	0
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	28	\$903	41,196	2,746	2
	Geothermal Heat Pump	20	\$9,032	851,703	42,585	2
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	9	\$2,323	209,934	13,996	1
	Commercial Contractor Rebate (GS & AS)	29	\$1,497			
Ag/Commercial & Industrial Insulation						
	Building Envelope	2	\$4,148	258,342	10,601	1
	Insulation (wall, ceiling, foundation, infiltration control)	1	\$3,871	246,457	9,858	1
	Multi Family - Insulation & Sealing	1	\$277	11,885	743	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$161	10,613	708	0
	Variable Speed Drive Motor Incentive	4	\$6,194	1,480,958	98,731	9
Agricultural						
	Dairy Pre-coolers Incentive	6	\$4,645	876,335	58,422	29
	Dairy Heat Reclaimer	2	\$2,065	329,539	21,969	11
	Livestock Ventilation Fans	83	\$9,804	437,979	36,498	11
	36"-47"	83	\$9,804	437,979	36,498	11
	Ventilation Thermostat Controller	8	\$258	21,689	1,807	0
	Circulating Fans --- BESS Lab Ratings	31	\$1,465	122,584	10,215	3
	36"-47"	31	\$1,465	122,584	10,215	3
	Scroll compressor (milk cooling)	13	\$4,194	714,574	47,638	6
	Efficient Livestock Waterers	22	\$1,419	208,323	17,360	
	Variable Speed Drive Motor - Dairy Vacuum Pump	12	\$6,194	2,645,556	155,621	13
	Hog Farrowing - Heat Lamps (<= 175W)	113	\$437	75,221	18,805	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	15	\$484	29,922	2,992	
	Hog Farrowing - Heat Lamp or Pad Controller	5	\$323	38,679	2,358	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	3	\$19,559	1,603,727	121,263	12
Ag, Commercial and Industrial Total		2,692	\$105,246	12,283,448	1,140,120	145
C & I Average kWh Sales (3 yr Ave actual and projected)**					139,638,298	
C & I kWh Savings as percentage of C & I kWh Sales					0.8%	

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	2				
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	10	\$1,000			
	Expert Energy Services - C&I	1	\$1,500			
	Energy Audit Services - Residential *	1,425	\$15,500			
IV. Educational & Research Programs						
	Member Information and Education	12,780	\$204,480			
	Peak Alert	12,780	\$225			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,780	\$29,688			
TOTAL		49,971	\$933,717	70,274,649	4,594,291	688
Total Average kWh Sales (3 yr Ave actual and projected)**					261,441,930	
Total kWh Savings as percentage of Total kWh Sales					1.76%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Maquoketa Valley Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	76	\$12,179	370,552	26,468	25
	SEER 14.5 (and EER 12)	38	\$4,872	131,921	9,423	9
	SEER 16 (and EER 13)	38	\$7,308	238,631	17,045	16
	ENERGY STAR Qualified Room Air Conditioner	11	\$353	9,711	1,079	1
	Geothermal Heat Pump	168	\$339,231	44,299,659	2,214,983	72
	Air Source Heat Pump	30	\$22,115	3,509,307	233,954	9
	Heat Recovery Ventilators	28	\$4,487	348,087	17,404	
	Residential Contractor Rebates	118	\$23,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	3,131	\$8,028	1,486,206	203,590	188
	Local CFL Rebate Program(s)	1,608	\$4,123	763,277	104,558	96
	ENERGY STAR CFL Fixtures	3	\$31	6,546	327	0
	T8 or better Lighting Fixtures	41	\$855	42,638	2,600	1
	2 ft. T8 or better Fixture w/ electronic ballasts	3	\$15	271	17	
	4 ft. T8 or better Fixture w/ electronic ballasts	13	\$167	8,929	544	0
	8 ft. T8 or better Fixture w/ electronic ballasts	25	\$673	33,438	2,039	1
	ENERGY STAR LED lighting	4	\$154	5,317	295	0
	ENERGY STAR Ceiling Fan	26	\$500	77,883	4,327	1
Exterior Lighting						
	High Efficiency Exterior Lighting	88	\$3,385	173,761	36,084	1
	High Pressure Sodium - 100+ W	27	\$1,038	26,841	6,100	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	61	\$2,346	146,920	29,984	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	387	\$50,128	1,347,251	89,817	12
	50-79 gallon	379	\$48,590	1,303,211	86,881	11
	80 gallon+	8	\$1,538	44,040	2,936	0
	Heat Pump Water Heater - (Integrated)	24	\$15,385	550,697	45,891	5
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$449	22,284	1,857	0
	Flow Restrictors - Faucet	25	\$962	82,823	9,203	1
	Flow Restrictors - Shower	25	\$1,603	157,049	15,705	1
	Tank Insulation	23	\$442	39,036	3,904	0
	Pipe Insulation	23	\$442	40,684	2,712	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	200	\$14,404	484,924	44,084	16
	ENERGY STAR Qualified Dishwasher	95	\$3,045	122,080	11,098	9
	ENERGY STAR Qualified Refrigerator	273	\$8,750	428,744	28,583	3
	ENERGY STAR Qualified Dehumidifier	78	\$2,500	219,723	18,310	2
	ENERGY STAR Qualified Freezer	70	\$2,244	77,533	5,169	1
	Appliance Recycling	281	\$21,488	3,015,762	335,085	53
	Refrigerator	281	\$21,488	3,015,762	335,085	53
	Efficient Television	133	\$6,821	263,843	21,987	5
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	4	\$2,564	132,252	4,408	1
	Advanced Lighting Package	5	\$1,282	42,982	2,149	1
Additional Low Income						
	Energy Efficiency Kits	8	\$359	81,097	9,011	1
	Weatherization Rebates	18	\$5,846	276,836	9,410	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$846	51,413	1,714	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	7	\$1,346	33,328	1,111	1
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$1,026	49,165	1,639	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	7	\$1,346	31,707	1,057	1
	Foundation (Bring Up to R-10)	1	\$1,026	83,947	2,798	
	Infiltration Control	1	\$256	27,277	1,091	0
Building Shell - Existing Home Only						
	Weatherization Rebates	148	\$39,410	1,912,006	64,949	16
	Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$5,712	408,262	13,609	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	60	\$9,519	285,664	9,522	7
	Wall (Bring Up to R19) - Elect. Heat Only	8	\$6,154	347,029	11,568	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	56	\$10,769	253,659	8,455	7
	Foundation (Bring Up to R-10)	7	\$5,385	449,690	14,990	
	Infiltration Control	7	\$1,615	157,958	6,318	0
	Duct Insulation (in unconditioned space)	1	\$256	9,743	487	0
Residential Total		7,153	\$597,164	60,390,551	3,569,001	526
Residential Average kWh Sales (3 yr Ave actual and projected)					120,154,965	
Residential kWh Savings as percentage of Residential kWh Sales					3.0%	

2014					
Estimated Achievable Potential Goals					
Maquoketa Valley Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	620	\$1,590	334,545	92,929	37
High Efficiency Interior Lighting	1,609	\$28,105	1,959,570	374,102	5
T-8 or 46" T5 - 4 ft	749	\$19,205	1,035,473	161,793	2
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	29	\$3,346	162,179	21,062	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	62	\$3,815	310,950	40,383	1
CFL lamps - Energy Star- 9W and up	754	\$1,450	371,616	142,929	2
Occupancy Sensors - Must control >150 Watts	15	\$288	79,351	7,935	
Exterior Lighting					
High Efficiency Exterior Lighting	3	\$115	3,321	678	0
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	3	\$115	3,321	678	0
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	28	\$897	41,196	2,746	2
Geothermal Heat Pump	25	\$11,218	1,064,629	53,231	3
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	12	\$3,077	279,911	18,661	1
Commercial Contractor Rebate (GS & AS)	37	\$1,897			
Ag/Commercial & Industrial Insulation					
Building Envelope	2	\$4,122	258,342	10,601	1
Insulation (wall, ceiling, foundation, infiltration control)	1	\$3,846	246,457	9,858	1
Multi Family - Insulation & Sealing	1	\$276	11,885	743	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	1	\$160	10,613	708	0
Variable Speed Drive Motor Incentive	4	\$6,154	1,480,958	98,731	9
Agricultural					
Dairy Pre-coolers Incentive	6	\$4,615	876,335	58,422	29
Dairy Heat Reclaimer	2	\$2,051	329,539	21,969	11
Livestock Ventilation Fans	85	\$9,976	448,533	37,378	11
36"-47"	85	\$9,976	448,533	37,378	11
Ventilation Thermostat Controller	8	\$256	21,689	1,807	0
Circulating Fans --- BESS Lab Ratings	32	\$1,503	126,539	10,545	3
36"-47"	32	\$1,503	126,539	10,545	3
Scroll compressor (milk cooling)	13	\$4,167	714,574	47,638	6
Efficient Livestock Waterers	23	\$1,474	217,793	18,149	
Variable Speed Drive Motor - Dairy Vacuum Pump	13	\$6,667	2,866,019	168,589	14
Hog Farrowing - Heat Lamps (<= 175W)	116	\$446	77,218	19,304	
Hog Farrowing - Single Crate Heating Pads (<=85W)	15	\$481	29,922	2,992	
Hog Farrowing - Heat Lamp or Pad Controller	5	\$321	38,679	2,358	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	3	\$19,433	1,603,727	121,263	12
Ag, Commercial and Industrial Total	2,662	\$108,726	12,783,651	1,162,804	144
C & I Average kWh Sales (3 yr Ave actual and projected)**				141,531,018	
C & I kWh Savings as percentage of C & I kWh Sales				0.8%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	2				
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$1,000			
Expert Energy Services - C&I	1	\$1,500			
Energy Audit Services - Residential *	1,600	\$16,000			
IV. Educational & Research Programs					
Member Information and Education	12,890	\$206,240			
Peak Alert	12,890	\$225			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	12,890	\$29,943			
TOTAL	50,098	\$960,798	73,174,202	4,731,805	670
Total Average kWh Sales (3 yr Ave actual and projected)**				261,685,983	
Total kWh Savings as percentage of Total kWh Sales				1.81%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Maquoketa Valley Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	0.44	1.39	1.29	0.77
	SEER 16 (and EER 13)	0.46	1.20	1.51	0.71
	ENERGY STAR Qualified Room Air Conditioner	0.44	1.33	1.44	0.71
	Geothermal Heat Pump	0.46	2.24	4.86	1.18
	Air Source Heat Pump	0.47	7.61	5.34	3.95
	Heat Recovery Ventilators	0.43	1.28	2.96	0.77
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.54	14.00	8.44	6.71
	Local CFL Rebate Program(s)	0.54	13.58	8.44	7.40
	ENERGY STAR CFL Fixtures	0.50	8.87	8.50	5.58
	T8 or better Lighting Fixtures				
	2 ft. T8 or better Fixture w/ electronic ballasts	0.32	2.23	0.74	0.84
	4 ft. T8 or better Fixture w/ electronic ballasts	0.41	6.42	2.09	2.82
	8 ft. T8 or better Fixture w/ electronic ballasts	0.42	5.07	2.01	2.36
	ENERGY STAR LED lighting	0.40	4.51	1.47	2.02
	ENERGY STAR Ceiling Fan	0.46	2.94	6.04	1.81
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.25	2.68	0.55	0.55
	Metal Halide - 250+ W (pulse start lamp and ballasts)	0.37	3.31	1.92	1.27
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	0.30	2.38	0.75	0.76
	80 gallon+	0.33	3.75	0.92	1.18
	Heat Pump Water Heater - (Integrated)	0.37	3.14	1.42	1.30
	Solar Water Heaters (w/ Electric auxiliary tank)	0.40	1.32	2.00	0.66
	Flow Restrictors - Faucet	0.41	94.62	3.36	4.16
	Flow Restrictors - Shower	0.43	16.19	3.89	4.88
	Tank Insulation	0.41	20.15	2.87	3.61
	Pipe Insulation	0.45	20.28	3.74	4.98
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.36	0.99	1.39	0.45
	ENERGY STAR Qualified Dishwasher	0.44	2.85	1.87	1.35
	ENERGY STAR Qualified Refrigerator	0.40	3.07	1.95	1.48
	ENERGY STAR Qualified Dehumidifier	0.43	8.70	3.49	3.90
	ENERGY STAR Qualified Freezer	0.37	3.50	1.41	1.50
	Appliance Recycling				
	Refrigerator	0.42	3.19	2.96	1.48
	Efficient Television	0.38	infinite	1.59	8.49
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.40	1.86	1.80	1.10
	Advanced Lighting Package	0.39	2.48	1.39	1.24
Additional Low Income					
	Energy Efficiency Kits	0.46	25.55	9.06	11.23
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.39	5.10	2.01	2.61
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.45	0.58	1.19	0.42
	Wall (Bring Up to R19) - Elect. Heat Only	0.37	3.41	1.58	1.74
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.44	0.38	1.13	0.27
	Foundation (Bring Up to R-10)	0.41	2.20	2.64	1.32
	Infiltration Control	0.44	7.33	3.79	4.06
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.40	4.40	2.35	2.41
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.43	0.55	1.30	0.38
	Wall (Bring Up to R19) - Elect. Heat Only	0.39	2.93	1.86	1.60
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.40	0.38	1.04	0.25
	Foundation (Bring Up to R-10)	0.41	1.68	2.69	1.03
	Infiltration Control	0.43	6.11	3.41	3.34
	Duct Insulation (in unconditioned space)	0.36	1.59	1.40	0.78

Residential Total

Residential Average kWh Sales (3 yr Ave actual and projected)
Residential kWh Savings as percentage of Residential kWh Sales

Cost Effectiveness Analysis					
Benefit/Cost Ratios					
Maquoketa Valley Electric Cooperative	Rate Payer	Participant	Utility	Societal	
	Agriculture/Commercial & Industrial Lighting				
Interior Lighting					
Change a Light Rebate Program	0.52	13.05	8.20	6.01	
High Efficiency Interior Lighting					
T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16	
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57	
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55	
CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64	
Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79	
Exterior Lighting					
High Efficiency Exterior Lighting					
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	0.35	2.68	1.03	0.82	
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	0.81	1.31	3.76	0.80	
Geothermal Heat Pump	0.45	3.29	5.61	2.00	
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.43	6.32	3.54	3.13	
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Insulation					
Building Envelope					
Insulation (wall, ceiling, foundation, infiltration control)	0.39	3.08	2.20	1.68	
Multi Family - Insulation & Sealing	0.38	3.29	1.69	1.49	
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	0.42	5.29	2.66	2.47	
Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78	
Agricultural					
Dairy Pre-coolers Incentive	0.45	3.58	7.22	2.49	
Dairy Heat Reclaimer	0.44	5.49	6.11	3.64	
Livestock Ventilation Fans					
36"-47"	0.38	5.42	1.75	2.24	
Ventilation Thermostat Controller	0.42	3.36	3.33	1.66	
Circulating Fans --- BESS Lab Ratings					
36"-47"	0.46	7.42	3.64	3.73	
Scroll compressor (milk cooling)	0.45	6.32	6.57	3.59	
Efficient Livestock Waterers	0.50	5.62	6.38	2.88	
Variable Speed Drive Motor - Dairy Vacuum Pump	0.46	5.16	16.07	3.28	
Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97	
Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54	
Hog Farrowing - Heat Lamp or Pad Controller	0.47	3.31	4.82	1.81	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	0.41	4.35	2.88	2.14	

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	#	#	#	#	
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural					
Expert Energy Services - C&I					
Energy Audit Services - Residential *					
IV. Educational & Research Programs					
Member Information and Education					
Peak Alert					
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network					

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Midland Power Cooperative

BACKGROUND

In business since 1937, Midland Power Cooperative is a member-owned, non-profit electric distribution cooperative that provides reliable, competitively priced electric energy to businesses, industries, farms and homes in all or portions of 13 counties.

In addition to serving Boone, Calhoun, Dallas, Franklin, Greene, Grundy, Guthrie, Hamilton, Hardin, Marshall, Polk, Story and Webster counties, Midland Power also provides electrical power, and assists with energy efficiency, to five municipal utilities: Dayton, Ellsworth, Lehigh, Paton and Stratford.

The headquarters for Midland Power Cooperative is location in Jefferson, Iowa, and three strategically located service centers are in the communities of Iowa Falls, Boone and Jefferson. A total of 37 local professionals, who are committed to providing superior service, work at these locations.

In total, Midland Power distributes power to approximately 9,421 households, businesses, and organizations, that purchase more than 386 million kilowatt-hours(kWh) annually. The average number of customers per mile of line is 3.22.

A dedicated board of nine directors, elected by and from the membership, makes strategic decisions about rates, service reliability, investments and other important issues such as the allocation of year-end margins.

Since 2004, three renewable bio-fuel plants have been constructed in Midland Power's service territory. Each plant consumes more than 1,000 KVA. Collectively, these three plants purchase more than 39% of Midland Power's total kWh sales. More than 45% of all the power sold by Midland Power Cooperative goes to eleven large C&I accounts (including the 3 renewable energy Bio-Fuels facilities), seven of which have come on line since January of 2004.

Both of Midland Power's generation and transmission cooperatives (G&Ts), CIPCO and Corn Belt, provide the cooperative with power produced from a diverse fuel mix including coal, nuclear, hydro, wind, natural gas, and oil energy resources. In addition to the two G&Ts, Midland Power has a total of seven renewable generation facilities erected on its lines, by members, with a combined installed capacity of 180 KW.

Midland Power actively promotes and incentivizes energy efficiency. Visit www.midlandpower.coop to view current promotions and programs.

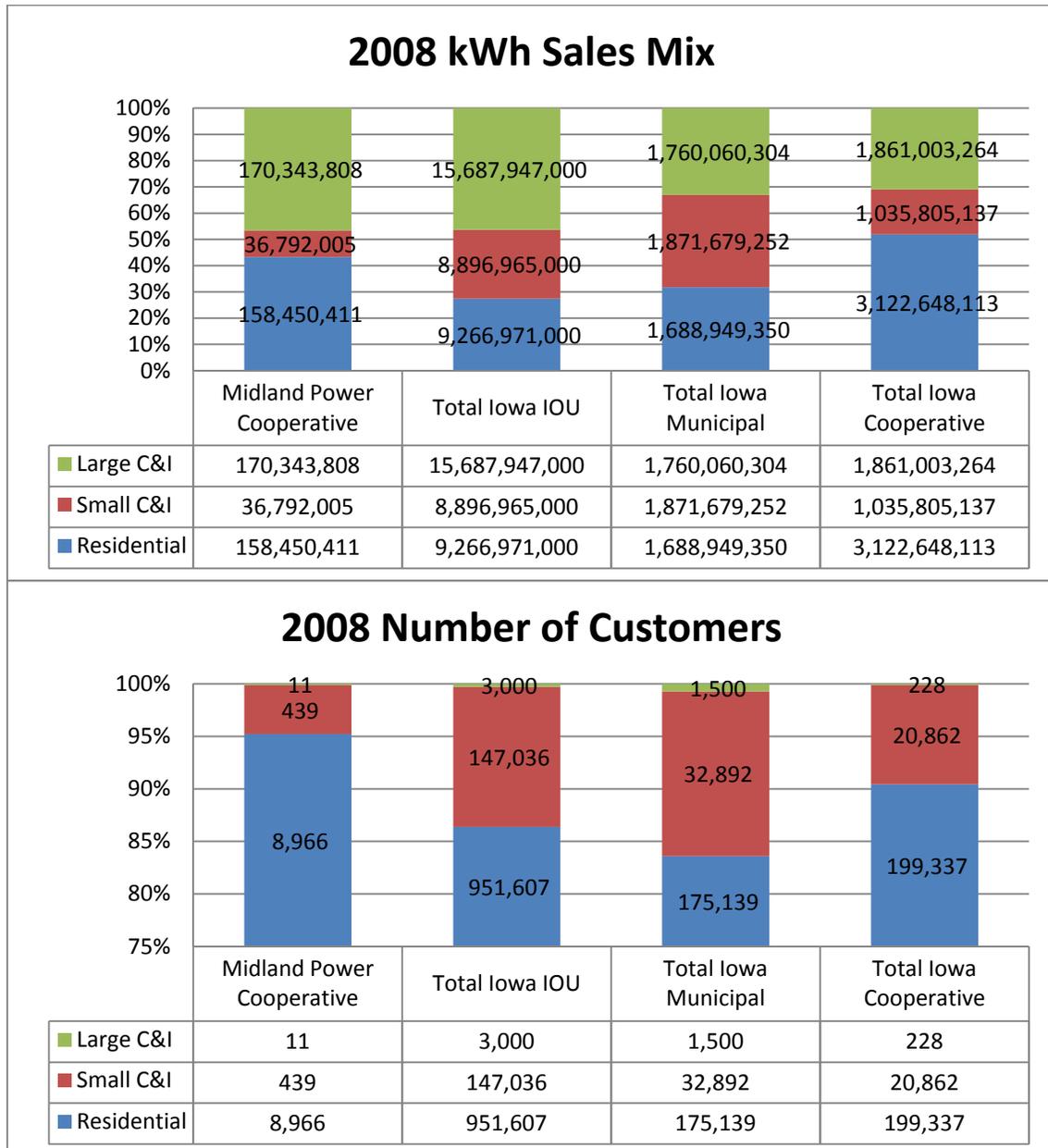
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

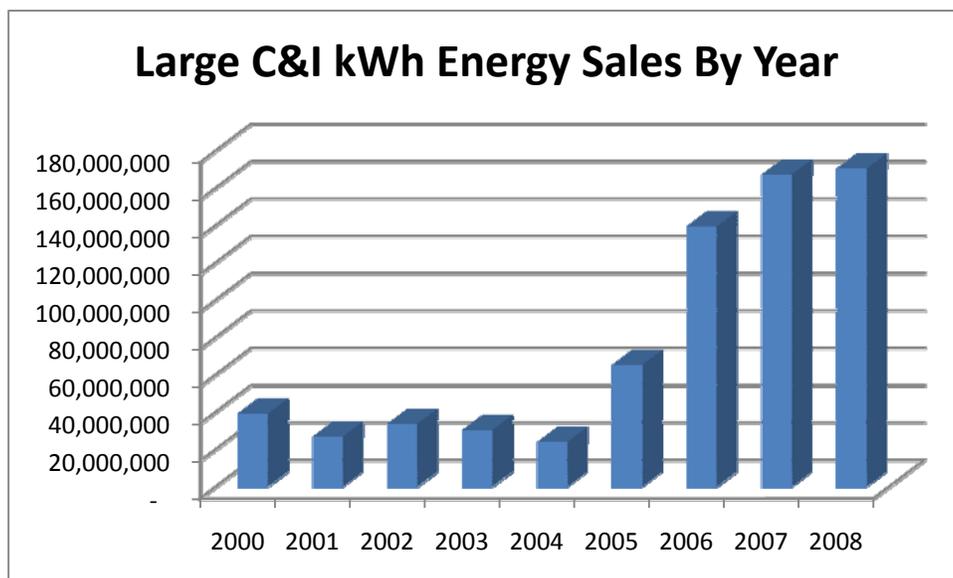
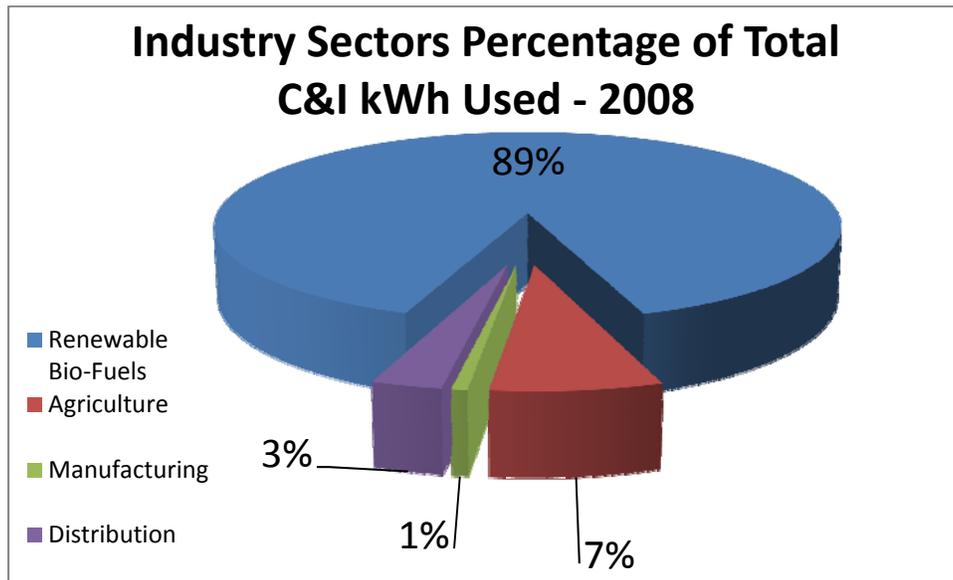
The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Midland Power Cooperative individually. While more than ninety-five percent of Midland Power's customers are residential, nearly fifty percent of the power sold by Midland goes to a total of eleven large commercial and industrial accounts. Of those accounts, 7 have been established, using the latest technologies, since 2004.



Source: IUB website raw data for the calendar year 2008.

ANALYSIS OF LARGE C&I ACCOUNTS

Of Midland Power's eleven large C&I accounts, three are renewable energy bio-fuels plants that consume 89% of the total power purchased by large C&I accounts. Seven of these eleven facilities, including the three bio-fuels plants, have been established since 2004: The second chart below documents the increase in kWh sales.



COMMITMENT TO ENERGY EFFICIENCY

Midland Power Cooperative has been committed to supply side and demand side energy efficiency for many years. The Cooperative has invested more than \$5.6 million in demand side energy efficiency programs from 1992 through 2007. Some of the new energy efficiency measures offered to members include efficient water heating, appliance, lighting, heating and cooling, new home construction, commercial refrigeration, weatherization, and insulation incentives, and low-income energy efficiency assistance.

Through one of its power suppliers Corn Belt Power Cooperative, Midland Power Cooperative is aggressively pursuing a load management program expected to be implemented in the next couple years. Items currently being completed include load research, infrastructure review, implementation strategies and benefit-cost evaluation.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014					
		Estimated Achievable Potential Goals					
Midland Power Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014	
I. Incentive Programs for Energy Efficient Technologies							
Residential Cooling & Heating (low income included)							
	ENERGY STAR Central Air Conditioning	234	\$33,005	902,956	191,141	64,497	
	SEER 14.5 (and EER 12)	184	\$23,445	605,325	127,363	43,237	
	SEER 16 (and EER 13)	50	\$9,561	297,631	63,778	21,259	
	ENERGY STAR Qualified Room Air Conditioner	50	\$1,592	41,800	13,933	4,644	
	Geothermal Heat Pump	213	\$428,418	56,339,533	8,027,611	2,816,977	
	Air Source Heat Pump	194	\$154,933	22,745,505	4,392,852	1,516,367	
	Heat Recovery Ventilators	10	\$1,592	124,762	18,714	6,238	
	Residential Contractor Rebates	263	\$52,600				
Residential Lighting (low income included)							
Interior Lighting							
	Change a Light Rebate Program (or similar program)	6,014	\$13,790	2,863,348	1,220,743	392,239	
	Local CFL Rebate Program(s)	49,753	\$127,722	23,671,593	10,090,820	3,242,684	
	ENERGY STAR Ceiling Fan	384	\$8,078	1,154,849	181,950	64,158	
Exterior Lighting							
	High Efficiency Exterior Lighting	270	\$10,322	269,367	179,125	61,220	
	High Pressure Sodium - 50 - 100 W	135	\$5,064	135,165	89,882	30,719	
	High Pressure Sodium - 100+ W	135	\$5,258	134,203	89,243	30,501	
Residential Water Heating (low income included)							
	High Efficiency Water Heater	885	\$141,929	3,975,138	783,060	265,009	
	40-49 gallon	10	\$640	14,932	2,986	995	
	50-79 gallon	420	\$54,011	1,448,136	285,026	96,542	
	80 gallon+	455	\$87,278	2,512,070	495,048	167,471	
	Heat Pump Water Heater - (Add-On)	20	\$7,646	383,799	115,140	38,380	
	Heat Pump Water Heater - (Integrated)	56	\$30,620	1,289,566	264,822	107,464	
	Drain Water Heat Recovery System	5	\$1,575	117,216	11,722	3,907	
	Flow Restrictors - Faucet	270	\$10,316	897,692	279,282	99,744	
	Flow Restrictors - Shower	270	\$17,195	1,702,211	476,619	170,221	
	Tank Insulation	164	\$3,155	279,003	81,149	27,900	
	Pipe Insulation	166	\$3,192	294,343	57,095	19,623	
Residential Appliances (low income included)							
	ENERGY STAR Qualified Clothes Washer	395	\$27,507	960,680	259,799	87,335	
	ENERGY STAR Qualified Dishwasher	310	\$11,850	399,793	106,690	36,345	
	ENERGY STAR Qualified Refrigerator	420	\$14,771	661,689	130,236	44,113	
	ENERGY STAR Qualified Dehumidifier	220	\$7,008	621,954	150,777	51,830	
	ENERGY STAR Qualified Freezer	150	\$4,780	166,737	33,347	11,116	
	Appliance Recycling	555	\$65,855	4,915,234	1,621,203	551,311	
	Refrigerator	400	\$38,265	4,299,054	1,404,365	477,673	
	Freezer	79	\$13,795	557,971	182,067	61,997	
	Window AC Unit	76	\$13,795	58,208	34,772	11,642	
	Efficient Television	64	\$3,261	127,417	30,195	10,618	
Efficient Home Incentives (low income included)							
	Energy Efficient Home Construction Rebates *	30	\$19,116	995,445	99,545	33,182	
	Advanced Lighting Package	10	\$2,549	86,272	12,941	4,314	
Additional Low Income							
	Energy Efficiency Kits	485	\$21,766	4,922,846	1,956,733	546,983	
	Weatherization Rebates	228	\$170,635	9,274,163	893,770	309,139	
	Ceiling (Bring up to R-38) - Elect. Heat Only	114	\$95,858	5,882,085	571,009	196,069	
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	30	\$5,737	143,344	14,334	4,778	
	Wall (Bring Up to R19) - Elect. Heat Only	64	\$65,216	3,157,817	299,335	105,261	
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	20	\$3,823	90,917	9,092	3,031	
Building Shell - Existing Home Only							
	Weatherization Rebates	504	\$191,404	11,854,876	1,170,081	404,945	
	Ceiling (Bring up to R-38) - Elect. Heat Only	118	\$74,402	5,371,952	512,915	179,065	
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	126	\$19,857	602,045	57,019	20,068	
	Wall (Bring Up to R19) - Elect. Heat Only	48	\$36,693	2,089,638	203,159	69,655	
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	118	\$22,359	536,412	51,217	17,880	
	Foundation (Bring Up to R-10)	30	\$22,939	1,934,150	193,415	64,472	
	Infiltration Control	54	\$12,605	1,222,904	137,690	48,916	
	Duct Insulation (in unconditioned space)	10	\$2,549	97,775	14,666	4,889	
Residential Total		62,592	\$1,588,957	152,039,787	32,851,095	10,992,501	
Residential Average kWh Sales (3 yr Ave actual and projected)							760,215,505
Residential kWh Savings as percentage of Residential kWh Sales							1.4%

		2010-2014				
		Estimated Achievable Potential Goals				
Midland Power Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	1,042	\$2,709	562,251	485,929	156,181
	High Efficiency Interior Lighting	4,278	\$87,761	8,131,995	3,322,402	1,205,998
	T-8 or 46" T5 - 4 ft	2,098	\$53,797	2,907,080	1,276,307	454,231
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	112	\$21,852	628,592	225,955	81,635
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	549	\$8,388	2,768,945	946,389	359,603
	CFL lamps - Energy Star- 9W and up	911	\$1,773	448,995	494,565	172,690
	Occupancy Sensors - Must control >150 Watts	64	\$1,245	339,779	96,625	33,978
	Compact fluorescent fixtures (Hard-Wired)	544	\$706	1,038,605	282,562	103,860
Exterior Lighting						
	High Efficiency Exterior Lighting	670	\$45,895	828,791	615,130	206,555
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	100	\$2,549	124,110	75,986	25,329
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	50	\$1,744	117,606	72,004	24,001
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	100	\$1,914	111,103	68,022	22,674
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	270	\$10,322	299,977	179,125	61,220
	CFL Outdoor Light - 42 W min., Cold Start	150	\$2,866	175,995	219,993	73,331
	Security Lighting: LED Technology		\$12,500			
	Security Lighting: Induction		\$14,000			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	42	\$8,325	62,132	11,932	4,142
	Water Cooled Chillers	20	\$150	106,560	15,984	5,328
	Geothermal Heat Pump	139	\$63,864	4,229,277	592,430	211,464
	Heat Recovery Ventilators	21	\$945	814,918	60,149	40,746
	Commercial Contractor Rebate (GS & AS)	176	\$8,936			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	63	\$6,356	244,749	54,030	20,396
	Commercial Solid Door Refrigerators - < 19 cu. ft.	14	\$889	25,111	5,528	2,093
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	16	\$1,834	52,500	11,480	4,375
	Commercial Solid Door Refrigerators - 31-60 cu. ft.	1	\$125	5,701	1,425	475
	Commercial Glass Door Refrigerators - < 19 cu. ft.	5	\$470	24,043	6,011	2,004
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	11	\$1,399	48,195	9,851	4,016
	Commercial Glass Door Refrigerators - 31-60 cu. ft.	6	\$968	30,788	5,131	2,566
	Commercial Solid Door Freezers - < 19 cu. ft.	4	\$251	15,877	3,969	1,323
	Commercial Solid Door Freezers - 19-30 cu. ft.	5	\$323	28,806	7,202	2,401
	Commercial Solid Door Freezers - 31-60 cu. ft.	1	\$97	13,728	3,432	1,144
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	15	\$470	160,340	32,068	10,689
	Variable Speed Drive Motor Incentive	20	\$14,693	7,444,598	1,488,920	496,307
Agricultural						
	Livestock Ventilation Fans	132	\$14,125	735,485	170,832	61,290
	14"-23"	13	\$1,215	49,870	11,828	4,156
	24"-35"	12	\$1,101	62,338	15,152	5,195
	36"-47"	78	\$8,938	412,049	96,853	34,337
	48"-49"	12	\$1,101	76,723	18,648	6,394
	50" & up	17	\$1,770	134,505	28,352	11,209
	Ventilation Thermostat Controller	20	\$640	54,418	13,604	4,535
	Circulating Fans --- BESS Lab Ratings	67	\$2,871	250,468	60,650	20,872
	20"-23"	14	\$567	40,280	10,549	3,357
	24"-35"	10	\$387	39,028	9,757	3,252
	36"-47"	42	\$1,908	166,366	39,944	13,864
	48"-52"	1	\$9	4,795	400	400
	Efficient Livestock Waterers	73	\$4,651	693,698	164,711	57,808
	Hog Farrowing - Heat Lamps (<= 175W)	132	\$505	88,183	61,795	22,046
	Hog Farrowing - Single Crate Heating Pads (<=85W)	135	\$1,328	270,914	115,838	27,091
	Hog Farrowing - Heat Lamp or Pad Controller	196	\$490	1,526,820	367,661	93,099
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$67,727	5,517,024	1,251,480	417,160
Ag, Commercial and Industrial Total		7,251	\$332,440	31,722,621	8,885,544	3,061,707
C & I Average kWh Sales (3 yr Ave actual and projected)**						268,569,967
C & I kWh Savings as percentage of C & I kWh Sales						1.1%

II. Demand Response Programs						
	Industrial Interruptible Price	5	\$100,665			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	191	\$86,666			
	Expert Energy Services - C&I	30	\$149,331			
	Energy Audit Services - Residential *	2,120	\$739,087			
IV. Educational & Research Programs						
	Model Housing Education	10	\$87,500			
	Member Information and Education	38,203	\$440,262			
	Peak Alert	38,203	\$19,560			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	38,203	\$143,375			
TOTAL		186,808	\$3,687,843	183,762,408	41,736,639	14,054,208
Total Average kWh Sales (3 yr Ave actual and projected)**						1,028,785,473
Total kWh Savings as percentage of Total kWh Sales						1.37%

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	44	\$6,287	171,380	12,241	12
	SEER 14.5 (and EER 12)	34	\$4,362	111,853	7,990	8
	SEER 16 (and EER 13)	10	\$1,925	59,526	4,252	4
	ENERGY STAR Qualified Room Air Conditioner	10	\$320	8,360	929	1
	Geothermal Heat Pump	35	\$70,978	9,257,448	462,872	32
	Air Source Heat Pump	34	\$26,928	3,986,438	265,763	18
	Heat Recovery Ventilators	2	\$320	24,952	1,248	
	Residential Contractor Rebates	43	\$8,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,300	\$3,005	618,948	84,787	78
	Local CFL Rebate Program(s)	10,750	\$27,829	5,114,659	700,638	645
	ENERGY STAR Ceiling Fan	63	\$1,209	189,469	10,526	2
Exterior Lighting						
	High Efficiency Exterior Lighting	50	\$1,925	49,883	11,337	0
	High Pressure Sodium - 50 - 100 W	25	\$938	25,031	5,689	
	High Pressure Sodium - 100+ W	25	\$987	24,852	5,648	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	169	\$27,384	759,125	50,608	7
	40-49 gallon	2	\$129	2,986	199	0
	50-79 gallon	80	\$10,429	275,824	18,388	2
	80 gallon+	87	\$16,826	480,315	32,021	4
	Heat Pump Water Heater - (Add-On)	4	\$1,539	76,760	7,676	1
	Heat Pump Water Heater - (Integrated)	6	\$3,849	138,168	11,514	1
	Drain Water Heat Recovery System	1	\$75	23,443	781	0
	Flow Restrictors - Faucet	40	\$1,539	132,991	14,777	1
	Flow Restrictors - Shower	40	\$2,566	252,179	25,218	2
	Tank Insulation	30	\$583	51,039	5,104	0
	Pipe Insulation	30	\$583	53,193	3,546	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	77	\$5,361	187,287	17,026	6
	ENERGY STAR Qualified Dishwasher	58	\$1,860	74,800	6,800	5
	ENERGY STAR Qualified Refrigerator	80	\$2,574	126,033	8,402	1
	ENERGY STAR Qualified Dehumidifier	40	\$1,283	113,083	9,424	1
	ENERGY STAR Qualified Freezer	30	\$962	33,347	2,223	0
	Appliance Recycling	105	\$12,493	923,505	103,633	20
	Refrigerator	75	\$7,223	806,073	89,564	14
	Freezer	15	\$2,635	105,944	11,772	2
	Window AC Unit	15	\$2,635	11,489	2,298	4
	Efficient Television	10	\$513	19,909	1,659	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,849	199,089	6,636	1
	Advanced Lighting Package	2	\$513	17,254	863	0
Additional Low Income						
	Energy Efficiency Kits	125	\$5,642	1,268,775	140,975	16
	Weatherization Rebates	40	\$29,122	1,572,206	52,407	7
	Ceiling (Bring up to R-38) - Elect. Heat Only	20	\$16,934	1,031,945	34,398	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,155	28,669	956	1
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$10,263	493,409	16,447	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	4	\$770	18,183	606	1
Building Shell - Existing Home Only						
	Weatherization Rebates	84	\$32,860	2,032,809	69,294	9
	Ceiling (Bring up to R-38) - Elect. Heat Only	20	\$12,700	910,500	30,350	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	20	\$3,174	95,563	3,185	2
	Wall (Bring Up to R19) - Elect. Heat Only	8	\$6,158	348,273	11,609	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	20	\$3,849	90,917	3,031	2
	Foundation (Bring Up to R-10)	6	\$4,618	386,830	12,894	
	Infiltration Control	8	\$1,847	181,171	7,247	1
	Duct Insulation (in unconditioned space)	2	\$513	19,555	978	0
Residential Total		13,308	\$282,551	27,476,533	2,088,908	868
Residential Average kWh Sales (3 yr Ave actual and projected)					152,900,506	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

		2010				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	225	\$592	121,407	33,724	14
	High Efficiency Interior Lighting	600	\$20,699	974,912	151,023	2
	T-8 or 46" T5 - 4 ft	313	\$8,105	433,705	67,766	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	16	\$10,667	89,799	11,662	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	36	\$1,278	181,199	23,532	0
	CFL lamps - Energy Star- 9W and up	150	\$296	73,929	28,434	0
	Occupancy Sensors - Must control >150 Watts	10	\$212	53,090	5,309	
	Compact fluorescent fixtures (Hard-Wired)	75	\$141	143,190	14,319	
Exterior Lighting						
	High Efficiency Exterior Lighting	130	\$7,786	161,314	40,404	1
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	20	\$513	24,822	5,066	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$385	23,521	4,800	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	20	\$385	22,221	4,535	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	50	\$1,925	55,551	11,337	0
	CFL Outdoor Light - 42 W min., Cold Start	30	\$577	35,199	14,666	1
	Security Lighting: LED Technology		\$2,000			
	Security Lighting: Induction		\$2,000			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	7	\$1,316	10,352	690	0
	Water Cooled Chillers					
	Geothermal Heat Pump	10	\$4,491	299,728	14,986	1
	Heat Recovery Ventilators					
	Commercial Contractor Rebate (GS & AS)	15	\$763			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	6	\$578	19,313	1,609	0
	Commercial Solid Door Refrigerators - < 19 cu. ft.	2	\$129	3,584	299	0
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	2	\$224	6,557	546	0
	Commercial Solid Door Refrigerators - 31-60 cu. ft.					
	Commercial Glass Door Refrigerators - < 19 cu. ft.	1	\$94	4,809	401	0
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	1	\$132	4,364	364	0
	Commercial Glass Door Refrigerators - 31-60 cu. ft.					
	Commercial Solid Door Freezers - < 19 cu. ft.					
	Commercial Solid Door Freezers - 19-30 cu. ft.					
	Commercial Solid Door Freezers - 31-60 cu. ft.					
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$94	32,068	2,138	0
	Variable Speed Drive Motor Incentive	4	\$3,079	1,488,920	99,261	9
Agricultural						
	Livestock Ventilation Fans	20	\$2,350	110,071	9,173	3
	14"-23"	2	\$229	7,672	639	0
	24"-35"	2	\$229	10,390	866	0
	36"-47"	12	\$1,434	63,398	5,283	2
	48"-49"	2	\$229	12,787	1,066	0
	50" & up	2	\$229	15,824	1,319	0
	Ventilation Thermostat Controller	4	\$129	10,884	907	0
	Circulating Fans --- BESS Lab Ratings	12	\$562	44,174	3,681	1
	20"-23"	3	\$137	8,631	719	0
	24"-35"	2	\$92	7,806	650	0
	36"-47"	7	\$333	27,737	2,311	1
	48"-52"					
	Efficient Livestock Waterers	12	\$770	114,038	9,503	
	Hog Farrowing - Heat Lamps (<= 175W)	20	\$77	13,361	3,340	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	97	\$118	194,840	19,484	
	Hog Farrowing - Heat Lamp or Pad Controller	64	\$79	498,589	30,402	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$13,722	1,103,405	83,432	8
Ag, Commercial and Industrial Total		1,231	\$57,204	5,197,375	503,758	40
C & I Average kWh Sales (3 yr Ave actual and projected)**					49,409,823	
C & I kWh Savings as percentage of C & I kWh Sales					1.0%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$18,138			145
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	35	\$16,000			
	Expert Energy Services - C&I	6	\$29,000			
	Energy Audit Services - Residential *	400	\$140,000			
IV. Educational & Research Programs						
	Model Housing Education	2	\$17,500			
	Member Information and Education	7,400	\$87,600			
	Peak Alert	7,400	\$2,000			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,400	\$27,800			
TOTAL		37,183	\$677,793	32,673,908	2,592,666	1,053
Total Average kWh Sales (3 yr Ave actual and projected)**					202,310,329	
Total kWh Savings as percentage of Total kWh Sales					1.28%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	46	\$6,521	177,959	12,711	13
	SEER 14.5 (and EER 12)	36	\$4,603	118,433	8,460	9
	SEER 16 (and EER 13)	10	\$1,918	59,526	4,252	4
	ENERGY STAR Qualified Room Air Conditioner	10	\$319	8,360	929	1
	Geothermal Heat Pump	40	\$80,821	10,579,670	528,984	36
	Air Source Heat Pump	37	\$29,511	4,338,207	289,214	20
	Heat Recovery Ventilators	2	\$319	24,952	1,248	
	Residential Contractor Rebates	49	\$9,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,300	\$2,992	618,948	84,787	78
	Local CFL Rebate Program(s)	10,750	\$27,704	5,114,659	700,638	645
	ENERGY STAR Ceiling Fan	70	\$1,339	210,523	11,696	2
Exterior Lighting						
	High Efficiency Exterior Lighting	52	\$1,995	51,878	11,790	0
	High Pressure Sodium - 50 - 100 W	26	\$975	26,032	5,916	
	High Pressure Sodium - 100+ W	26	\$1,020	25,846	5,874	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	173	\$27,887	777,076	51,805	7
	40-49 gallon	2	\$128	2,986	199	0
	50-79 gallon	82	\$10,617	282,725	18,848	2
	80 gallon+	89	\$17,142	491,365	32,758	4
	Heat Pump Water Heater - (Add-On)	4	\$1,534	76,760	7,676	1
	Heat Pump Water Heater - (Integrated)	8	\$4,614	184,224	15,352	2
	Drain Water Heat Recovery System	1	\$375	23,443	781	0
	Flow Restrictors - Faucet	50	\$1,918	166,239	18,471	1
	Flow Restrictors - Shower	50	\$3,197	315,224	31,522	3
	Tank Insulation	31	\$600	52,736	5,274	0
	Pipe Insulation	32	\$618	56,743	3,783	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	78	\$5,432	189,711	17,246	6
	ENERGY STAR Qualified Dishwasher	60	\$1,918	77,379	7,034	5
	ENERGY STAR Qualified Refrigerator	82	\$2,988	129,186	8,612	1
	ENERGY STAR Qualified Dehumidifier	42	\$1,342	118,737	9,895	1
	ENERGY STAR Qualified Freezer	30	\$959	33,347	2,223	0
	Appliance Recycling	108	\$12,646	955,779	107,219	21
	Refrigerator	78	\$7,376	838,346	93,150	15
	Freezer	15	\$2,635	105,944	11,772	2
	Window AC Unit	15	\$2,635	11,489	2,298	4
	Efficient Television	12	\$614	23,891	1,991	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,836	199,089	6,636	1
	Advanced Lighting Package	2	\$511	17,254	863	0
Additional Low Income						
	Energy Efficiency Kits	150	\$6,743	1,522,530	169,170	20
	Weatherization Rebates	44	\$32,758	1,774,082	59,136	7
	Ceiling (Bring up to R-38) - Elect. Heat Only	22	\$18,565	1,135,139	37,838	4
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,151	28,669	956	1
	Wall (Bring Up to R19) - Elect. Heat Only	12	\$12,275	592,091	19,736	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	4	\$767	18,183	606	1
Building Shell - Existing Home Only						
	Weatherization Rebates	96	\$37,253	2,284,425	77,983	10
	Ceiling (Bring up to R-38) - Elect. Heat Only	22	\$13,924	1,001,550	33,385	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	24	\$3,797	114,675	3,823	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,672	435,341	14,511	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	22	\$4,220	100,009	3,334	3
	Foundation (Bring Up to R-10)	6	\$4,603	386,830	12,894	
	Infiltration Control	10	\$2,526	226,464	9,059	1
	Duct Insulation (in unconditioned space)	2	\$511	19,555	978	0
Residential Total		13,415	\$309,067	30,103,013	2,244,671	882
Residential Average kWh Sales (3 yr Ave actual and projected)					153,092,262	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

		2011				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	225	\$588	121,407	33,724	14
	High Efficiency Interior Lighting	726	\$14,848	1,188,664	183,578	2
	T-8 or 46" T5 - 4 ft	391	\$10,079	541,786	84,654	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	20	\$2,496	112,249	14,578	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	44	\$1,541	221,465	28,762	0
	CFL lamps - Energy Star- 9W and up	173	\$339	85,265	32,794	0
	Occupancy Sensors - Must control >150 Watts	12	\$231	63,708	6,371	
	Compact fluorescent fixtures (Hard-Wired)	86	\$161	164,191	16,419	
Exterior Lighting						
	High Efficiency Exterior Lighting	132	\$8,349	163,536	40,857	1
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	20	\$511	24,822	5,066	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$384	23,521	4,800	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	20	\$384	22,221	4,535	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	52	\$1,995	57,773	11,790	0
	CFL Outdoor Light - 42 W min., Cold Start	30	\$575	35,199	14,666	1
	Security Lighting: LED Technology		\$2,000			
	Security Lighting: Induction		\$2,500			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	8	\$1,565	11,834	789	0
	Water Cooled Chillers					
	Geothermal Heat Pump	30	\$13,426	899,183	44,959	4
	Heat Recovery Ventilators					
	Commercial Contractor Rebate (GS & AS)	36	\$1,834			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	10	\$895	38,758	3,230	0
	Commercial Solid Door Refrigerators - < 19 cu. ft.	2	\$128	3,584	299	0
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	2	\$223	6,557	546	0
	Commercial Solid Door Refrigerators - 31-60 cu. ft.					
	Commercial Glass Door Refrigerators - < 19 cu. ft.	1	\$94	4,809	401	0
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	1	\$131	4,364	364	0
	Commercial Glass Door Refrigerators - 31-60 cu. ft.					
	Commercial Solid Door Freezers - < 19 cu. ft.	2	\$188	7,939	662	0
	Commercial Solid Door Freezers - 19-30 cu. ft.	2	\$131	11,506	959	0
	Commercial Solid Door Freezers - 31-60 cu. ft.					
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$94	32,068	2,138	0
	Variable Speed Drive Motor Incentive	4	\$3,069	1,488,920	99,261	9
Agricultural						
	Livestock Ventilation Fans	24	\$2,808	125,540	10,462	3
	14"-23"	3	\$343	11,508	959	0
	24"-35"	3	\$343	15,584	1,299	0
	36"-47"	15	\$1,779	79,266	6,606	2
	48"-49"	3	\$343	19,181	1,598	0
	50" & up					
	Ventilation Thermostat Controller	4	\$128	10,884	907	0
	Circulating Fans --- BESS Lab Ratings	13	\$608	48,128	4,011	1
	20"-23"	3	\$137	8,631	719	0
	24"-35"	2	\$92	7,806	650	0
	36"-47"	8	\$379	31,691	2,641	1
	48"-52"					
	Efficient Livestock Waterers	13	\$833	123,507	10,292	
	Hog Farrowing - Heat Lamps (<= 175W)	24	\$92	16,033	4,008	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	8	\$256	16,016	1,602	
	Hog Farrowing - Heat Lamp or Pad Controller	64	\$78	498,589	30,402	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$13,633	1,103,405	83,432	8
Ag, Commercial and Industrial Total		1,326	\$63,104	5,886,471	553,652	43
C & I Average kWh Sales (3 yr Ave actual and projected)**					50,145,476	
C & I kWh Savings as percentage of C & I kWh Sales					1.1%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$19,874			155
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	37	\$16,660			
	Expert Energy Services - C&I	6	\$29,421			
	Energy Audit Services - Residential *	412	\$141,287			
IV. Educational & Research Programs						
	Model Housing Education	2	\$17,500			
	Member Information and Education	7,518	\$90,228			
	Peak Alert	7,518	\$2,000			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,518	\$28,175			
TOTAL		37,753	\$717,316	35,989,485	2,798,322	1,081
Total Average kWh Sales (3 yr Ave actual and projected)**					203,237,738	
Total kWh Savings as percentage of Total kWh Sales					1.38%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	48	\$6,755	184,539	13,181	13
	SEER 14.5 (and EER 12)	38	\$4,843	125,013	8,929	9
	SEER 16 (and EER 13)	10	\$1,912	59,526	4,252	4
	ENERGY STAR Qualified Room Air Conditioner	10	\$318	8,360	929	1
	Geothermal Heat Pump	44	\$88,542	11,638,205	581,910	40
	Air Source Heat Pump	40	\$32,073	4,689,976	312,665	22
	Heat Recovery Ventilators	2	\$318	24,952	1,248	
	Residential Contractor Rebates	54	\$10,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,234	\$2,828	587,524	80,483	74
	Local CFL Rebate Program(s)	10,213	\$26,204	4,859,164	665,639	613
	ENERGY STAR Ceiling Fan	79	\$1,507	237,590	13,199	2
Exterior Lighting						
	High Efficiency Exterior Lighting	54	\$2,065	53,873	12,244	0
	High Pressure Sodium - 50 - 100 W	27	\$1,013	27,033	6,144	
	High Pressure Sodium - 100+ W	27	\$1,052	26,841	6,100	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	177	\$28,389	795,028	53,002	7
	40-49 gallon	2	\$128	2,986	199	0
	50-79 gallon	84	\$10,803	289,627	19,308	3
	80 gallon+	91	\$17,457	502,414	33,494	5
	Heat Pump Water Heater - (Add-On)	4	\$1,529	76,760	7,676	1
	Heat Pump Water Heater - (Integrated)	10	\$6,372	230,280	19,190	2
	Drain Water Heat Recovery System	1	\$375	23,443	781	0
	Flow Restrictors - Faucet	58	\$2,217	192,838	21,426	1
	Flow Restrictors - Shower	58	\$3,696	365,660	36,566	3
	Tank Insulation	33	\$635	56,143	5,614	0
	Pipe Insulation	33	\$635	58,512	3,901	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	79	\$5,502	192,136	17,467	6
	ENERGY STAR Qualified Dishwasher	62	\$1,975	79,959	7,269	6
	ENERGY STAR Qualified Refrigerator	84	\$3,053	132,338	8,823	1
	ENERGY STAR Qualified Dehumidifier	44	\$1,402	124,391	10,366	1
	ENERGY STAR Qualified Freezer	30	\$956	33,347	2,223	0
	Appliance Recycling	111	\$13,264	984,306	110,389	21
	Refrigerator	80	\$7,684	859,811	95,535	15
	Freezer	16	\$2,790	113,007	12,556	2
	Window AC Unit	15	\$2,790	11,489	2,298	4
	Efficient Television	14	\$714	27,872	2,323	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,823	199,089	6,636	1
	Advanced Lighting Package	2	\$510	17,254	863	0
Additional Low Income						
	Energy Efficiency Kits	120	\$5,373	1,218,024	135,336	16
	Weatherization Rebates	48	\$36,370	1,975,958	65,865	8
	Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$20,186	1,238,334	41,278	4
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,147	28,669	956	1
	Wall (Bring Up to R19) - Elect. Heat Only	14	\$14,273	690,772	23,026	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	4	\$765	18,183	606	1
Building Shell - Existing Home Only						
	Weatherization Rebates	104	\$39,135	2,439,415	83,451	11
	Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$15,139	1,092,600	36,420	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	26	\$4,099	124,232	4,141	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,646	435,341	14,511	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	24	\$4,401	109,101	3,637	3
	Foundation (Bring Up to R-10)	6	\$4,588	386,830	12,894	
	Infiltration Control	12	\$2,753	271,756	10,870	1
	Duct Insulation (in unconditioned space)	2	\$510	19,555	978	0
Residential Total		12,856	\$327,335	31,506,937	2,280,665	852
Residential Average kWh Sales (3 yr Ave actual and projected)					150,683,187	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

		2012				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	214	\$556	115,472	32,076	13
	High Efficiency Interior Lighting	976	\$16,976	2,132,093	309,561	4
	T-8 or 46" T5 - 4 ft	450	\$11,548	623,540	97,428	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	24	\$2,753	134,698	17,493	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	203	\$1,858	1,024,510	133,053	2
	CFL lamps - Energy Star- 9W and up	190	\$370	93,643	36,017	1
	Occupancy Sensors - Must control >150 Watts	14	\$268	74,327	7,433	
	Compact fluorescent fixtures (Hard-Wired)	95	\$178	181,374	18,137	
Exterior Lighting						
	High Efficiency Exterior Lighting	134	\$8,744	165,758	41,311	1
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	20	\$510	24,822	5,066	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$213	23,521	4,800	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	20	\$383	22,221	4,535	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	54	\$2,065	59,995	12,244	0
	CFL Outdoor Light - 42 W min., Cold Start	30	\$573	35,199	14,666	1
	Security Lighting: LED Technology		\$2,500			
	Security Lighting: Induction		\$2,500			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	9	\$1,815	13,316	888	1
	Water Cooled Chillers	20	\$150	106,560	5,328	6
	Geothermal Heat Pump	45	\$21,976	1,411,837	70,592	5
	Heat Recovery Ventilators					
	Commercial Contractor Rebate (GS & AS)	57	\$2,899			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	16	\$1,719	71,945	5,995	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	3	\$190	5,382	448	0
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	4	\$445	13,113	1,093	0
	Commercial Solid Door Refrigerators - 31-60 cu. ft.	1	\$125	5,701	475	0
	Commercial Glass Door Refrigerators - < 19 cu. ft.	1	\$94	4,809	401	0
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	3	\$380	13,156	1,096	0
	Commercial Glass Door Refrigerators - 31-60 cu. ft.	2	\$325	10,263	855	0
	Commercial Solid Door Freezers - < 19 cu. ft.					
	Commercial Solid Door Freezers - 19-30 cu. ft.	1	\$63	5,794	483	0
	Commercial Solid Door Freezers - 31-60 cu. ft.	1	\$97	13,728	1,144	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$94	32,068	2,138	0
	Variable Speed Drive Motor Incentive	4	\$3,058	1,488,920	99,261	9
Agricultural						
	Livestock Ventilation Fans	28	\$3,315	162,827	13,569	4
	14"-23"	2	\$229	7,672	639	0
	24"-35"	2	\$229	10,390	866	0
	36"-47"	16	\$1,893	84,505	7,042	2
	48"-49"	2	\$229	12,787	1,066	0
	50" & up	6	\$735	47,472	3,956	1
	Ventilation Thermostat Controller	4	\$128	10,884	907	0
	Circulating Fans --- BESS Lab Ratings	14	\$654	52,083	4,340	1
	20"-23"	3	\$137	8,631	719	0
	24"-35"	2	\$92	7,806	650	0
	36"-47"	9	\$425	35,646	2,970	1
	48"-52"					
	Efficient Livestock Waterers	16	\$1,019	152,051	12,671	
	Hog Farrowing - Heat Lamps (<= 175W)	28	\$108	18,706	4,676	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	10	\$319	20,020	2,002	
	Hog Farrowing - Heat Lamp or Pad Controller	64	\$78	498,589	30,402	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$13,544	1,103,405	83,432	8
Ag, Commercial and Industrial Total		1,644	\$77,152	7,556,530	719,149	54
C & I Average kWh Sales (3 yr Ave actual and projected)**					52,545,811	
C & I kWh Savings as percentage of C & I kWh Sales					1.4%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$20,371			155
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	38	\$17,327			
	Expert Energy Services - C&I	6	\$29,853			
	Energy Audit Services - Residential *	424	\$148,400			
IV. Educational & Research Programs						
	Model Housing Education	2	\$17,500			
	Member Information and Education	7,638	\$92,935			
	Peak Alert	7,638	\$2,000			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,638	\$28,673			
TOTAL		37,885	\$761,546	39,063,467	2,999,815	1,061
Total Average kWh Sales (3 yr Ave actual and projected)**					203,228,998	
Total kWh Savings as percentage of Total kWh Sales					1.48%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	48	\$6,732	184,539	13,181	13
	SEER 14.5 (and EER 12)	38	\$4,827	125,013	8,929	9
	SEER 16 (and EER 13)	10	\$1,906	59,526	4,252	4
	ENERGY STAR Qualified Room Air Conditioner	10	\$317	8,360	929	1
	Geothermal Heat Pump	46	\$92,214	12,167,472	608,374	42
	Air Source Heat Pump	41	\$32,835	4,806,953	320,464	22
	Heat Recovery Ventilators	2	\$317	24,952	1,248	
	Residential Contractor Rebates	57	\$11,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,135	\$2,590	540,389	74,026	68
	Local CFL Rebate Program(s)	9,396	\$24,002	4,470,450	612,390	564
	ENERGY STAR Ceiling Fan	85	\$1,616	255,627	14,202	3
Exterior Lighting						
	High Efficiency Exterior Lighting	56	\$2,134	55,869	12,697	0
	High Pressure Sodium - 50 - 100 W	28	\$1,050	28,034	6,371	
	High Pressure Sodium - 100+ W	28	\$1,084	27,835	6,326	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	181	\$28,886	812,979	54,199	7
	40-49 gallon	2	\$128	2,986	199	0
	50-79 gallon	86	\$10,989	296,529	19,769	3
	80 gallon+	93	\$17,770	513,464	34,231	5
	Heat Pump Water Heater - (Add-On)	4	\$1,524	76,760	7,676	1
	Heat Pump Water Heater - (Integrated)	14	\$8,891	322,391	26,866	3
	Drain Water Heat Recovery System	1	\$375	23,443	781	0
	Flow Restrictors - Faucet	60	\$2,286	199,487	22,165	1
	Flow Restrictors - Shower	60	\$3,810	378,269	37,827	3
	Tank Insulation	34	\$651	57,840	5,784	0
	Pipe Insulation	35	\$670	62,063	4,138	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	80	\$5,572	194,561	17,687	6
	ENERGY STAR Qualified Dishwasher	64	\$3,032	82,538	7,503	6
	ENERGY STAR Qualified Refrigerator	86	\$3,116	135,490	9,033	1
	ENERGY STAR Qualified Dehumidifier	46	\$1,461	130,045	10,837	1
	ENERGY STAR Qualified Freezer	30	\$953	33,347	2,223	0
	Appliance Recycling	114	\$13,417	1,006,537	112,927	22
	Refrigerator	82	\$7,837	881,275	97,919	16
	Freezer	16	\$2,790	113,007	12,556	2
	Window AC Unit	16	\$2,790	12,254	2,451	4
	Efficient Television	14	\$711	27,872	2,323	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,810	199,089	6,636	1
	Advanced Lighting Package	2	\$508	17,254	863	0
Additional Low Income						
	Energy Efficiency Kits	60	\$2,676	609,012	67,668	8
	Weatherization Rebates	48	\$36,251	1,975,958	65,865	8
	Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$20,119	1,238,334	41,278	4
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,144	28,669	956	1
	Wall (Bring Up to R19) - Elect. Heat Only	14	\$14,226	690,772	23,026	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	4	\$762	18,183	606	1
Building Shell - Existing Home Only						
	Weatherization Rebates	110	\$41,145	2,549,113	87,108	12
	Ceiling (Bring up to R-38) - Elect. Heat Only	26	\$16,346	1,183,650	39,455	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	28	\$4,400	133,788	4,460	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,621	435,341	14,511	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	26	\$4,953	118,193	3,940	3
	Foundation (Bring Up to R-10)	6	\$4,573	386,830	12,894	
	Infiltration Control	12	\$2,744	271,756	10,870	1
	Duct Insulation (in unconditioned space)	2	\$508	19,555	978	0
Residential Total		11,925	\$334,681	31,408,660	2,207,619	795
Residential Average kWh Sales (3 yr Ave actual and projected)					151,363,784	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

		2013				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	197	\$508	106,299	29,527	12
	High Efficiency Interior Lighting	1,113	\$17,645	2,411,321	342,455	5
	T-8 or 46" T5 - 4 ft	472	\$12,059	654,024	102,191	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	26	\$2,973	145,923	18,951	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	214	\$1,922	1,080,039	140,265	2
	CFL lamps - Energy Star- 9W and up	199	\$385	98,079	37,723	1
	Occupancy Sensors - Must control >150 Watts	14	\$267	74,327	7,433	
	Compact fluorescent fixtures (Hard-Wired)	188	\$38	358,930	35,893	
Exterior Lighting						
	High Efficiency Exterior Lighting	136	\$9,976	167,980	41,764	1
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	20	\$508	24,822	5,066	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$382	23,521	4,800	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	20	\$382	22,221	4,535	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	56	\$2,134	62,218	12,697	0
	CFL Outdoor Light - 42 W min., Cold Start	30	\$571	35,199	14,666	1
	Security Lighting: LED Technology		\$2,500			
	Security Lighting: Induction		\$3,500			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	9	\$1,815	13,316	888	1
	Water Cooled Chillers					
	Geothermal Heat Pump	30	\$13,337	899,183	44,959	4
	Heat Recovery Ventilators	10	\$450	388,056	19,403	6
	Commercial Contractor Rebate (GS & AS)	37	\$1,874			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	17	\$1,649	66,190	5,516	1
	Commercial Solid Door Refrigerators - < 19 cu. ft.	3	\$190	5,382	448	0
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	4	\$472	13,137	1,095	0
	Commercial Solid Door Refrigerators - 31-60 cu. ft.					
	Commercial Glass Door Refrigerators - < 19 cu. ft.	1	\$94	4,809	401	0
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	3	\$379	13,156	1,096	0
	Commercial Glass Door Refrigerators - 31-60 cu. ft.	2	\$323	10,263	855	0
	Commercial Solid Door Freezers - < 19 cu. ft.	2	\$63	7,939	662	0
	Commercial Solid Door Freezers - 19-30 cu. ft.	2	\$129	11,506	959	0
	Commercial Solid Door Freezers - 31-60 cu. ft.					
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$94	32,068	2,138	0
	Variable Speed Drive Motor Incentive	4	\$3,048	1,488,920	99,261	9
Agricultural						
	Livestock Ventilation Fans	30	\$3,537	171,940	14,328	4
	14"-23"	3	\$343	11,508	959	0
	24"-35"	2	\$229	10,390	866	0
	36"-47"	17	\$2,001	89,782	7,482	2
	48"-49"	2	\$229	12,787	1,066	0
	50" & up	6	\$735	47,472	3,956	1
	Ventilation Thermostat Controller	4	\$128	10,884	907	0
	Circulating Fans --- BESS Lab Ratings	14	\$652	52,083	4,340	1
	20"-23"	3	\$137	8,631	719	0
	24"-35"	2	\$92	7,806	650	0
	36"-47"	9	\$423	35,646	2,970	1
	48"-52"					
	Efficient Livestock Waterers	16	\$1,016	152,051	12,671	
	Hog Farrowing - Heat Lamps (<= 175W)	30	\$114	20,042	5,010	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	10	\$318	20,020	2,002	
	Hog Farrowing - Heat Lamp or Pad Controller	2	\$128	15,527	947	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$13,457	1,103,405	83,432	8
Ag, Commercial and Industrial Total		1,664	\$69,745	7,119,283	709,550	51
C & I Average kWh Sales (3 yr Ave actual and projected)**					55,835,734	
C & I kWh Savings as percentage of C & I kWh Sales					1.3%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$20,880			155
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	40	\$18,000			
	Expert Energy Services - C&I	6	\$30,299			
	Energy Audit Services - Residential *	436	\$152,600			
IV. Educational & Research Programs						
	Model Housing Education	2	\$17,500			
	Member Information and Education	7,761	\$95,722			
	Peak Alert	7,761	\$2,000			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,761	\$29,125			
TOTAL		37,357	\$770,553	38,527,942	2,917,169	1,001
Total Average kWh Sales (3 yr Ave actual and projected)**					207,199,518	
Total kWh Savings as percentage of Total kWh Sales					1.41%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	48	\$6,710	184,539	13,181	13
	SEER 14.5 (and EER 12)	38	\$4,811	125,013	8,929	9
	SEER 16 (and EER 13)	10	\$1,900	59,526	4,252	4
	ENERGY STAR Qualified Room Air Conditioner	10	\$316	8,360	929	1
	Geothermal Heat Pump	48	\$95,862	12,696,739	634,837	44
	Air Source Heat Pump	42	\$33,587	4,923,930	328,262	22
	Heat Recovery Ventilators	2	\$316	24,952	1,248	
	Residential Contractor Rebates	60	\$12,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,045	\$2,375	497,539	68,156	63
	Local CFL Rebate Program(s)	8,644	\$21,984	4,112,661	563,378	519
	ENERGY STAR Ceiling Fan	87	\$2,407	261,640	14,536	3
Exterior Lighting						
	High Efficiency Exterior Lighting	58	\$2,203	57,864	13,151	0
	High Pressure Sodium - 50 - 100 W	29	\$1,088	29,035	6,599	
	High Pressure Sodium - 100+ W	29	\$1,115	28,829	6,552	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	185	\$29,382	830,930	55,395	7
	40-49 gallon	2	\$127	2,986	199	0
	50-79 gallon	88	\$11,173	303,431	20,229	3
	80 gallon+	95	\$18,082	524,513	34,968	5
	Heat Pump Water Heater - (Add-On)	4	\$1,519	76,760	7,676	1
	Heat Pump Water Heater - (Integrated)	18	\$6,894	414,503	34,542	4
	Drain Water Heat Recovery System	1	\$375	23,443	781	0
	Flow Restrictors - Faucet	62	\$2,355	206,137	22,904	1
	Flow Restrictors - Shower	62	\$3,925	390,878	39,088	3
	Tank Insulation	36	\$687	61,246	6,125	0
	Pipe Insulation	36	\$687	63,831	4,255	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	81	\$5,640	196,985	17,908	6
	ENERGY STAR Qualified Dishwasher	66	\$3,064	85,117	7,738	6
	ENERGY STAR Qualified Refrigerator	88	\$3,040	138,642	9,243	1
	ENERGY STAR Qualified Dehumidifier	48	\$1,519	135,699	11,308	1
	ENERGY STAR Qualified Freezer	30	\$950	33,347	2,223	0
	Appliance Recycling	117	\$14,035	1,045,107	117,144	22
	Refrigerator	85	\$8,145	913,549	101,505	16
	Freezer	17	\$2,945	120,070	13,341	2
	Window AC Unit	15	\$2,945	11,489	2,298	4
	Efficient Television	14	\$709	27,872	2,323	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,798	199,089	6,636	1
	Advanced Lighting Package	2	\$506	17,254	863	0
Additional Low Income						
	Energy Efficiency Kits	30	\$1,333	304,506	33,834	4
	Weatherization Rebates	48	\$36,133	1,975,958	65,865	8
	Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$20,054	1,238,334	41,278	4
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	6	\$1,140	28,669	956	1
	Wall (Bring Up to R19) - Elect. Heat Only	14	\$14,179	690,772	23,026	2
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	4	\$760	18,183	606	1
Building Shell - Existing Home Only						
	Weatherization Rebates	110	\$41,011	2,549,113	87,108	12
	Ceiling (Bring up to R-38) - Elect. Heat Only	26	\$16,293	1,183,650	39,455	3
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	28	\$4,386	133,788	4,460	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,596	435,341	14,511	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	26	\$4,937	118,193	3,940	3
	Foundation (Bring Up to R-10)	6	\$4,558	386,830	12,894	
	Infiltration Control	12	\$2,735	271,756	10,870	1
	Duct Insulation (in unconditioned space)	2	\$506	19,555	978	0
Residential Total		11,088	\$335,323	31,544,645	2,170,637	745
Residential Average kWh Sales (3 yr Ave actual and projected)					152,175,767	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

		2014				
		Estimated Achievable Potential Goals				
Midland Power Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	181	\$464	97,665	27,129	11
	High Efficiency Interior Lighting	863	\$17,594	1,425,005	219,381	3
	T-8 or 46" T5 - 4 ft	472	\$12,006	654,024	102,191	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	26	\$2,963	145,923	18,951	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	52	\$1,788	261,732	33,991	1
	CFL lamps - Energy Star- 9W and up	199	\$383	98,079	37,723	1
	Occupancy Sensors - Must control >150 Watts	14	\$267	74,327	7,433	
	Compact fluorescent fixtures (Hard-Wired)	100	\$188	190,920	19,092	
Exterior Lighting						
	High Efficiency Exterior Lighting	138	\$11,040	170,202	42,218	1
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	20	\$506	24,822	5,066	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$380	23,521	4,800	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	20	\$380	22,221	4,535	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	58	\$2,203	64,440	13,151	0
	CFL Outdoor Light - 42 W min., Cold Start	30	\$569	35,199	14,666	1
	Security Lighting: LED Technology		\$3,500			
	Security Lighting: Induction		\$3,500			
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	9	\$1,814	13,316	888	1
	Water Cooled Chillers					
	Geothermal Heat Pump	24	\$10,635	719,347	35,967	3
	Heat Recovery Ventilators	11	\$495	426,862	21,343	6
	Commercial Contractor Rebate (GS & AS)	31	\$1,565			
Ag/Commercial & Industrial Appliances						
	Commercial ENERGY STAR Refrigerators and Freezers	14	\$1,516	48,544	4,045	0
	Commercial Solid Door Refrigerators - < 19 cu. ft.	4	\$252	7,180	598	0
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	4	\$471	13,137	1,095	0
	Commercial Solid Door Refrigerators - 31-60 cu. ft.					
	Commercial Glass Door Refrigerators - < 19 cu. ft.	1	\$94	4,809	401	0
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	3	\$378	13,156	1,096	0
	Commercial Glass Door Refrigerators - 31-60 cu. ft.	2	\$321	10,263	855	0
	Commercial Solid Door Freezers - < 19 cu. ft.					
	Commercial Solid Door Freezers - 19-30 cu. ft.					
	Commercial Solid Door Freezers - 31-60 cu. ft.					
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$94	32,068	2,138	0
	Variable Speed Drive Motor Incentive	4	\$2,438	1,488,920	99,261	9
Agricultural						
	Livestock Ventilation Fans	30	\$2,115	165,107	13,759	4
	14"-23"	3	\$71	11,508	959	0
	24"-35"	3	\$71	15,584	1,299	0
	36"-47"	18	\$1,831	95,097	7,925	2
	48"-49"	3	\$71	19,181	1,598	0
	50" & up	3	\$71	23,736	1,978	1
	Ventilation Thermostat Controller	4	\$127	10,884	907	0
	Circulating Fans --- BESS Lab Ratings	14	\$395	54,001	4,500	1
	20"-23"	2	\$19	5,754	480	0
	24"-35"	2	\$19	7,806	650	0
	36"-47"	9	\$348	35,646	2,970	1
	48"-52"	1	\$9	4,795	400	0
	Efficient Livestock Waterers	16	\$1,013	152,051	12,671	
	Hog Farrowing - Heat Lamps (<= 175W)	30	\$114	20,042	5,010	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	10	\$317	20,020	2,002	
	Hog Farrowing - Heat Lamp or Pad Controller	2	\$127	15,527	947	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$13,371	1,103,405	83,432	8
Ag, Commercial and Industrial Total		1,386	\$65,234	5,962,962	575,599	48
C & I Average kWh Sales (3 yr Ave actual and projected)**					60,633,123	
C & I kWh Savings as percentage of C & I kWh Sales					0.9%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$21,402			155
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	41	\$18,679			
	Expert Energy Services - C&I	6	\$30,758			
	Energy Audit Services - Residential *	448	\$156,800			
IV. Educational & Research Programs						
	Model Housing Education	2	\$17,500			
	Member Information and Education	7,886	\$73,777			
	Peak Alert	7,886	\$11,560			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,886	\$29,602			
TOTAL		36,630	\$760,635	37,507,607	2,746,236	948
Total Average kWh Sales (3 yr Ave actual and projected)**					212,808,889	
Total kWh Savings as percentage of Total kWh Sales					1.29%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Midland Power Cooperative		Cost Effectiveness Analysis				Cost Effectiveness Analysis			
		Benefit/Cost Ratios - CIPCO				Benefit/Cost Ratios - Corn Belt			
		Rate Payer	Participant	Utility	Societal	Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies									
Residential Cooling & Heating (low income included)									
ENERGY STAR Central Air Conditioning									
	0.44	1.39	1.29	0.77	1.16	1.16	3.20	1.72	
	0.46	1.20	1.51	0.71	0.86	1.08	2.35	1.20	
ENERGY STAR Qualified Room Air Conditioner									
	0.44	1.33	1.44	0.71	0.52	1.13	1.52	0.72	
Geothermal Heat Pump									
	0.46	2.24	4.86	1.18	0.44	1.96	4.70	0.95	
Air Source Heat Pump									
	0.47	7.61	5.34	3.95	0.48	6.55	6.62	3.55	
Heat Recovery Ventilators									
	0.43	1.28	2.96	0.77	0.23	1.05	1.41	0.33	
Residential Contractor Rebates									
Residential Lighting (low income included)									
Interior Lighting									
Change a Light Rebate Program (or similar program)									
	0.54	14.00	8.44	6.71	0.99	13.34	17.77	14.02	
Local CFL Rebate Program(s)									
	0.54	13.58	8.44	7.40	0.96	13.21	11.74	14.15	
ENERGY STAR Ceiling Fan									
	0.46	2.94	6.04	1.81	0.40	2.54	4.74	1.34	
Exterior Lighting									
High Efficiency Exterior Lighting									
					0.25	3.02	1.17	0.82	
	0.25	2.68	0.55	0.55	0.26	3.02	1.22	0.86	
Residential Water Heating (low income included)									
High Efficiency Water Heater									
	0.34	1.37	0.96	0.59	2.28	0.62	6.08	1.91	
	0.30	2.38	0.75	0.76	1.43	0.90	4.19	1.70	
	0.33	3.75	0.92	1.18	1.27	1.71	3.29	2.71	
Heat Pump Water Heater - (Add-On)									
	0.39	2.26	1.94	1.04	0.35	2.05	1.60	0.84	
Heat Pump Water Heater - (Integrated)									
	0.37	3.14	1.42	1.30	0.33	2.58	1.31	0.91	
Drain Water Heat Recovery System									
					0.32	1.89	6.15	0.92	
Flow Restrictors - Faucet									
	0.41	94.62	3.36	4.16	0.30	57.34	3.57	4.40	
Flow Restrictors - Shower									
	0.43	16.19	3.89	4.88	0.36	20.76	5.08	6.32	
Tank Insulation									
	0.41	20.15	2.87	3.61	0.36	52.24	5.67	7.06	
Pipe Insulation									
	0.45	20.28	3.74	4.98	0.38	38.59	1.45	1.91	
Residential Appliances (low income included)									
ENERGY STAR Qualified Clothes Washer									
	0.36	0.99	1.39	0.45	0.45	1.15	1.69	0.65	
ENERGY STAR Qualified Dishwasher									
	0.44	2.85	1.87	1.35	0.74	2.68	3.00	2.31	
ENERGY STAR Qualified Refrigerator									
	0.40	3.07	1.95	1.48	0.35	2.72	1.59	1.16	
ENERGY STAR Qualified Dehumidifier									
	0.43	8.70	3.49	3.90	0.28	7.73	2.11	2.31	
ENERGY STAR Qualified Freezer									
	0.37	3.50	1.41	1.50	0.38	3.13	1.39	1.43	
Appliance Recycling									
	0.42	3.19	2.96	1.48	0.53	4.87	6.90	3.01	
Refrigerator									
					0.54	3.29	4.80	2.09	
Freezer									
					0.56	0.43	1.17	0.30	
Window AC Unit									
	0.38	infinite	1.59	8.49	0.37	0.46	1.46	0.23	
Efficient Television									
Efficient Home Incentives (low income included)									
Energy Efficient Home Construction Rebates *									
	0.40	1.86	1.80	1.10	0.30	1.95	0.77	0.84	
Advanced Lighting Package									
	0.39	2.48	1.39	1.24	0.51	2.19	1.68	1.45	
Additional Low Income									
Energy Efficiency Kits									
	0.46	25.55	9.06	11.23	0.36	30.97	9.33	11.49	
Weatherization Rebates									
Ceiling (Bring up to R-38) - Elect. Heat Only									
	0.39	5.10	2.01	2.61	0.32	4.03	2.62	1.81	
Ceiling (Bring up to R-38) - Central AC Only (LP Heat)									
	0.45	0.58	1.19	0.42	0.45	0.54	1.05	0.38	
Wall (Bring Up to R19) - Elect. Heat Only									
	0.37	3.41	1.58	1.74	0.30	2.73	1.68	1.16	
Wall (Bring Up to R19) - Central AC Only (LP Heat)									
	0.44	0.38	1.13	0.27	0.36	0.41	0.67	0.24	
Building Shell - Existing Home Only									
Weatherization Rebates									
Ceiling (Bring up to R-38) - Elect. Heat Only									
	0.40	4.40	2.35	2.41	0.30	3.60	2.19	1.51	
Ceiling (Bring up to R-38) - Central AC Only (LP Heat)									
	0.43	0.55	1.30	0.38	0.36	0.54	0.85	0.31	
Wall (Bring Up to R19) - Elect. Heat Only									
	0.39	2.93	1.86	1.60	0.28	2.45	1.42	0.98	
Wall (Bring Up to R19) - Central AC Only (LP Heat)									
	0.40	0.38	1.04	0.25	0.30	0.41	0.56	0.20	
Foundation (Bring Up to R-10)									
	0.41	1.68	2.69	1.03	0.22	1.45	1.32	0.48	
Infiltration Control									
	0.43	6.11	3.41	3.34	0.32	4.96	4.27	2.16	
Duct Insulation (in unconditioned space)									
	0.36	1.59	1.40	0.78	0.27	1.32	1.20	0.49	

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

		Cost Effectiveness Analysis				Cost Effectiveness Analysis			
		Benefit/Cost Ratios - CIPCO				Benefit/Cost Ratios - Corn Belt			
Midland Power Cooperative		Rate Payer	Participant	Utility	Societal	Rate Payer	Participant	Utility	Societal
Agriculture/Commercial & Industrial Lighting									
Interior Lighting									
	Change a Light Rebate Program	0.52	13.05	8.20	6.01	0.87	8.82	12.32	8.00
	High Efficiency Interior Lighting								
	T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16	0.32	4.96	4.27	2.16
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57	0.28	3.81	1.13	1.14
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55	0.34	3.69	3.22	1.43
	CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64	0.34	9.20	3.78	3.07
	Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79	0.33	6.69	5.93	2.58
	Compact fluorescent fixtures (Hard-Wired)					0.34	3.87	21.21	1.63
Exterior Lighting									
	High Efficiency Exterior Lighting								
	Pulse start metal halide fixtures - 70-249 Watt RETRO ONLY	0.40	2.37	1.70	0.89	0.30	2.24	1.08	0.72
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	0.39	3.23	2.00	1.24	0.31	2.54	1.33	0.86
	High Pressure Sodium Fixture (ballast & lamp replacement) - 50-100 W	0.42	3.08	2.06	1.17	0.31	2.52	1.32	0.85
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	0.35	2.68	1.03	0.82	0.23	1.65	0.65	0.42
	CFL Outdoor Light - 42 W min., Cold Start	0.38	6.59	1.99	2.12	0.36	4.83	2.83	1.79
	Security Lighting: LED Technology								
	Security Lighting: Induction								
Ag/Commercial & Industrial Heating and Cooling									
	ENERGY STAR Air Conditioning	0.81	1.31	3.76	0.80	1.00	1.17	2.01	1.52
	Water Cooled Chillers								
	Geothermal Heat Pump	0.45	3.29	5.61	2.00	0.54	1.67	4.85	0.95
	Heat Recovery Ventilators	0.44	3.96	6.06	2.36				
	Commercial Contractor Rebate (GS & AS)								
Ag/Commercial & Industrial Appliances									
Commercial ENERGY STAR Refrigerators and Freezers									
	Commercial Solid Door Refrigerators - < 19 cu. ft.	0.42	1.52	1.37	0.66	0.41	1.55	1.10	0.78
	Commercial Solid Door Refrigerators - 19-30 cu. ft.	0.40	1.92	1.50	0.85	0.40	1.78	1.23	0.87
	Commercial Solid Door Refrigerators - 31-60 cu. ft.								
	Commercial Glass Door Refrigerators - < 19 cu. ft.					0.43	2.37	1.73	1.22
	Commercial Glass Door Refrigerators - 19-30 cu. ft.	0.39	2.01	1.46	0.89	0.40	1.78	1.23	0.87
	Commercial Glass Door Refrigerators - 31-60 cu. ft.	0.37	1.35	1.37	0.61				
	Commercial Solid Door Freezers - < 19 cu. ft.								
	Commercial Solid Door Freezers - 19-30 cu. ft.	0.45	3.24	3.77	1.71				
	Commercial Solid Door Freezers - 31-60 cu. ft.	0.45	4.98	5.76	2.74				
Ag/Commercial & Industrial Motors									
	Premium Motors Rebate Program - NEMA	0.42	5.29	2.66	2.47	0.36	5.96	2.40	2.48
	Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78	0.39	6.11	13.46	3.04
Agricultural									
	Livestock Ventilation Fans								
	14"-23"					0.48	8.11	5.24	4.37
	24"-35"					0.46	7.53	4.20	3.87
	36"-47"	0.38	5.42	1.75	2.24	0.44	5.33	3.20	2.69
	48"-49"					0.45	6.05	3.23	3.02
	50" & up					0.46	6.99	3.70	3.54
	Ventilation Thermostat Controller	0.42	3.36	3.33	1.66	0.35	2.46	2.15	1.05
	Circulating Fans --- BESS Lab Ratings								
	20"-23"					0.59	6.90	4.18	4.43
	24"-35"					0.60	6.87	4.26	4.52
	36"-47"	0.46	7.42	3.64	3.73	0.57	5.45	3.23	3.42
	48"-52"					0.57	5.28	3.11	3.29
	Efficient Livestock Waterers	0.50	5.62	6.38	2.88	0.31	6.06	3.08	2.17
	Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97	0.32	11.67	4.09	3.76
	Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54	0.28	4.16	1.34	1.27
	Hog Farrowing - Heat Lamp or Pad Controller	0.47	3.31	4.82	1.81	0.30	2.35	2.30	0.90
Ag/Commercial & Industrial Custom Rebates									
	Custom Rebate Program	0.41	4.35	2.88	2.14	0.59	1.51	3.25	1.03

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs									
	Industrial Interruptible Price	#	#	#	#	#	#	#	#
III. Energy Audit & Technical Support Programs									
	Expert Energy Services - Agricultural								
	Expert Energy Services - C&I								
	Energy Audit Services - Residential *								
IV. Educational & Research Programs									
	Model Housing Education								
	Member Information and Education								
	Peak Alert								
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network								

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Nishnabotna Valley Rural Electric Cooperative Harlan, Iowa

Background

Nishnabotna Valley REC was formed in 1936, with the first meter energized in 1938. For more than 70 years, the Cooperative has provided safe, reliable electric service to its members in parts of Shelby, Pottawattamie, Crawford, Harrison, Audubon and Cass counties in southwest Iowa.

Nishnabotna Valley REC, headquartered in Harlan, Iowa, helps its members to get the most for their energy dollar through one-to-one assistance at their homes or businesses. It also promotes the principles of energy efficiency through education, equipment rebates and a load management program, which offers special electric rates.

The Cooperative's seven-member board of directors is elected by the membership at an annual meeting. The board of directors represents the 2,600 members on the 1,417 miles of line in the Cooperative's assigned area of service. Nishnabotna Valley REC serves the members with a staff of 25 employees, which includes a service department that promotes, sells and services energy efficient water heaters and heat pumps.

Besides the residential and farm customers, Nishnabotna Valley REC serves several commercial and industrial loads, which account for nearly 40% of the Cooperative's annual sales.

The largest commercial customer is Oakland Foods, a company that is part of a world leader in providing quality products for the food industry. The business provides jobs for nearly 900 people at its Oakland, Iowa facility, and is continually looking for energy efficient equipment when making changes to its production processes.

The Cooperative also provides power to Shelby County Cookers, a bacon processor that is planning an expansion in the near future. The company's plans include energy efficient measures for the building and production equipment.

Menard, Inc. is the third largest home improvement supply chain in the country, and has a warehouse and manufacturing plant on the Cooperative's lines that currently employs 500 people.

Nishnabotna Valley REC's power sources include coal, hydropower, wind and other renewable sources from Basin Electric Power Cooperative and Western Area Power Administration. Recently, four wind energy interconnections have been made with Nishnabotna Valley REC members. The Cooperative purchases any excess energy the individual produces in a net metering arrangement.

The Website for Nishnabotna Valley REC is <http://www.nvrec.com>. The website is one of the mechanisms used to promote energy efficiency programs.

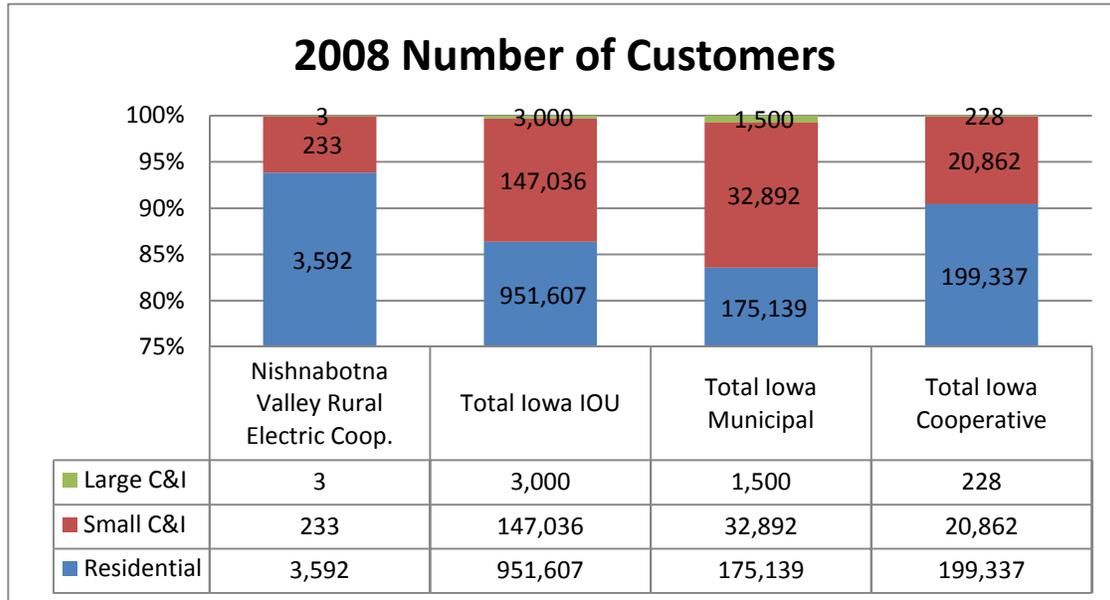
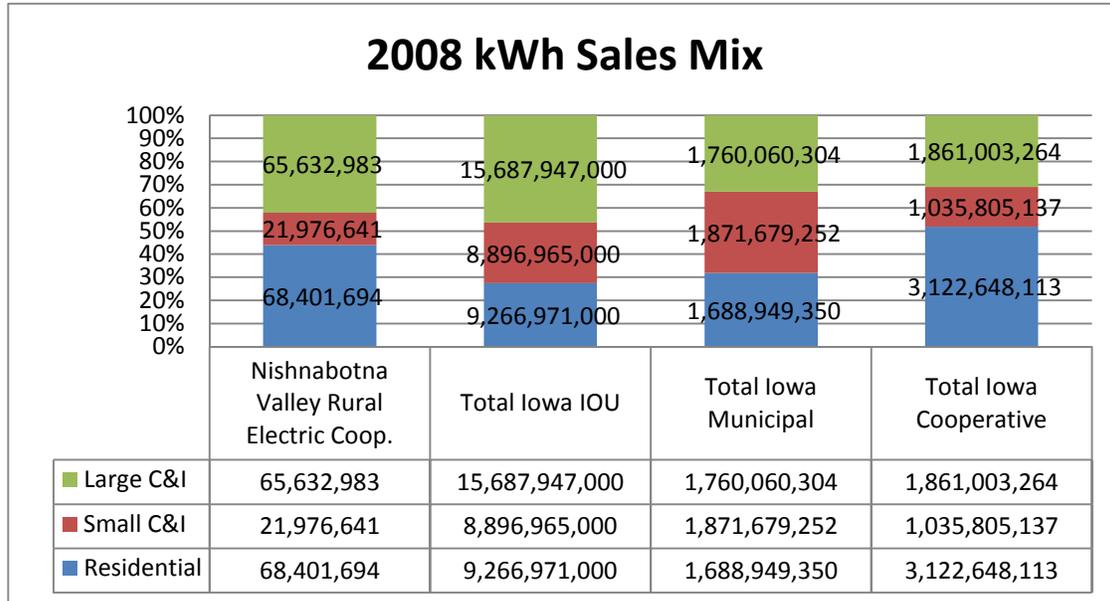
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kilowatt-hour mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the electric cooperatives as a group and Nishnabotna Valley REC itself. This illustrates that making any comparison of Nishnabotna Valley REC's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customer mix and sales mix renders an apples to oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Nishnabotna Valley REC has been committed to supply side and demand side energy efficiency for many years. The Cooperative has invested \$4,457,157 in demand side energy efficiency programs from 1992 through 2007. Going forward, Nishnabotna Valley REC has a planned demand side investment of \$1.3 million for 2010 through 2014. Some of the new energy efficiency measures offered to members include: Energy Star appliance rebates for clothes washers, refrigerators, freezers and dishwashers; commercial, industrial and agricultural energy efficiency motor and lighting program; appliance recycling program; Energy Star central air conditioners; Energy Star window and portable air conditioners; and energy efficiency kits (compact fluorescent light bulbs, low-flow showerheads, faucet aerators, etc.)

Electricity is the most economical when the demand for power is predictable and even. To help keep the electric demand stable, Nishnabotna Valley Rural Electric Cooperative works in coordination with our wholesale power provider, Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generation and transmission electric cooperative with the primary purpose to purchase and transmit reliable, economical and safe power to its member electric cooperatives, and provide other services its members require.

One of the services NIPCO provides for its electric cooperatives is operating a load management program for its electric cooperative members. In 1984, a program known as "Switch Makes Cents", was developed to promote energy efficient applications and voluntary load management. This allowed us to maximize the available power supply while keeping electric rates affordable for our member-consumers. Our management and staff worked closely with NIPCO to establish the goals of the program. The goals were, and continue to be, achieving efficient electric use, stabilize customer rates, and improve load factors and to reduce purchased power costs.

The load management system uses a centrally controlled and operated load management system. In its 25 year history, this load management system has proven to be a very popular and effective tool to help maximize power supply and control costs. The electric cooperatives in the NIPCO system currently provide load control for 35,900 qualifying customer loads and have saved the electric cooperative member-consumers over \$35 million in power supply costs.

The primary loads eligible to participate in this program are space heating and cooling, water heating, irrigation and several large commercial load applications. In addition to equipment incentives, the energy efficiency and load management program options and services used to educate the member-consumer on their program include information provided by our energy advisor staff, newspaper, web site development to provide easy access to program information, utilizing online services, direct mail, media, information meetings and open houses.

Nishnabotna Valley REC and NIPCO work hard to operate our electric systems efficiently by evaluating and making cost effective assessments when replacing or installing new electric and electronic supply side equipment. Several specific areas include electrical conductor installation, transformers, heat pumps used to provide heating and cooling in equipment buildings, replacing incandescent beacon lights with strobe lights, replace the tower incandescent obstruction lights with LED lights, CFL lighting applications in buildings and the installation, implementing an advanced metering infrastructure system and the use of our fiber optics system to better communicate and transport data that helps us to operate the electrical system more efficiently and effectively.

ENERGY EFFICIENCY GOALS

1. Energy efficiency programs available to all revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the life of the plan.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of program to the maximum extent reasonably possible.
7. Adherence to the Cooperative Principles and, in particular, the education and training principle, concern for community and cooperation among cooperatives principles.

ENERGY EFFICIENCY PROGRAM GOALS:

1. Offer members rebate or incentive programs for efficient technologies.
2. Participate in educational energy efficiency programs.
3. Participate in research programs related to energy efficiency.
4. Offer member-consumers demand response programs.
5. Offer member-consumers energy audit and technical support programs.

ENERGY EFFICIENCY MEASURE GOALS:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five-year period 2010-2014:

		2010-2014				
		Estimated Achievable Potential Goals				
Nishnabotna Valley Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	38	\$6,726	155,680	29,216	11,120
	SEER 14.5 (and EER 12)	14	\$1,677	43,512	8,214	3,108
	SEER 15 +	14	\$2,567	55,913	10,555	3,994
	SEER 16 (and EER 13)	10	\$2,482	56,255	10,447	4,018
	ENERGY STAR Qualified Room Air Conditioner	42	\$1,307	33,147	9,909	3,683
	Geothermal Heat Pump	45	\$112,141	11,951,037	1,659,866	597,552
	Air Source Heat Pump	265	\$198,560	31,221,081	6,212,799	2,081,405
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	12,334	\$27,751	5,896,602	2,147,286	807,754
Residential Water Heating (low income included)						
	High Efficiency Water Heater	361	\$90,176	1,755,959	349,390	117,064
	50-79 gallon	118	\$29,416	408,658	81,039	27,244
	80 gallon+	243	\$60,760	1,347,301	268,351	89,820
	Flow Restrictors - Faucet	290	\$3,085	967,631	322,544	107,515
	Flow Restrictors - Shower	145	\$1,545	917,415	275,225	91,742
	Tank Insulation	145	\$1,545	247,863	74,359	24,786
	Pipe Insulation	145	\$1,545	258,325	51,665	17,222
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	40	\$2,471	97,680	23,532	8,880
	ENERGY STAR Qualified Dishwasher	244	\$7,579	315,799	76,126	28,709
	ENERGY STAR Qualified Refrigerator	196	\$6,121	310,023	54,834	20,668
	ENERGY STAR Qualified Freezer	291	\$9,089	324,625	57,339	21,642
	Appliance Recycling	415	\$24,995	3,678,851	1,221,347	409,102
	Refrigerator	208	\$12,531	2,248,309	745,833	249,812
	Freezer	202	\$12,153	1,426,712	473,216	158,524
	Window AC Unit	5	\$311	3,830	2,298	766
Additional Low Income						
	Energy Efficiency Kits	125	\$5,330	1,271,228	423,743	141,248
Building Shell - Existing Home Only						
	Weatherization Rebates	119	\$73,946	5,436,824	455,353	181,227
	Ceiling (Bring up to R-38) - Elect. Heat Only	119	\$73,946	5,436,824	455,353	181,227
Residential Total		15,240	\$573,912	64,839,770	13,444,533	4,671,317
Residential Average kWh Sales (3 yr Ave actual and projected)						336,444,962
Residential kWh Savings as percentage of Residential kWh Sales						1.4%
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	1,422	\$2,844	772,794	570,931	214,665
	High Efficiency Interior Lighting	2,889	\$6,279	2,715,809	1,563,603	587,102
	T-8 or 46" T5 - 4 ft	1,422	\$2,844	1,979,970	822,812	309,370
	CFL lamps - Energy Star- 9W and up	1,422	\$2,844	705,869	722,059	271,488
	Metal Halide Lamps	45	\$591	29,970	18,731	6,244
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$8,150	86,802	13,020	4,340
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	10	\$7,400	261,738	52,348	17,449
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	25	\$4,775	138,611	27,722	9,241
	80 gallon+	25	\$4,775	138,611	27,722	9,241
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	335	\$133,950	3,580,916	716,183	238,728
	Variable Speed Drive Motor Incentive	105	\$6,345	39,153,807	7,830,761	2,610,254
Ag, Commercial and Industrial Total		4,791	\$169,743	46,710,478	10,774,568	3,681,779
C & I Average kWh Sales (3 yr Ave actual and projected)**						500,410,215
C & I kWh Savings as percentage of C & I kWh Sales						0.7%
II. Demand Response Programs						
	Water Heater Load Control	9,402	\$102,725			
	Air Conditioning Load Control	5,881	\$88,713			
	Space Heating Load Control (Interruptible)	5,911	\$81,211			
	Dual-Fuel Space Heating	3,355	\$10,905			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$1,250			
	Expert Energy Services - C&I	5	\$1,250			
	Energy Audit Services - Residential *	25	\$2,500			
IV. Educational & Research Programs						
	Model Housing Education	13,000	\$50,000			
	Domestic Water Heater Enhancement	13,000	\$30,000			
	Member Information and Education	13,000	\$141,750			
	Peak Alert	13,000	\$250			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	13,000	\$67,500			
TOTAL		109,615	\$1,321,709	111,550,247	24,219,101	8,353,096
Total Average kWh Sales (3 yr Ave actual and projected)**						836,855,177
Total kWh Savings as percentage of Total kWh Sales						1.0%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2010					
Estimated Achievable Potential Goals					
Nishnabotna Valley Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	5	\$876	19,829	1,416	2
SEER 14.5 (and EER 12)	2	\$219	6,216	444	0
SEER 15 +	2	\$334	7,988	571	1
SEER 16 (and EER 13)	1	\$323	5,625	402	0
ENERGY STAR Qualified Room Air Conditioner	6	\$172	4,735	526	1
Geothermal Heat Pump	7	\$17,536	1,859,050	92,953	11
Air Source Heat Pump	52	\$38,888	6,126,401	408,427	53
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	1,629	\$3,665	778,787	106,683	98
Residential Water Heating (low income included)					
High Efficiency Water Heater	71	\$17,706	345,787	23,052	3
50-79 gallon	23	\$5,776	79,654	5,310	1
80 gallon+	48	\$11,930	266,134	17,742	2
Flow Restrictors - Faucet	58	\$617	193,526	21,503	1
Flow Restrictors - Shower	29	\$309	183,483	18,348	1
Tank Insulation	29	\$309	49,573	4,957	0
Pipe Insulation	29	\$309	51,665	3,444	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	5	\$323	12,210	1,110	0
ENERGY STAR Qualified Dishwasher	32	\$990	41,416	3,765	3
ENERGY STAR Qualified Refrigerator	26	\$800	41,126	2,742	0
ENERGY STAR Qualified Freezer	38	\$1,189	42,391	2,826	0
Appliance Recycling	82	\$4,936	726,459	80,786	14
Refrigerator	41	\$2,475	443,176	49,242	8
Freezer	40	\$2,400	282,517	31,391	6
Window AC Unit	1	\$61	766	153	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	12	\$7,530	548,251	18,275	1
Ceiling (Bring up to R-38) - Elect. Heat Only	12	\$7,530	548,251	18,275	1
Residential Total	2,135	\$97,221	11,278,936	819,063	192
Residential Average kWh Sales (3 yr Ave actual and projected)				69,414,064	
Residential kWh Savings as percentage of Residential kWh Sales				1.2%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	188	\$376	102,170	28,380	11
High Efficiency Interior Lighting	385	\$871	361,084	78,043	1
T-8 or 46" T5 - 4 ft	188	\$376	261,768	40,901	1
CFL lamps - Energy Star- 9W and up	188	\$376	93,322	35,893	1
Metal Halide Lamps	9	\$119	5,994	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,630	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,480	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	5	\$955	27,722	1,848	0
80 gallon+	5	\$955	27,722	1,848	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	67	\$26,790	716,183	47,746	6
Variable Speed Drive Motor Incentive	21	\$1,269	7,830,761	522,051	45
Ag, Commercial and Industrial Total	669	\$33,371	9,107,628	682,426	64
C & I Average kWh Sales (3 yr Ave actual and projected)**				90,148,940	
C & I kWh Savings as percentage of C & I kWh Sales				0.8%	

II. Demand Response Programs					
Water Heater Load Control	1,736	\$19,842			868
Air Conditioning Load Control	1,037	\$16,170			726
Space Heating Load Control (Interruptible)	1,058	\$15,239			4,761
Dual-Fuel Space Heating	671	\$2,181			4,026
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$250			
Expert Energy Services - C&I	1	\$250			
Energy Audit Services - Residential *	5	\$500			
IV. Educational & Research Programs					
Model Housing Education	2,580	\$10,000			
Domestic Water Heater Enhancement	2,580	\$6,000			
Member Information and Education	2,580	\$28,350			
Peak Alert	2,580	\$50			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	2,580	\$12,500			
TOTAL	20,213	\$241,924	20,386,564	1,501,489	10,637
Total Average kWh Sales (3 yr Ave actual and projected)**				159,563,004	
Total kWh Savings as percentage of Total kWh Sales				0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2011					
Estimated Achievable Potential Goals					
Nishnabotna Valley Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	6	\$1,108	25,455	1,818	2
SEER 14.5 (and EER 12)	2	\$276	6,216	444	0
SEER 15 +	2	\$423	7,988	571	1
SEER 16 (and EER 13)	2	\$409	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	7	\$216	5,524	614	1
Geothermal Heat Pump	8	\$19,975	2,124,629	106,231	12
Air Source Heat Pump	53	\$39,373	6,244,216	416,281	54
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,043	\$4,598	976,711	133,796	123
Residential Water Heating (low income included)					
High Efficiency Water Heater	71	\$17,893	345,787	23,052	3
50-79 gallon	23	\$5,837	79,654	5,310	1
80 gallon+	48	\$12,056	266,134	17,742	2
Flow Restrictors - Faucet	58	\$617	193,526	21,503	1
Flow Restrictors - Shower	29	\$309	183,483	18,348	1
Tank Insulation	29	\$309	49,573	4,957	0
Pipe Insulation	29	\$309	51,665	3,444	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	7	\$408	17,094	1,554	1
ENERGY STAR Qualified Dishwasher	40	\$1,250	51,770	4,706	4
ENERGY STAR Qualified Refrigerator	32	\$1,010	50,616	3,374	0
ENERGY STAR Qualified Freezer	48	\$1,500	53,546	3,570	0
Appliance Recycling	82	\$4,967	726,459	80,786	14
Refrigerator	41	\$2,490	443,176	49,242	8
Freezer	40	\$2,415	282,517	31,391	6
Window AC Unit	1	\$62	766	153	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	18	\$11,114	822,377	27,413	2
Ceiling (Bring up to R-38) - Elect. Heat Only	18	\$11,114	822,377	27,413	2
Residential Total	2,585	\$106,022	12,176,678	879,698	222
Residential Average kWh Sales (3 yr Ave actual and projected)				68,025,898	
Residential kWh Savings as percentage of Residential kWh Sales				1.3%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	236	\$471	128,256	35,627	14
High Efficiency Interior Lighting	481	\$1,060	451,745	97,650	1
T-8 or 46" T5 - 4 ft	236	\$471	328,603	51,344	1
CFL lamps - Energy Star- 9W and up	236	\$471	117,149	45,057	1
Metal Halide Lamps	9	\$118	5,994	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,630	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,480	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	5	\$955	27,722	1,848	0
80 gallon+	5	\$955	27,722	1,848	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	67	\$26,790	716,183	47,746	6
Variable Speed Drive Motor Incentive	21	\$1,269	7,830,761	522,051	45
Ag, Commercial and Industrial Total	813	\$33,655	9,224,376	709,279	67
C & I Average kWh Sales (3 yr Ave actual and projected)**				95,591,141	
C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs					
Water Heater Load Control	1,807	\$20,073			904
Air Conditioning Load Control	1,104	\$16,988			773
Space Heating Load Control (Interruptible)	1,119	\$15,837			5,036
Dual-Fuel Space Heating	671	\$2,181			4,026
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$250			
Expert Energy Services - C&I	1	\$250			
Energy Audit Services - Residential *	5	\$500			
IV. Educational & Research Programs					
Model Housing Education	2,590	\$10,000			
Domestic Water Heater Enhancement	2,590	\$6,000			
Member Information and Education	2,590	\$28,350			
Peak Alert	2,590	\$50			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	2,590	\$13,000			
TOTAL	21,056	\$253,156	21,401,053	1,588,977	11,027
Total Average kWh Sales (3 yr Ave actual and projected)**				163,617,039	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2012					
Estimated Achievable Potential Goals					
Nishnabotna Valley Rural Electric Cooperative	Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
	Participants	Cost	Savings	Savings	
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,344	32,556	2,325	3
SEER 14.5 (and EER 12)	3	\$335	9,324	666	1
SEER 15 +	3	\$513	11,981	856	1
SEER 16 (and EER 13)	2	\$496	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	8	\$261	6,314	702	1
Geothermal Heat Pump	9	\$22,440	2,390,207	119,510	14
Air Source Heat Pump	53	\$39,809	6,244,216	416,281	54
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,464	\$5,544	1,177,982	161,367	148
Residential Water Heating (low income included)					
High Efficiency Water Heater	73	\$18,065	354,795	23,653	3
50-79 gallon	24	\$5,893	83,117	5,541	1
80 gallon+	49	\$12,172	271,678	18,112	2
Flow Restrictors - Faucet	58	\$617	193,526	21,503	1
Flow Restrictors - Shower	29	\$309	183,483	18,348	1
Tank Insulation	29	\$309	49,573	4,957	0
Pipe Insulation	29	\$309	51,665	3,444	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	8	\$493	19,536	1,776	1
ENERGY STAR Qualified Dishwasher	49	\$1,514	63,419	5,765	4
ENERGY STAR Qualified Refrigerator	39	\$1,222	61,688	4,113	0
ENERGY STAR Qualified Freezer	58	\$1,815	64,702	4,313	1
Appliance Recycling	83	\$4,998	737,269	81,987	14
Refrigerator	42	\$2,506	453,986	50,443	8
Freezer	40	\$2,430	282,517	31,391	6
Window AC Unit	1	\$62	766	153	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	24	\$14,741	1,096,502	36,550	3
Ceiling (Bring up to R-38) - Elect. Heat Only	24	\$14,741	1,096,502	36,550	3
Residential Total	3,046	\$114,856	12,981,678	934,845	252
Residential Average kWh Sales (3 yr Ave actual and projected)				66,889,000	
Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	284	\$568	154,342	42,873	17
High Efficiency Interior Lighting	577	\$1,254	542,406	117,257	2
T-8 or 46" T5 - 4 ft	284	\$568	395,437	61,787	1
CFL lamps - Energy Star- 9W and up	284	\$568	140,975	54,221	1
Metal Halide Lamps	9	\$118	5,994	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,630	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,480	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	5	\$955	27,722	1,848	0
80 gallon+	5	\$955	27,722	1,848	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	67	\$26,790	716,183	47,746	6
Variable Speed Drive Motor Incentive	21	\$1,269	7,830,761	522,051	45
Ag, Commercial and Industrial Total	957	\$33,946	9,341,123	736,132	70
C & I Average kWh Sales (3 yr Ave actual and projected)**				102,023,133	
C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs					
Water Heater Load Control	1,880	\$20,710			940
Air Conditioning Load Control	1,174	\$17,816			822
Space Heating Load Control (Interruptible)	1,181	\$16,238			5,315
Dual-Fuel Space Heating	671	\$2,181			4,026
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$250			
Expert Energy Services - C&I	1	\$250			
Energy Audit Services - Residential *	5	\$500			
IV. Educational & Research Programs					
Model Housing Education	2,600	\$10,000			
Domestic Water Heater Enhancement	2,600	\$6,000			
Member Information and Education	2,600	\$28,350			
Peak Alert	2,600	\$50			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	2,600	\$13,500			
TOTAL	21,916	\$264,647	22,322,801	1,670,977	11,424
Total Average kWh Sales (3 yr Ave actual and projected)**				168,912,133	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2013					
Estimated Achievable Potential Goals					
Nishnabotna Valley Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,577	32,556	2,325	3
SEER 14.5 (and EER 12)	3	\$393	9,324	666	1
SEER 15 +	3	\$602	11,981	856	1
SEER 16 (and EER 13)	2	\$582	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	10	\$306	7,892	877	1
Geothermal Heat Pump	10	\$24,815	2,655,786	132,789	15
Air Source Heat Pump	53	\$40,020	6,244,216	416,281	54
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,881	\$6,482	1,377,340	188,677	173
Residential Water Heating (low income included)					
High Efficiency Water Heater	73	\$18,167	354,795	23,653	3
50-79 gallon	24	\$5,926	83,117	5,541	1
80 gallon+	49	\$12,241	271,678	18,112	2
Flow Restrictors - Faucet	58	\$617	193,526	21,503	1
Flow Restrictors - Shower	29	\$309	183,483	18,348	1
Tank Insulation	29	\$309	49,573	4,957	0
Pipe Insulation	29	\$309	51,665	3,444	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	9	\$579	21,978	1,998	1
ENERGY STAR Qualified Dishwasher	57	\$1,776	73,773	6,707	5
ENERGY STAR Qualified Refrigerator	46	\$1,434	72,761	4,851	0
ENERGY STAR Qualified Freezer	68	\$2,130	75,857	5,057	1
Appliance Recycling	84	\$5,031	744,332	82,772	14
Refrigerator	42	\$2,522	453,986	50,443	8
Freezer	41	\$2,446	289,580	32,176	6
Window AC Unit	1	\$63	766	153	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	30	\$18,418	1,370,628	45,688	4
Ceiling (Bring up to R-38) - Elect. Heat Only	30	\$18,418	1,370,628	45,688	4
Residential Total	3,499	\$123,345	13,764,406	988,176	280
Residential Average kWh Sales (3 yr Ave actual and projected)				66,159,667	
Residential kWh Savings as percentage of Residential kWh Sales				1.5%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	332	\$664	180,427	50,119	20
High Efficiency Interior Lighting	673	\$1,446	633,068	136,864	2
T-8 or 46" T5 - 4 ft	332	\$664	462,271	72,230	1
CFL lamps - Energy Star- 9W and up	332	\$664	164,802	63,385	1
Metal Halide Lamps	9	\$118	5,994	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,630	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,480	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	5	\$955	27,722	1,848	0
80 gallon+	5	\$955	27,722	1,848	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	67	\$26,790	716,183	47,746	6
Variable Speed Drive Motor Incentive	21	\$1,269	7,830,761	522,051	45
Ag, Commercial and Industrial Total	1,101	\$34,234	9,457,870	762,985	74
C & I Average kWh Sales (3 yr Ave actual and projected)**				105,217,000	
C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs					
Water Heater Load Control	1,953	\$20,915			977
Air Conditioning Load Control	1,245	\$18,246			872
Space Heating Load Control (Interruptible)	1,244	\$16,643			5,598
Dual-Fuel Space Heating	671	\$2,181			4,026
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$250			
Expert Energy Services - C&I	1	\$250			
Energy Audit Services - Residential *	5	\$500			
IV. Educational & Research Programs					
Model Housing Education	2,610	\$10,000			
Domestic Water Heater Enhancement	2,610	\$6,000			
Member Information and Education	2,610	\$28,350			
Peak Alert	2,610	\$50			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	2,610	\$14,000			
TOTAL	22,770	\$274,964	23,222,276	1,751,162	11,826
Total Average kWh Sales (3 yr Ave actual and projected)**				171,376,667	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
Nishnabotna Valley Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	11	\$1,821	45,284	3,235	3
SEER 14.5 (and EER 12)	4	\$454	12,432	888	1
SEER 15 +	4	\$695	15,975	1,141	1
SEER 16 (and EER 13)	3	\$672	16,876	1,205	1
ENERGY STAR Qualified Room Air Conditioner	11	\$352	8,681	965	1
Geothermal Heat Pump	11	\$27,375	2,921,365	146,068	17
Air Source Heat Pump	54	\$40,470	6,362,032	424,135	55
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	3,317	\$7,462	1,585,781	217,230	199
Residential Water Heating (low income included)					
High Efficiency Water Heater	73	\$18,345	354,795	23,653	3
50-79 gallon	24	\$5,984	83,117	5,541	1
80 gallon+	49	\$12,361	271,678	18,112	2
Flow Restrictors - Faucet	58	\$617	193,526	21,503	1
Flow Restrictors - Shower	29	\$309	183,483	18,348	1
Tank Insulation	29	\$309	49,573	4,957	0
Pipe Insulation	29	\$309	51,665	3,444	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	11	\$668	26,862	2,442	1
ENERGY STAR Qualified Dishwasher	66	\$2,049	85,421	7,766	6
ENERGY STAR Qualified Refrigerator	53	\$1,655	83,833	5,589	1
ENERGY STAR Qualified Freezer	79	\$2,455	88,128	5,875	1
Appliance Recycling	84	\$5,063	744,332	82,772	14
Refrigerator	42	\$2,538	453,986	50,443	8
Freezer	41	\$2,462	289,580	32,176	6
Window AC Unit	1	\$63	766	153	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	35	\$22,143	1,599,066	53,302	4
Ceiling (Bring up to R-38) - Elect. Heat Only	35	\$22,143	1,599,066	53,302	4
Residential Total	3,975	\$132,468	14,638,072	1,049,534	312
Residential Average kWh Sales (3 yr Ave actual and projected)				65,956,333	
Residential kWh Savings as percentage of Residential kWh Sales				1.6%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	382	\$765	207,600	57,667	23
High Efficiency Interior Lighting	773	\$1,648	727,506	157,288	2
T-8 or 46" T5 - 4 ft	382	\$765	531,891	83,108	1
CFL lamps - Energy Star- 9W and up	382	\$765	189,622	72,931	1
Metal Halide Lamps	9	\$118	5,994	1,249	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,630	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,480	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	5	\$955	27,722	1,848	0
80 gallon+	5	\$955	27,722	1,848	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	67	\$26,790	716,183	47,746	6
Variable Speed Drive Motor Incentive	21	\$1,269	7,830,761	522,051	45
Ag, Commercial and Industrial Total	1,251	\$34,537	9,579,481	790,957	77
C & I Average kWh Sales (3 yr Ave actual and projected)**				107,430,000	
C & I kWh Savings as percentage of C & I kWh Sales				0.7%	

II. Demand Response Programs					
Water Heater Load Control	2,026	\$21,185			1,013
Air Conditioning Load Control	1,321	\$19,493			925
Space Heating Load Control (Interruptible)	1,309	\$17,254			5,891
Dual-Fuel Space Heating	671	\$2,181			4,026
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$250			
Expert Energy Services - C&I	1	\$250			
Energy Audit Services - Residential *	5	\$500			
IV. Educational & Research Programs					
Model Housing Education	2,620	\$10,000			
Domestic Water Heater Enhancement	2,620	\$6,000			
Member Information and Education	2,620	\$28,350			
Peak Alert	2,620	\$50			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	2,620	\$14,500			
TOTAL	23,660	\$287,018	24,217,553	1,840,491	12,243
Total Average kWh Sales (3 yr Ave actual and projected)**				173,386,333	
Total kWh Savings as percentage of Total kWh Sales				1.1%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Nishnabotna Valley Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	1.14	1.16	3.13	1.69
	SEER 15 +	0.93	1.19	2.30	1.41
	SEER 16 (and EER 13)	0.82	1.08	2.13	1.14
	ENERGY STAR Qualified Room Air Conditioner	0.50	1.13	1.47	0.69
	Geothermal Heat Pump	0.39	2.01	3.18	0.87
	Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.95	17.96	16.84	17.30
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	1.06	1.16	2.09	1.59
	80 gallon+	1.24	1.71	3.15	2.62
	Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.29	20.76	4.95	6.16
	Tank Insulation	0.33	8.71	14.04	3.50
	Pipe Insulation	0.38	38.59	11.82	15.52
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.72	0.62
	ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.32	2.72	1.47	1.07
	ENERGY STAR Qualified Freezer	0.35	3.13	1.22	1.27
	Appliance Recycling				
	Refrigerator	0.50	4.87	7.35	2.93
	Freezer	0.52	3.29	5.12	2.05
	Window AC Unit	0.55	0.43	1.20	0.29
Additional Low Income					
	Energy Efficiency Kits	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.24	3.81	1.23	1.24

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.67	10.95	10.63	7.47
	High Efficiency Interior Lighting				
	T-8 or 46" T5 - 4 ft	0.66	3.90	5.31	2.78
	CFL lamps - Energy Star- 9W and up	0.67	10.95	10.63	7.47
	Metal Halide Lamps	0.71	2.25	3.97	1.80
Ag/Commercial & Industrial Heating and Cooling					
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater				
	80 gallon+	1.24	1.71	3.16	2.63
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.33	7.24	4.84	2.89
	Variable Speed Drive Motor Incentive	0.33	7.24	4.84	2.89

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
	Air Conditioning Load Control	#	#	#	#
	Space Heating Load Control (Interruptible)	#	#	#	#
	Dual-Fuel Space Heating	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Model Housing Education				
	Domestic Water Heater Enhancement				
	Member Information and Education				
	Peak Alert				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

North West Rural Electric Cooperative (Orange City)

BACKGROUND

North West Rural Electric Cooperative (North West REC) was formed in 1998 and is the result of the consolidations of four former electric cooperatives which all came into being in the 1930s after the formation of the Rural Electrification Administration (REA). The first consolidation took place in 1993, when O'Brien County Rural Electric Cooperative and Sioux Electric Cooperative Association became North West Rural Electric Cooperative. Then in January, 1998, Ida County Rural Electric Cooperative and Plymouth Electric Cooperative Association joined North West Rural Electric Cooperative, forming the Cooperative as we know it today.

North West REC is a not-for-profit cooperative, headquartered in Orange City, Iowa. The Cooperative assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency rebates.

North West REC is governed by an eleven member board of directors all elected by and from the member-consumers served by the electric cooperative. The Cooperative serves member-consumers in 11 counties with the majority of them being in Sioux, O'Brien, Plymouth and Ida Counties. The Cooperative provides electric service to approximately 9,400 accounts. 630 of these are commercial and industrial accounts and the remaining 8,770 accounts are residential and/or farm accounts. The Cooperative supplies service to one small resale member-consumer, the Town of Westfield, Iowa with 190 residents. The Cooperative provides service to five biofuel plants ranging in size from 2 MW to 10 MW. The two earlier plants which came online in 2001, have taken advantage of the Cooperative's rebates to switch to energy efficient motors and lighting. The two most recent plants which were energized in 2007 and 2008, were equipped with the latest in energy efficient motors and lighting when constructed.

North West REC serves its members with a staff of 47 employees. The cooperative has 2.5 members per mile of distribution line.

North West REC is a member of Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generating and transmission cooperative providing wholesale power to seven members in northwest Iowa. North West REC has an all requirements power supply contract with NIPCO. About 25 percent of NIPCO's power comes from renewable hydro power from the dams along the Missouri River. The remainder of the power is produced by clean, low-cost thermal generation augmented by a growing portion of wind generation. Basin Electric cooperative, headquartered in Bismarck, N.D., provides that power.

Basin Electric Power Cooperative is a recognized leader of wind energy development in the upper Midwest. Through joint projects and purchase power agreements, Basin has added approximately 181 megawatts (MW) of wind energy to its energy portfolio in the past decade.

North West REC and the other members of NIPCO have joined together with the other electric cooperatives in Iowa to perform an assessment of potential for energy efficiency through the Iowa Association of Electric Cooperatives.

The website for North West REC is <http://www.nwrec.coop>. This website is one of the mechanisms used to promote energy efficiency programs.

North West REC is currently providing net metering to one member-consumer who has a 20 kilowatt (KW) wind turbine interconnected to the Cooperative's distribution system. Upon completion, another small (3.5 KW) residential wind turbine will be connected to the Cooperative's system in a net metering arrangement.

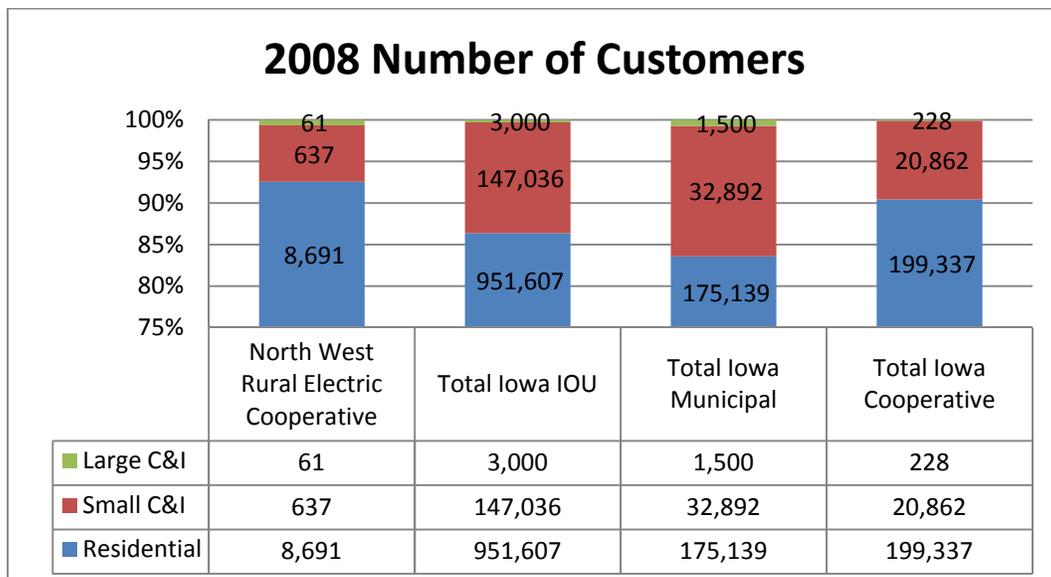
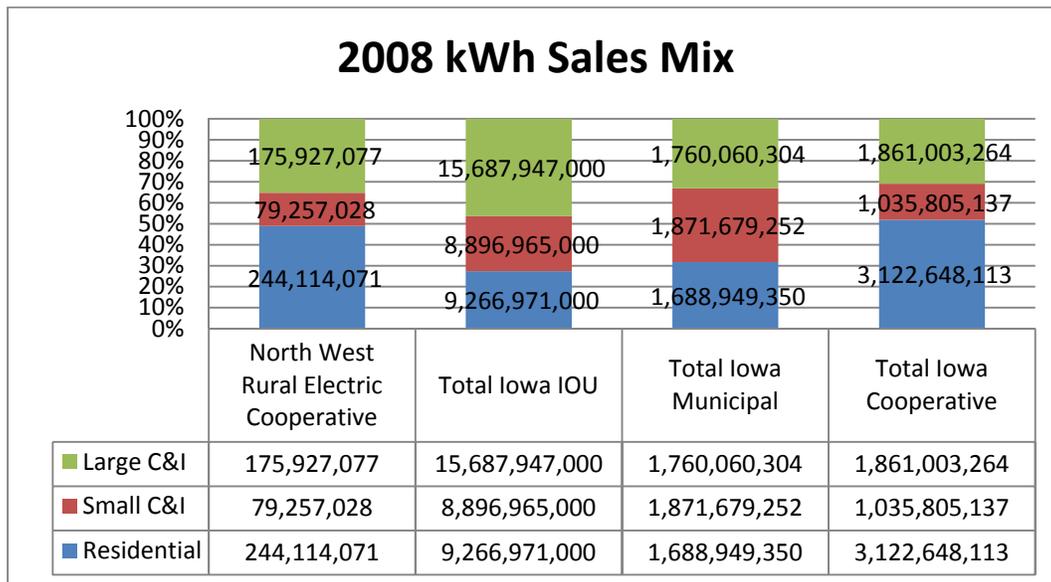
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined, our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

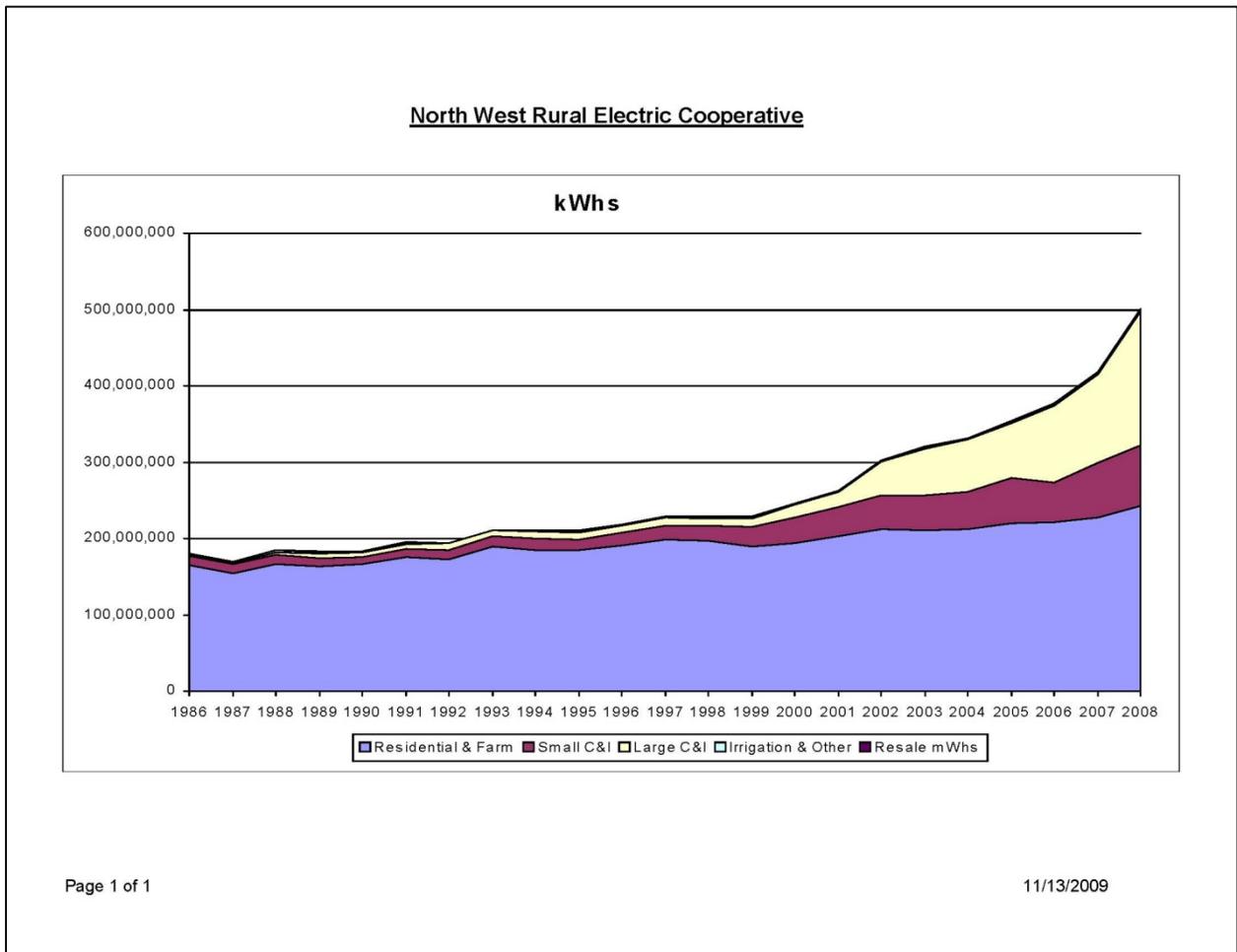
CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and North West REC itself. This illustrates that making any comparison of North West REC's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



The following graph illustrates how the addition of five biofuel plants since 2001 has affected the kWh sales mix of North West REC. The Cooperative went from having C & I kWh sales making up 20% of total sales in the year 2000 to almost 47% of total sales in 2008.

Due to the fact that these biofuel plants were constructed in recent years, they have already had the advantage of the most efficient equipment available or in the case of the earlier plants, took advantage of North West REC's energy efficiency rebates to encourage the switch to energy efficient motors and lighting.



COMMITMENT TO ENERGY EFFICIENCY

North West REC has been committed to supply side and demand side energy efficiency for many years. North West REC has invested \$7.7 million in demand side energy efficiency programs from 1992 through 2007. Going forward, North West REC has a planned demand side investment of \$ 3.1 million for 2010 through 2014. Some of the new energy efficiency measures offered to members include energy efficient equipment and appliance rebates, building insulation rebates, an appliance recycling program and a C & I and Agricultural Energy Efficiency Motor and Lighting Program.

Electricity is the most economical when the demand for power is predictable and even. To help keep the electric demand stable, North West REC works in coordination with our wholesale power provider, Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generation and transmission electric cooperative with the primary purpose to purchase and transmit reliable, economical and safe power to its member electric cooperatives, and provide other services its members require.

One of the services NIPCO provides for its electric cooperatives is operating a load management program for its electric cooperative members. In 1984, a program known as “Switch Makes Cents”, was developed to promote energy efficient applications and voluntary load management. This allowed us to maximize the available power supply while keeping electric rates affordable for our member-consumers. Our management and staff worked closely with NIPCO to establish the goals of the program. The goals were, and continue to be, achieving efficient electric use, stabilize customer rates, and improve load factors and to reduce purchased power costs.

The load management system uses a centrally controlled and operated load management system. In its 25 year history, this load management system has proven to be a very popular and effective tool to help maximize power supply and control costs. The electric cooperatives in the NIPCO system currently provide load control for 35,900 qualifying customer loads and have saved the electric cooperative member-consumers over \$35 million in power supply costs.

The primary loads eligible to participate in this program are space heating and cooling, water heating, irrigation and several large commercial load applications. In addition to equipment incentives, the energy efficiency and load management program options and services used to educate the member-consumer on their program include information provided by our energy advisor staff, newspaper, web site development to provide easy access to program information, utilizing online services, direct mail, media, information meetings and open houses.

North West REC and NIPCO work hard to operate our electric systems efficiently by evaluating and making cost effective assessments when replacing or installing new electric and electronic supply side equipment. Several specific areas include electrical conductor installation, transformers, heat pumps used to provide heating and cooling in equipment buildings, replacing incandescent beacon lights with strobe lights, replace the tower incandescent obstruction lights with LED lights, CFL lighting applications in buildings and the installation, implementing an advanced metering infrastructure system and the use of our fiber optics system to better communicate and transport data that helps us to operate the electrical system more efficiently and effectively.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer member rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
North West Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	92	\$16,178	378,990	70,885	27,071
	SEER 14.5 (and EER 12)	33	\$4,035	102,564	19,092	7,326
	SEER 15 +	34	\$6,173	135,789	25,674	9,699
	SEER 16 (and EER 13)	25	\$5,970	140,637	26,118	10,046
	ENERGY STAR Qualified Room Air Conditioner	101	\$3,141	79,710	23,501	8,857
	Geothermal Heat Pump	110	\$269,739	29,213,646	4,063,353	1,460,682
	Air Source Heat Pump	638	\$477,606	75,166,225	14,931,138	5,011,082
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	29,667	\$66,751	14,183,110	5,165,000	1,942,892
Residential Water Heating (low income included)						
	High Efficiency Water Heater	868	\$216,904	4,223,589	840,329	281,573
	50-79 gallon	283	\$70,758	980,086	195,324	65,339
	80 gallon+	585	\$146,146	3,243,503	645,004	216,234
	Flow Restrictors - Faucet	695	\$7,425	2,318,979	772,993	257,664
	Flow Restrictors - Shower	350	\$3,710	2,214,450	664,335	221,445
	Tank Insulation	350	\$3,710	598,290	179,487	59,829
	Pipe Insulation	350	\$3,710	623,543	124,709	41,570
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	96	\$5,945	234,432	56,832	21,312
	ENERGY STAR Qualified Dishwasher	584	\$18,234	755,848	182,020	68,713
	ENERGY STAR Qualified Refrigerator	471	\$14,722	745,004	131,918	49,667
	ENERGY STAR Qualified Freezer	700	\$21,859	780,885	138,105	52,059
	Appliance Recycling	1,002	\$60,025	8,863,218	2,944,354	985,823
	Refrigerator	502	\$30,041	5,426,208	1,800,329	602,912
	Freezer	485	\$29,235	3,425,521	1,137,132	380,613
	Window AC Unit	15	\$749	11,489	6,893	2,298
Additional Low Income						
	Energy Efficiency Kits	700	\$29,841	7,118,874	2,316,459	790,986
Building Shell - Existing Home Only						
	Weatherization Rebates	285	\$177,862	13,020,966	1,088,888	434,032
	Ceiling (Bring up to R-38) - Elect. Heat Only	285	\$177,862	13,020,966	1,088,888	434,032
Residential Total		37,059	\$1,397,362	160,519,758	33,694,304	11,715,256
Residential Average kWh Sales (3 yr Ave actual and projected)						1,099,353,551
Residential kWh Savings as percentage of Residential kWh Sales						1.1%
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	3,489	\$6,975	1,896,118	1,400,305	526,699
	High Efficiency Interior Lighting	7,093	\$15,390	6,666,529	3,836,929	1,441,143
	T-8 or 46" T5 - 4 ft	3,489	\$6,975	4,858,028	2,018,087	759,067
	CFL lamps - Energy Star- 9W and up	3,489	\$6,975	1,731,912	1,770,974	666,120
	Metal Halide Lamps	115	\$1,440	76,590	47,869	15,956
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	10	\$19,990	173,604	26,041	8,680
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	30	\$18,140	785,214	157,043	52,348
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	60	\$11,715	332,667	66,533	22,178
	80 gallon+	60	\$11,715	332,667	66,533	22,178
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	820	\$328,505	8,765,226	1,753,045	584,348
	Variable Speed Drive Motor Incentive	260	\$15,560	96,952,284	19,390,457	6,463,486
Ag, Commercial and Industrial Total		11,762	\$416,275	115,571,642	26,630,353	9,098,882
C & I Average kWh Sales (3 yr Ave actual and projected)**						907,544,462
C & I kWh Savings as percentage of C & I kWh Sales						1.0%
II. Demand Response Programs						
	Water Heater Load Control	34,801	\$286,704			
	Air Conditioning Load Control	19,703	\$232,035			
	Space Heating Load Control (Interruptible)	21,032	\$217,954			
	Dual-Fuel Space Heating	4,380	\$14,235			
Irrigation						
	Load Control	255	\$830			
	Industrial Interruptible Price	230	\$2,349			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	20	\$4,000			
	Expert Energy Services - C&I	5	\$1,500			
	Energy Audit Services - Residential *	140	\$14,000			
IV. Educational & Research Programs						
	Domestic Water Heater Enhancement	28,750	\$2,665			
	Member Information and Education	35,275	\$86,000			
	Peak Alert	35,275	\$1,350			
	Living with Energy in Iowa	35,275	\$168,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	35,275	\$220,500			
TOTAL		299,237	\$3,066,259	276,091,401	60,324,657	20,814,138
Total Average kWh Sales (3 yr Ave actual and projected)**						2,006,898,014
Total kWh Savings as percentage of Total kWh Sales						1.0%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2010					
Estimated Achievable Potential Goals					
North West Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	11	\$2,109	45,284	3,235	3
SEER 14.5 (and EER 12)	4	\$526	12,432	888	1
SEER 15 +	4	\$805	15,975	1,141	1
SEER 16 (and EER 13)	3	\$778	16,876	1,205	1
ENERGY STAR Qualified Room Air Conditioner	13	\$413	10,260	1,140	1
Geothermal Heat Pump	17	\$42,181	4,514,836	225,742	26
Air Source Heat Pump	125	\$93,538	14,726,925	981,795	128
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	3,918	\$8,817	1,873,106	256,590	235
Residential Water Heating (low income included)					
High Efficiency Water Heater	171	\$42,589	831,551	55,437	7
50-79 gallon	56	\$13,893	193,939	12,929	2
80 gallon+	115	\$28,696	637,612	42,507	6
Flow Restrictors - Faucet	139	\$1,485	463,796	51,533	3
Flow Restrictors - Shower	70	\$742	442,890	44,289	4
Tank Insulation	70	\$742	119,658	11,966	1
Pipe Insulation	70	\$742	124,709	8,314	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	13	\$778	31,746	2,886	1
ENERGY STAR Qualified Dishwasher	76	\$2,382	98,364	8,942	7
ENERGY STAR Qualified Refrigerator	62	\$1,924	98,069	6,538	1
ENERGY STAR Qualified Freezer	92	\$2,860	102,631	6,842	1
Appliance Recycling	198	\$11,773	1,750,448	194,698	33
Refrigerator	99	\$5,852	1,070,109	118,901	19
Freezer	96	\$5,773	678,041	75,338	13
Window AC Unit	3	\$148	2,298	460	1
Additional Low Income					
Energy Efficiency Kits	130	\$5,542	1,322,077	146,897	17
Building Shell - Existing Home Only					
Weatherization Rebates	29	\$18,112	1,324,940	44,165	3
Ceiling (Bring up to R-38) - Elect. Heat Only	29	\$18,112	1,324,940	44,165	3
Residential Total	5,204	\$236,729	27,881,287	2,051,008	472
Residential Average kWh Sales (3 yr Ave actual and projected)				235,240,401	
Residential kWh Savings as percentage of Residential kWh Sales				0.9%	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	461	\$921	250,533	69,593	28
High Efficiency Interior Lighting	945	\$2,130	886,044	191,501	3
T-8 or 46" T5 - 4 ft	461	\$921	641,889	100,295	1
CFL lamps - Energy Star- 9W and up	461	\$921	228,837	88,014	1
Metal Halide Lamps	23	\$288	15,318	3,191	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	2	\$3,998	34,721	1,736	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$3,628	157,043	10,470	1
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,343	66,533	4,436	1
80 gallon+	12	\$2,343	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	164	\$65,701	1,753,045	116,870	15
Variable Speed Drive Motor Incentive	52	\$3,112	19,390,457	1,292,697	112
Ag, Commercial and Industrial Total	1,642	\$81,833	22,538,376	1,687,301	158
C & I Average kWh Sales (3 yr Ave actual and projected)**				162,502,396	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	
II. Demand Response Programs					
Water Heater Load Control	6,613	\$55,692			3,307
Air Conditioning Load Control	3,604	\$42,313			2,523
Space Heating Load Control (Interruptible)	3,907	\$41,098			17,582
Dual-Fuel Space Heating	876	\$2,847			5,256
Irrigation					
Load Control	51	\$166			337
Industrial Interruptible Price	42	\$137			277
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	20	\$2,000			
IV. Educational & Research Programs					
Domestic Water Heater Enhancement	7,025	\$500			
Member Information and Education	7,025	\$17,000			
Peak Alert	7,025	\$250			
Living with Energy in Iowa	7,025	\$33,600			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,025	\$38,900			
TOTAL	57,089	\$554,165	50,419,663	3,738,309	29,911
Total Average kWh Sales (3 yr Ave actual and projected)**				397,742,797	
Total kWh Savings as percentage of Total kWh Sales				0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2011					
Estimated Achievable Potential Goals					
North West Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	15	\$2,666	62,005	4,429	5
SEER 14.5 (and EER 12)	5	\$665	15,540	1,110	1
SEER 15 +	6	\$1,017	23,963	1,712	2
SEER 16 (and EER 13)	4	\$984	22,502	1,607	2
ENERGY STAR Qualified Room Air Conditioner	17	\$519	13,417	1,491	2
Geothermal Heat Pump	20	\$48,047	5,311,572	265,579	31
Air Source Heat Pump	126	\$94,707	14,844,740	989,649	129
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	4,915	\$11,059	2,349,748	321,883	295
Residential Water Heating (low income included)					
High Efficiency Water Heater	172	\$43,039	837,095	55,806	7
50-79 gallon	56	\$14,040	193,939	12,929	2
80 gallon+	116	\$28,999	643,156	42,877	6
Flow Restrictors - Faucet	139	\$1,485	463,796	51,533	3
Flow Restrictors - Shower	70	\$742	442,890	44,289	4
Tank Insulation	70	\$742	119,658	11,966	1
Pipe Insulation	70	\$742	124,709	8,314	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	16	\$981	39,072	3,552	1
ENERGY STAR Qualified Dishwasher	96	\$3,008	124,249	11,295	9
ENERGY STAR Qualified Refrigerator	78	\$2,428	123,377	8,225	1
ENERGY STAR Qualified Freezer	115	\$3,607	128,288	8,553	1
Appliance Recycling	199	\$11,949	1,761,257	195,899	33
Refrigerator	100	\$5,990	1,080,918	120,102	19
Freezer	96	\$5,810	678,041	75,338	13
Window AC Unit	3	\$149	2,298	460	1
Additional Low Income					
Energy Efficiency Kits	135	\$5,755	1,372,926	152,547	18
Building Shell - Existing Home Only					
Weatherization Rebates	43	\$26,732	1,964,567	65,486	5
Ceiling (Bring up to R-38) - Elect. Heat Only	43	\$26,732	1,964,567	65,486	5
Residential Total	6,296	\$258,208	30,083,365	2,200,496	544
Residential Average kWh Sales (3 yr Ave actual and projected)				237,175,668	
Residential kWh Savings as percentage of Residential kWh Sales				0.9%	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	578	\$1,156	314,118	87,255	35
High Efficiency Interior Lighting	1,179	\$2,600	1,107,031	239,293	3
T-8 or 46" T5 - 4 ft	578	\$1,156	804,798	125,750	2
CFL lamps - Energy Star- 9W and up	578	\$1,156	286,915	110,352	2
Metal Halide Lamps	23	\$288	15,318	3,191	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	2	\$3,998	34,721	1,736	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$3,628	157,043	10,470	1
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,343	66,533	4,436	1
80 gallon+	12	\$2,343	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	164	\$65,701	1,753,045	116,870	15
Variable Speed Drive Motor Incentive	52	\$3,112	19,390,457	1,292,697	112
Ag, Commercial and Industrial Total	1,993	\$82,538	22,822,947	1,752,755	166
C & I Average kWh Sales (3 yr Ave actual and projected)**				174,286,733	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	
II. Demand Response Programs					
Water Heater Load Control	6,785	\$56,451			3,393
Air Conditioning Load Control	3,765	\$44,436			2,636
Space Heating Load Control (Interruptible)	4,053	\$42,372			18,239
Dual-Fuel Space Heating	876	\$2,847			5,256
Irrigation					
Load Control	51	\$166			337
Industrial Interruptible Price	44	\$543			290
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	24	\$2,400			
IV. Educational & Research Programs					
Domestic Water Heater Enhancement	7,040	\$515			
Member Information and Education	7,040	\$17,100			
Peak Alert	7,040	\$260			
Living with Energy in Iowa	7,040	\$33,650			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,040	\$41,600			
TOTAL	59,092	\$584,186	52,906,312	3,953,252	30,860
Total Average kWh Sales (3 yr Ave actual and projected)**				411,462,401	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2012					
Estimated Achievable Potential Goals					
North West Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	19	\$3,232	77,840	5,560	6
SEER 14.5 (and EER 12)	7	\$806	21,756	1,554	2
SEER 15 +	7	\$1,233	27,956	1,997	2
SEER 16 (and EER 13)	5	\$1,193	28,127	2,009	2
ENERGY STAR Qualified Room Air Conditioner	20	\$627	15,784	1,754	2
Geothermal Heat Pump	22	\$53,976	5,842,729	292,136	34
Air Source Heat Pump	128	\$95,755	15,080,371	1,005,358	131
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	5,927	\$13,335	2,833,562	388,159	356
Residential Water Heating (low income included)					
High Efficiency Water Heater	174	\$43,452	846,103	56,407	8
50-79 gallon	57	\$14,175	197,402	13,160	2
80 gallon+	117	\$29,277	648,701	43,247	6
Flow Restrictors - Faucet	139	\$1,485	463,796	51,533	3
Flow Restrictors - Shower	70	\$742	442,890	44,289	4
Tank Insulation	70	\$742	119,658	11,966	1
Pipe Insulation	70	\$742	124,709	8,314	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	19	\$1,187	46,398	4,218	2
ENERGY STAR Qualified Dishwasher	117	\$3,642	151,428	13,766	11
ENERGY STAR Qualified Refrigerator	94	\$2,940	148,685	9,912	1
ENERGY STAR Qualified Freezer	140	\$4,365	156,177	10,412	1
Appliance Recycling	200	\$12,023	1,768,320	196,684	33
Refrigerator	100	\$6,027	1,080,918	120,102	19
Freezer	97	\$5,846	685,104	76,123	14
Window AC Unit	3	\$150	2,298	460	1
Additional Low Income					
Energy Efficiency Kits	140	\$5,968	1,423,775	158,197	18
Building Shell - Existing Home Only					
Weatherization Rebates	57	\$35,456	2,604,193	86,806	7
Ceiling (Bring up to R-38) - Elect. Heat Only	57	\$35,456	2,604,193	86,806	7
Residential Total	7,406	\$279,669	32,146,418	2,345,472	617
Residential Average kWh Sales (3 yr Ave actual and projected)				234,514,333	
Residential kWh Savings as percentage of Residential kWh Sales				1.0%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	697	\$1,393	378,789	105,219	42
High Efficiency Interior Lighting	1,417	\$3,074	1,331,795	287,902	4
T-8 or 46" T5 - 4 ft	697	\$1,393	970,492	151,639	2
CFL lamps - Energy Star- 9W and up	697	\$1,393	345,985	133,071	2
Metal Halide Lamps	23	\$288	15,318	3,191	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	2	\$3,998	34,721	1,736	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$3,628	157,043	10,470	1
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,343	66,533	4,436	1
80 gallon+	12	\$2,343	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	164	\$65,701	1,753,045	116,870	15
Variable Speed Drive Motor Incentive	52	\$3,112	19,390,457	1,292,697	112
Ag, Commercial and Industrial Total	2,350	\$83,249	23,112,383	1,819,329	174
C & I Average kWh Sales (3 yr Ave actual and projected)**				184,408,000	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	

II. Demand Response Programs					
Water Heater Load Control	6,959	\$57,417			3,480
Air Conditioning Load Control	3,934	\$46,586			2,754
Space Heating Load Control (Interruptible)	4,203	\$43,660			18,914
Dual-Fuel Space Heating	876	\$2,847			5,256
Irrigation					
Load Control	51	\$166			337
Industrial Interruptible Price	46	\$550			304
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	28	\$2,800			
IV. Educational & Research Programs					
Domestic Water Heater Enhancement	7,055	\$530			
Member Information and Education	7,055	\$17,200			
Peak Alert	7,055	\$270			
Living with Energy in Iowa	7,055	\$33,700			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,055	\$44,500			
TOTAL	61,133	\$614,244	55,258,801	4,164,801	31,833
Total Average kWh Sales (3 yr Ave actual and projected)**				418,922,333	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2013					
Estimated Achievable Potential Goals					
North West Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	22	\$3,792	90,567	6,469	7
SEER 14.5 (and EER 12)	8	\$946	24,864	1,776	2
SEER 15 +	8	\$1,447	31,950	2,282	2
SEER 16 (and EER 13)	6	\$1,399	33,753	2,411	3
ENERGY STAR Qualified Room Air Conditioner	24	\$736	18,941	2,105	2
Geothermal Heat Pump	24	\$59,688	6,373,886	318,694	37
Air Source Heat Pump	129	\$96,262	15,198,187	1,013,212	132
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	6,929	\$15,591	3,312,596	453,780	416
Residential Water Heating (low income included)					
High Efficiency Water Heater	175	\$43,698	851,648	56,777	8
50-79 gallon	57	\$14,255	197,402	13,160	2
80 gallon+	118	\$29,443	654,245	43,616	6
Flow Restrictors - Faucet	139	\$1,485	463,796	51,533	3
Flow Restrictors - Shower	70	\$742	442,890	44,289	4
Tank Insulation	70	\$742	119,658	11,966	1
Pipe Insulation	70	\$742	124,709	8,314	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	22	\$1,393	53,724	4,884	2
ENERGY STAR Qualified Dishwasher	137	\$4,273	177,314	16,119	12
ENERGY STAR Qualified Refrigerator	110	\$3,450	173,993	11,600	1
ENERGY STAR Qualified Freezer	164	\$5,122	182,950	12,197	2
Appliance Recycling	202	\$12,100	1,786,192	198,670	34
Refrigerator	101	\$6,066	1,091,727	121,303	19
Freezer	98	\$5,884	692,167	76,907	14
Window AC Unit	3	\$150	2,298	460	1
Additional Low Income					
Energy Efficiency Kits	145	\$6,181	1,474,624	163,847	19
Building Shell - Existing Home Only					
Weatherization Rebates	71	\$44,301	3,243,820	108,127	9
Ceiling (Bring up to R-38) - Elect. Heat Only	71	\$44,301	3,243,820	108,127	9
Residential Total	8,503	\$300,298	34,089,492	2,482,583	687
Residential Average kWh Sales (3 yr Ave actual and projected)				235,132,667	
Residential kWh Savings as percentage of Residential kWh Sales				1.1%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	815	\$1,629	442,917	123,032	49
High Efficiency Interior Lighting	1,653	\$3,546	1,554,670	336,102	5
T-8 or 46" T5 - 4 ft	815	\$1,629	1,134,793	177,311	2
CFL lamps - Energy Star- 9W and up	815	\$1,629	404,559	155,600	2
Metal Halide Lamps	23	\$288	15,318	3,191	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	2	\$3,998	34,721	1,736	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$3,628	157,043	10,470	1
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,343	66,533	4,436	1
80 gallon+	12	\$2,343	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	164	\$65,701	1,753,045	116,870	15
Variable Speed Drive Motor Incentive	52	\$3,112	19,390,457	1,292,697	112
Ag, Commercial and Industrial Total	2,704	\$83,957	23,399,386	1,885,343	182
C & I Average kWh Sales (3 yr Ave actual and projected)**				190,251,667	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	

II. Demand Response Programs					
Water Heater Load Control	7,134	\$58,186			3,567
Air Conditioning Load Control	4,109	\$48,354			2,876
Space Heating Load Control (Interruptible)	4,356	\$44,757			19,602
Dual-Fuel Space Heating	876	\$2,847			5,256
Irrigation					
Load Control	51	\$166			337
Industrial Interruptible Price	48	\$556			317
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	32	\$3,200			
IV. Educational & Research Programs					
Domestic Water Heater Enhancement	7,070	\$545			
Member Information and Education	7,070	\$17,300			
Peak Alert	7,070	\$280			
Living with Energy in Iowa	7,070	\$33,750			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,070	\$46,600			
TOTAL	63,168	\$641,896	57,488,878	4,367,925	32,824
Total Average kWh Sales (3 yr Ave actual and projected)**				425,384,333	
Total kWh Savings as percentage of Total kWh Sales				1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
North West Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	25	\$4,379	103,294	7,378	8
SEER 14.5 (and EER 12)	9	\$1,092	27,972	1,998	2
SEER 15 +	9	\$1,671	35,944	2,567	3
SEER 16 (and EER 13)	7	\$1,616	39,378	2,813	3
ENERGY STAR Qualified Room Air Conditioner	27	\$846	21,309	2,368	2
Geothermal Heat Pump	27	\$65,847	7,170,622	358,531	42
Air Source Heat Pump	130	\$97,344	15,316,002	1,021,067	133
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	7,978	\$17,949	3,814,098	522,479	479
Residential Water Heating (low income included)					
High Efficiency Water Heater	176	\$44,126	857,192	57,146	8
50-79 gallon	57	\$14,395	197,402	13,160	2
80 gallon+	119	\$29,731	659,790	43,986	6
Flow Restrictors - Faucet	139	\$1,485	463,796	51,533	3
Flow Restrictors - Shower	70	\$742	442,890	44,289	4
Tank Insulation	70	\$742	119,658	11,966	1
Pipe Insulation	70	\$742	124,709	8,314	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	26	\$1,606	63,492	5,772	2
ENERGY STAR Qualified Dishwasher	158	\$4,929	204,493	18,590	14
ENERGY STAR Qualified Refrigerator	127	\$3,980	200,882	13,392	1
ENERGY STAR Qualified Freezer	189	\$5,905	210,839	14,056	2
Appliance Recycling	203	\$12,180	1,797,001	199,871	34
Refrigerator	102	\$6,106	1,102,536	122,504	19
Freezer	98	\$5,922	692,167	76,907	14
Window AC Unit	3	\$152	2,298	460	1
Additional Low Income					
Energy Efficiency Kits	150	\$6,395	1,525,473	169,497	20
Building Shell - Existing Home Only					
Weatherization Rebates	85	\$53,261	3,883,446	129,448	10
Ceiling (Bring up to R-38) - Elect. Heat Only	85	\$53,261	3,883,446	129,448	10
Residential Total	9,650	\$322,458	36,319,196	2,635,697	762
Residential Average kWh Sales (3 yr Ave actual and projected)				157,290,482	
Residential kWh Savings as percentage of Residential kWh Sales				1.7%	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	938	\$1,876	509,762	141,600	56
High Efficiency Interior Lighting	1,899	\$4,040	1,786,990	386,345	5
T-8 or 46" T5 - 4 ft	938	\$1,876	1,306,056	204,071	3
CFL lamps - Energy Star- 9W and up	938	\$1,876	465,616	179,083	3
Metal Halide Lamps	23	\$288	15,318	3,191	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	2	\$3,998	34,721	1,736	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	6	\$3,628	157,043	10,470	1
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	12	\$2,343	66,533	4,436	1
80 gallon+	12	\$2,343	66,533	4,436	1
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	164	\$65,701	1,753,045	116,870	15
Variable Speed Drive Motor Incentive	52	\$3,112	19,390,457	1,292,697	112
Ag, Commercial and Industrial Total	3,073	\$84,698	23,698,551	1,954,154	190
C & I Average kWh Sales (3 yr Ave actual and projected)**				196,095,667	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	
II. Demand Response Programs					
Water Heater Load Control	7,310	\$58,958			3,655
Air Conditioning Load Control	4,291	\$50,346			3,004
Space Heating Load Control (Interruptible)	4,513	\$46,067			20,309
Dual-Fuel Space Heating	876	\$2,847			5,256
Irrigation					
Load Control	51	\$166			337
Industrial Interruptible Price	50	\$563			330
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	36	\$3,600			
IV. Educational & Research Programs					
Domestic Water Heater Enhancement	560	\$575			
Member Information and Education	7,085	\$17,400			
Peak Alert	7,085	\$290			
Living with Energy in Iowa	7,085	\$33,800			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	7,085	\$48,900			
TOTAL	58,755	\$671,768	60,017,747	4,589,851	33,842
Total Average kWh Sales (3 yr Ave actual and projected)**				353,386,149	
Total kWh Savings as percentage of Total kWh Sales				1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Cost Effectiveness Analysis				
Benefit/Cost Ratios				
North West Rural Electric Cooperative	Rate Payer	Participant	Utility	Societal
	I. Incentive Programs for Energy Efficient Technologies			
Residential Cooling & Heating (low income included)				
ENERGY STAR Central Air Conditioning				
SEER 14.5 (and EER 12)	1.14	1.16	3.13	1.69
SEER 15 +	0.93	1.19	2.30	1.41
SEER 16 (and EER 13)	0.82	1.08	2.13	1.14
ENERGY STAR Qualified Room Air Conditioner	0.50	1.13	1.47	0.69
Geothermal Heat Pump	0.39	2.01	3.18	0.87
Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)				
Interior Lighting				
Change a Light Rebate Program (or similar program)	0.95	17.96	16.84	17.30
Residential Water Heating (low income included)				
High Efficiency Water Heater				
50-79 gallon	1.06	1.16	2.09	1.59
80 gallon+	1.24	1.71	3.15	2.62
Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
Flow Restrictors - Shower	0.29	20.76	4.95	6.16
Tank Insulation	0.33	8.71	14.04	3.50
Pipe Insulation	0.38	38.59	11.82	15.52
Residential Appliances (low income included)				
ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.72	0.62
ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
ENERGY STAR Qualified Refrigerator	0.32	2.72	1.47	1.07
ENERGY STAR Qualified Freezer	0.35	3.13	1.22	1.27
Appliance Recycling				
Refrigerator	0.50	4.87	7.35	2.93
Freezer	0.52	3.29	5.12	2.05
Window AC Unit	0.55	0.43	1.20	0.29
Additional Low Income				
Energy Efficiency Kits	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only				
Weatherization Rebates				
Ceiling (Bring up to R-38) - Elect. Heat Only	0.24	3.81	1.23	1.24

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting				
Interior Lighting				
Change a Light Rebate Program	0.67	10.95	10.63	7.47
High Efficiency Interior Lighting				
T-8 or 46" T5 - 4 ft	0.66	3.90	5.31	2.78
CFL lamps - Energy Star- 9W and up	0.67	10.95	10.63	7.47
Metal Halide Lamps	0.71	2.25	3.97	1.80
Ag/Commercial & Industrial Heating and Cooling				
Geothermal Heat Pump	0.39	2.01	3.19	0.87
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Water Heating				
High-Efficiency Water Heater				
80 gallon+	1.24	1.71	3.16	2.63
Ag/Commercial & Industrial Motors				
Premium Motors Rebate Program - NEMA	0.33	7.24	4.84	2.89
Variable Speed Drive Motor Incentive	0.33	7.24	4.84	2.89

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs				
Water Heater Load Control	#	#	#	#
Air Conditioning Load Control	#	#	#	#
Space Heating Load Control (Interruptible)	#	#	#	#
Dual-Fuel Space Heating	#	#	#	#
Irrigation				
Load Control	#	#	#	#
Industrial Interruptible Price	#	#	#	#
III. Energy Audit & Technical Support Programs				
Expert Energy Services - Agricultural				
Expert Energy Services - C&I				
Energy Audit Services - Residential *				
IV. Educational & Research Programs				
Domestic Water Heater Enhancement				
Member Information and Education				
Peak Alert				
Living with Energy in Iowa				
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Osceola Electric Cooperative, Inc.

BACKGROUND

Osceola Electric Cooperative, Inc., (Osceola Electric), formed in 1938, provides reliable electric service to a rural region in northwestern Iowa. Osceola Electric organized in 1938 under the guidelines of the Rural Electrification Administration.

Osceola Electric a small town not-for-profit cooperative, based out of Sibley, Iowa. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates.

Osceola Electric is governed by a seven member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Osceola, Dickinson, Lyon and O'Brien counties. The cooperative provides electric service to 900 member-consumers. Osceola Electric serves a chicken egg laying facility, an ethanol plant, a rural water treatment facility, two dairy facilities plus various agriculture related services. The remaining member-consumers are residential and farms of varying size.

Osceola Electric serves the member-consumers with a staff of 9 employees. Osceola Electric has 2.4 electric services per mile of distribution line.

Osceola Electric procures power supply from L & O Power Cooperative (L & O). L & O purchases power from Western Area Power Administration and Basin Electric Power Cooperative. The members of L & O joined together with the members of Northwest Iowa Power Cooperative in 2008 to perform an assessment of potential for energy efficiency with the assistance of Power Systems Engineering.

The Website for Osceola Electric is <http://www.osceolaelectric.com>. The website is one of the mechanisms used to promote energy efficiency programs. Other ways Osceola Electric promotes energy efficiency is by co-sponsoring the Doug Rye radio show "Home Remedies" on two different radio stations and publishing various articles in our monthly newsletter as well as providing the magazine "Living with Energy in Iowa" to our member-consumers.

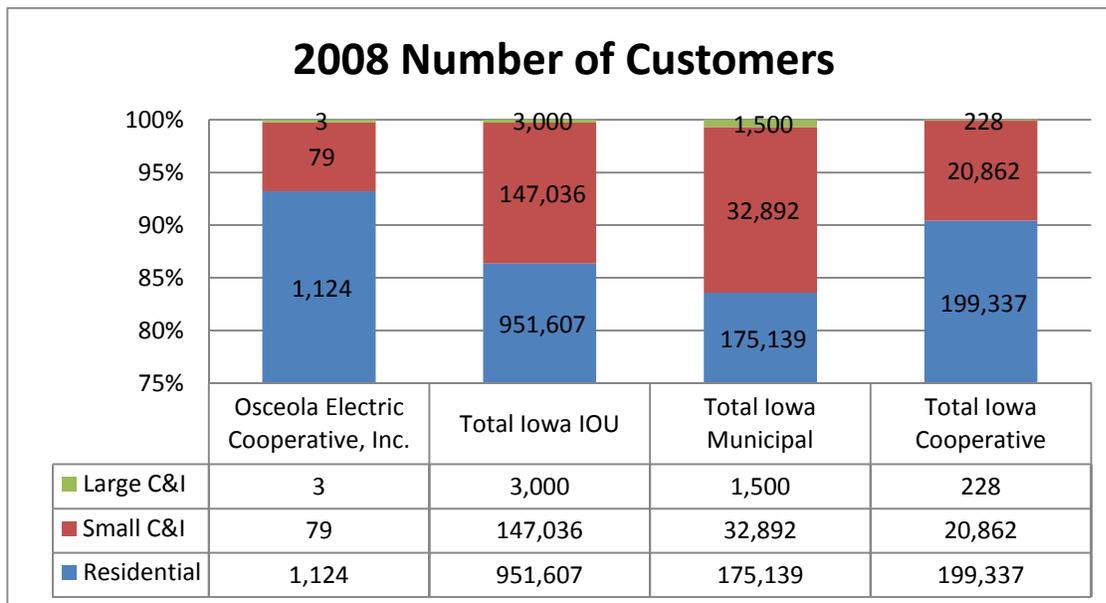
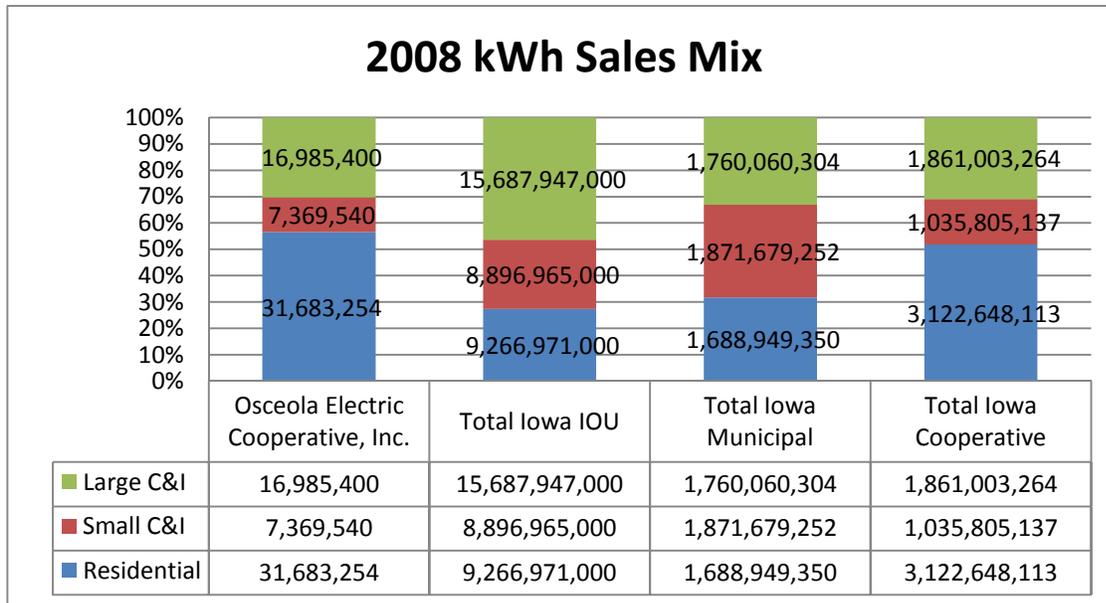
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Osceola Electric Cooperative itself. This illustrates that making any comparison of Osceola Electric's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customer mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Osceola Electric has been committed to supply side and demand side energy efficiency for many years. Osceola Electric in conjunction with L & O Power has invested in demand side energy efficiency programs. Osceola Electric has invested \$94,769.59 in demand side energy efficiency equipment. There were additional investments of labor not itemized in this report for the programs from 1992 through 2006. Going forward, Osceola Electric has a planned demand side investment of \$534,000 for 2010 through 2014. Some of the new energy efficiency measures offered to members include upgrading load control switches, continued promotion of high efficiency electric water heaters and new rebate offerings in the future.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	15	\$2,438	45,765	9,212	3,269
	SEER 14.5 (and EER 12)	7	\$875	17,949	3,297	1,282
	SEER 15 +	7	\$1,313	23,170	4,256	1,655
	SEER 16 (and EER 13)	1	\$250	4,646	1,659	332
	ENERGY STAR Qualified Room Air Conditioner	17	\$531	11,039	3,175	1,227
	Geothermal Heat Pump	8	\$19,600	2,124,629	278,858	106,231
	Air Source Heat Pump	75	\$56,250	8,836,155	1,720,105	589,077
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	10,069	\$25,173	4,813,757	1,906,741	659,419
	Local CFL Rebate Program(s)	3,500	\$8,750	1,673,270	687,645	229,215
Exterior Lighting						
	High Efficiency Exterior Lighting	40	\$10,000	89,133	48,618	16,206
	High Pressure Sodium - 100+ W	40	\$10,000	89,133	48,618	16,206
Residential Water Heating (low income included)						
	High Efficiency Water Heater	200	\$68,750	900,765	174,148	60,051
	50-79 gallon	100	\$31,250	346,320	66,955	23,088
	80 gallon+	100	\$37,500	554,445	107,193	36,963
	Flow Restrictors - Faucet	204	\$4,565	680,679	222,444	75,631
	Flow Restrictors - Shower	184	\$8,234	1,164,168	316,350	116,417
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	85	\$5,313	207,570	54,390	18,870
	ENERGY STAR Qualified Dishwasher	50	\$1,563	64,713	17,649	5,883
	ENERGY STAR Qualified Refrigerator	24	\$750	37,962	7,065	2,531
	ENERGY STAR Qualified Freezer	9	\$281	10,040	1,636	669
	Appliance Recycling	160	\$10,750	1,429,769	476,590	158,863
	Refrigerator	80	\$5,375	864,734	288,245	96,082
	Freezer	80	\$5,375	565,034	188,345	62,782
Additional Low Income						
	Energy Efficiency Kits	100	\$2,500	1,016,982	338,994	112,998
Residential Total		14,740	\$225,446	23,106,395	6,263,619	2,156,557
Residential Average kWh Sales (3 yr Ave actual and projected)						157,776,621
Residential kWh Savings as percentage of Residential kWh Sales						1.4%

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	1,072	\$2,680	805,255	651,488	217,636
Exterior Lighting						
	High Efficiency Exterior Lighting	10	\$375	20,396	12,488	4,163
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	10	\$375	20,396	12,488	4,163
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	5	\$375	53,447	10,689	3,563
	Variable Speed Drive Motor Incentive	5	\$2,500	1,632,116	326,423	108,808
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	45	\$45,000	2,207,291	632,757	220,729
Ag, Commercial and Industrial Total		1,137	\$50,930	4,718,504	1,633,845	554,899
C & I Average kWh Sales (3 yr Ave actual and projected)**						135,276,598
C & I kWh Savings as percentage of C & I kWh Sales						0.4%

II. Demand Response Programs						
	Water Heater Load Control	2,875	\$172,500			
Crop Drying						
	Load Control	40				
Irrigation						
	Load Control	60				
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	100	\$31,250			
IV. Educational & Research Programs						
	Member Information and Education	4,500	\$12,375			
	Living with Energy in Iowa	4,500	\$21,600			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,500	\$20,250			
TOTAL		32,452	\$534,351	27,824,899	7,897,464	2,711,456
Total Average kWh Sales (3 yr Ave actual and projected)**						293,053,219
Total kWh Savings as percentage of Total kWh Sales						0.9%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	3	\$563	10,521	751	1
	SEER 14.5 (and EER 12)	1	\$125	2,564	183	0
	SEER 15 +	1	\$188	3,310	236	0
	SEER 16 (and EER 13)	1	\$250	4,646	332	0
	ENERGY STAR Qualified Room Air Conditioner	2	\$63	1,299	144	0
	Geothermal Heat Pump	1	\$2,450	265,579	13,279	2
	Air Source Heat Pump	14	\$10,500	1,649,416	109,961	14
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,823	\$4,558	871,534	119,388	109
	Local CFL Rebate Program(s)	700	\$1,750	334,654	45,843	42
Exterior Lighting						
	High Efficiency Exterior Lighting	8	\$2,000	17,827	3,241	1
	High Pressure Sodium - 100+ W	8	\$2,000	17,827	3,241	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	36	\$12,375	162,138	10,809	1
	50-79 gallon	18	\$5,625	62,338	4,156	1
	80 gallon+	18	\$6,750	99,800	6,653	1
	Flow Restrictors - Faucet	40	\$895	133,466	14,830	1
	Flow Restrictors - Shower	20	\$895	126,540	12,654	1
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	15	\$938	36,630	3,330	1
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	4	\$125	6,327	422	0
	ENERGY STAR Qualified Freezer	1	\$31	1,116	74	0
	Appliance Recycling	32	\$2,150	285,954	31,773	5
	Refrigerator	16	\$1,075	172,947	19,216	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	20	\$500	203,396	22,600	3
Residential Total		2,729	\$40,104	4,119,338	390,276	182
Residential Average kWh Sales (3 yr Ave actual and projected)					30,995,851	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	215	\$538	161,502	43,649	13
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$75	4,079	833	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	2	\$75	4,079	833	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$75	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	8	\$8,000	392,407	39,241	8
Ag, Commercial and Industrial Total		227	\$9,188	895,101	106,196	23
C & I Average kWh Sales (3 yr Ave actual and projected)**					26,785,868	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
	Water Heater Load Control	575	\$34,500			288
Crop Drying						
	Load Control	8				16
Irrigation						
	Load Control	12				79
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$6,250			
IV. Educational & Research Programs						
	Member Information and Education	900	\$2,425			
	Living with Energy in Iowa	900	\$4,320			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	900	\$3,950			
TOTAL		6,271	\$100,736	5,014,438	496,472	588
Total Average kWh Sales (3 yr Ave actual and projected)**					57,781,719	
Total kWh Savings as percentage of Total kWh Sales					0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	2	\$313	5,874	420	1
	SEER 14.5 (and EER 12)	1	\$125	2,564	183	0
	SEER 15 +	1	\$188	3,310	236	0
	SEER 16 (and EER 13)					
	ENERGY STAR Qualified Room Air Conditioner	3	\$94	1,948	216	0
	Geothermal Heat Pump	1	\$2,450	265,579	13,279	2
	Air Source Heat Pump	14	\$10,500	1,649,416	109,961	14
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,877	\$4,693	897,351	122,925	113
	Local CFL Rebate Program(s)	700	\$1,750	334,654	45,843	42
Exterior Lighting						
	High Efficiency Exterior Lighting	8	\$2,000	17,827	3,241	1
	High Pressure Sodium - 100+ W	8	\$2,000	17,827	3,241	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	38	\$13,063	171,145	11,410	2
	50-79 gallon	19	\$5,938	65,801	4,387	1
	80 gallon+	19	\$7,125	105,345	7,023	1
	Flow Restrictors - Faucet	38	\$850	126,793	14,088	1
	Flow Restrictors - Shower	38	\$1,701	240,426	24,043	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	16	\$1,000	39,072	3,552	1
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	4	\$125	6,327	422	0
	ENERGY STAR Qualified Freezer	1	\$31	1,116	74	0
	Appliance Recycling	32	\$2,150	285,954	31,773	5
	Refrigerator	16	\$1,075	172,947	19,216	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	20	\$500	203,396	22,600	3
Residential Total		2,802	\$41,531	4,259,819	405,022	186
Residential Average kWh Sales (3 yr Ave actual and projected)					31,664,732	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	212	\$530	159,248	43,040	13
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$75	4,079	833	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	2	\$75	4,079	833	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$75	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	8	\$8,500	392,407	39,241	8
Ag, Commercial and Industrial Total		224	\$9,680	892,847	105,587	23
C & I Average kWh Sales (3 yr Ave actual and projected)**					26,294,397	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
	Water Heater Load Control	575	\$34,500			288
Crop Drying						
	Load Control	8				16
Irrigation						
	Load Control	12				79
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$6,250			
IV. Educational & Research Programs						
	Member Information and Education	900	\$2,450			
	Living with Energy in Iowa	900	\$4,320			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	900	\$4,000			
TOTAL		6,341	\$102,731	5,152,666	510,610	592
Total Average kWh Sales (3 yr Ave actual and projected)**					57,959,129	
Total kWh Savings as percentage of Total kWh Sales					0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	2	\$313	5,874	420	1
	SEER 14.5 (and EER 12)	1	\$125	2,564	183	0
	SEER 15 +	1	\$188	3,310	236	0
	SEER 16 (and EER 13)					
	ENERGY STAR Qualified Room Air Conditioner	3	\$94	1,948	216	0
	Geothermal Heat Pump	2	\$4,900	531,157	26,558	3
	Air Source Heat Pump	15	\$11,250	1,767,231	117,815	15
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,000	\$5,000	956,154	130,980	120
	Local CFL Rebate Program(s)	700	\$1,750	334,654	45,843	42
Exterior Lighting						
	High Efficiency Exterior Lighting	8	\$2,000	17,827	3,241	1
	High Pressure Sodium - 100+ W	8	\$2,000	17,827	3,241	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	40	\$13,750	180,153	12,010	2
	50-79 gallon	20	\$6,250	69,264	4,618	1
	80 gallon+	20	\$7,500	110,889	7,393	1
	Flow Restrictors - Faucet	40	\$895	133,466	14,830	1
	Flow Restrictors - Shower	40	\$1,790	253,080	25,308	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	17	\$1,063	41,514	3,774	1
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	5	\$156	7,909	527	0
	ENERGY STAR Qualified Freezer	2	\$63	2,231	149	0
	Appliance Recycling	32	\$2,150	285,954	31,773	5
	Refrigerator	16	\$1,075	172,947	19,216	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	20	\$500	203,396	22,600	3
Residential Total		2,936	\$45,985	4,735,491	437,220	197
Residential Average kWh Sales (3 yr Ave actual and projected)					31,676,137	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	213	\$533	159,999	43,243	13
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$75	4,079	833	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	2	\$75	4,079	833	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$75	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	9	\$9,000	441,458	44,146	9
Ag, Commercial and Industrial Total		226	\$10,183	942,649	110,696	24
C & I Average kWh Sales (3 yr Ave actual and projected)**					27,248,333	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
	Water Heater Load Control	575	\$34,500			288
Crop Drying						
	Load Control	8				16
Irrigation						
	Load Control	12				79
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$6,250			
IV. Educational & Research Programs						
	Member Information and Education	900	\$2,475			
	Living with Energy in Iowa	900	\$4,320			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	900	\$4,050			
TOTAL		6,477	\$107,763	5,678,140	547,916	604
Total Average kWh Sales (3 yr Ave actual and projected)**					58,924,471	
Total kWh Savings as percentage of Total kWh Sales					0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	4	\$625	11,748	839	1
	SEER 14.5 (and EER 12)	2	\$250	5,128	366	0
	SEER 15 +	2	\$375	6,620	473	1
	SEER 16 (and EER 13)					
	ENERGY STAR Qualified Room Air Conditioner	4	\$125	2,597	289	0
	Geothermal Heat Pump	2	\$4,900	531,157	26,558	3
	Air Source Heat Pump	16	\$12,000	1,885,046	125,670	16
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,123	\$5,308	1,014,957	139,035	127
	Local CFL Rebate Program(s)	700	\$1,750	334,654	45,843	42
Exterior Lighting						
	High Efficiency Exterior Lighting	8	\$2,000	17,827	3,241	1
	High Pressure Sodium - 100+ W	8	\$2,000	17,827	3,241	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	42	\$14,438	189,161	12,611	2
	50-79 gallon	21	\$6,563	72,727	4,848	1
	80 gallon+	21	\$7,875	116,433	7,762	1
	Flow Restrictors - Faucet	42	\$940	140,140	15,571	1
	Flow Restrictors - Shower	42	\$1,880	265,734	26,573	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,125	43,956	3,996	1
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	5	\$156	7,909	527	0
	ENERGY STAR Qualified Freezer	2	\$63	2,231	149	0
	Appliance Recycling	32	\$2,150	285,954	31,773	5
	Refrigerator	16	\$1,075	172,947	19,216	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	20	\$500	203,396	22,600	3
Residential Total		3,070	\$48,271	4,949,410	456,451	206
Residential Average kWh Sales (3 yr Ave actual and projected)					31,634,922	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	215	\$538	161,502	43,649	13
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$75	4,079	833	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	2	\$75	4,079	833	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$75	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$9,500	490,509	49,051	10
Ag, Commercial and Industrial Total		229	\$10,688	993,202	116,007	25
C & I Average kWh Sales (3 yr Ave actual and projected)**					27,398,000	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
	Water Heater Load Control	575	\$34,500			288
Crop Drying						
	Load Control	8				16
Irrigation						
	Load Control	12				79
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$6,250			
IV. Educational & Research Programs						
	Member Information and Education	900	\$2,500			
	Living with Energy in Iowa	900	\$4,320			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	900	\$4,100			
TOTAL		6,614	\$110,628	5,942,613	572,458	614
Total Average kWh Sales (3 yr Ave actual and projected)**					59,032,922	
Total kWh Savings as percentage of Total kWh Sales					1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Osceola Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	4	\$625	11,748	839	1
	SEER 14.5 (and EER 12)	2	\$250	5,128	366	0
	SEER 15 +	2	\$375	6,620	473	1
	SEER 16 (and EER 13)					
	ENERGY STAR Qualified Room Air Conditioner	5	\$156	3,247	361	0
	Geothermal Heat Pump	2	\$4,900	531,157	26,558	3
	Air Source Heat Pump	16	\$12,000	1,885,046	125,670	16
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,246	\$5,615	1,073,761	147,091	135
	Local CFL Rebate Program(s)	700	\$1,750	334,654	45,843	42
Exterior Lighting						
	High Efficiency Exterior Lighting	8	\$2,000	17,827	3,241	1
	High Pressure Sodium - 100+ W	8	\$2,000	17,827	3,241	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	44	\$15,125	198,168	13,211	2
	50-79 gallon	22	\$6,875	76,190	5,079	1
	80 gallon+	22	\$8,250	121,978	8,132	1
	Flow Restrictors - Faucet	44	\$985	146,813	16,313	1
	Flow Restrictors - Shower	44	\$1,969	278,388	27,839	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	19	\$1,188	46,398	4,218	2
	ENERGY STAR Qualified Dishwasher	10	\$313	12,943	1,177	1
	ENERGY STAR Qualified Refrigerator	6	\$188	9,491	633	0
	ENERGY STAR Qualified Freezer	3	\$94	3,347	223	0
	Appliance Recycling	32	\$2,150	285,954	31,773	5
	Refrigerator	16	\$1,075	172,947	19,216	3
	Freezer	16	\$1,075	113,007	12,556	2
Additional Low Income						
	Energy Efficiency Kits	20	\$500	203,396	22,600	3
Residential Total		3,203	\$49,556	5,042,337	467,588	214
Residential Average kWh Sales (3 yr Ave actual and projected)					31,804,978	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	217	\$543	163,004	44,055	13
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$75	4,079	833	0
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	2	\$75	4,079	833	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$75	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$500	326,423	21,762	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$10,000	490,509	49,051	10
Ag, Commercial and Industrial Total		231	\$11,193	994,705	116,413	25
C & I Average kWh Sales (3 yr Ave actual and projected)**					27,550,000	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
	Water Heater Load Control	575	\$34,500			288
Crop Drying						
	Load Control	8				16
Irrigation						
	Load Control	12				79
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$6,250			
IV. Educational & Research Programs						
	Member Information and Education	900	\$2,525			
	Living with Energy in Iowa	900	\$4,320			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	900	\$4,150			
TOTAL		6,749	\$112,494	6,037,042	584,000	622
Total Average kWh Sales (3 yr Ave actual and projected)**					59,354,978	
Total kWh Savings as percentage of Total kWh Sales					1.0%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Osceola Electric Cooperative, Inc.		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	1.25	1.02	3.08	1.65
	SEER 15 +	1.02	1.05	2.30	1.39
	SEER 16 (and EER 13)	0.89	0.95	2.05	1.10
	ENERGY STAR Qualified Room Air Conditioner	0.53	0.99	1.36	0.64
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.95	13.75	15.16	13.54
	Local CFL Rebate Program(s)	0.95	13.75	15.16	13.54
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.34	2.48	0.87	0.90
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	0.93	1.30	1.66	1.54
	80 gallon+	1.15	1.82	2.62	2.56
	Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.29	20.76	4.95	6.16
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.66	0.61
	ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.32	2.72	1.46	1.07
	ENERGY STAR Qualified Freezer	0.35	3.13	1.21	1.27
	Appliance Recycling				
	Refrigerator	0.49	4.87	6.40	2.80
	Freezer	0.51	3.29	4.47	1.96
Additional Low Income					
	Energy Efficiency Kits	0.33	30.97	8.31	10.24

Residential Total
Residential Average kWh Sales (3 yr Ave actual and projected)
Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.67	10.95	10.63	7.47
Exterior Lighting					
	High Efficiency Exterior Lighting				
	Pulse start metal halide fixtures - >=250 Watt RETRO ONLY	0.23	3.05	1.16	0.75
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.43	7.03	4.70	3.56
	Variable Speed Drive Motor Incentive	0.26	6.65	12.02	2.19
Ag/Commercial & Industrial Custom Rebates					
	Custom Rebate Program	0.41	2.13	1.94	1.07

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
Crop Drying					
	Load Control	#	#	#	#
Irrigation					
	Load Control	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

Pella Cooperative Electric Association

BACKGROUND

Pella Cooperative Electric Association is a not for profit electric distribution cooperative with headquarters in Pella, Iowa located approximately 40 miles southeast of Des Moines. Founded in 1936, Pella Cooperative Electric Association serves member-consumers in Marion, Jasper, Mahaska, Poweshiek and Warren counties. Reliable service is provided to 2,787 accounts using approximately 631 miles of line. Therefore, the Cooperative has a density of 4.42 member-consumers per mile of distribution line.

Pella Cooperative Electric Association serves 5 large commercial and industrial accounts. PCEA also serves 211 accounts classified as small commercial and industrial. The remainder of the accounts, 2,571, fall into the residential and/or farm category.

The 5 commercial and industrial accounts include metal fabrication plants, an underground limestone mine, and a large assisted and independent living facility. The small commercial and industrial accounts include Corps of Engineers campgrounds around Lake Red Rock, churches, a hotel, convenience center, and fast food establishments. Most of the commercial and industrial accounts are relatively new and were constructed from the late 1990's to the present.

Pella Cooperative Electric Association is governed by a seven-member board of directors selected by and from the member-consumers served by the electric cooperative. 14 full time employees serve the membership. The Cooperative purchases their power through Central Iowa Power Cooperative (CIPCO), headquartered in Cedar Rapids, Iowa.

The Cooperative website is www.pella-cea.org. Our website promotes our energy efficiency programs, including rebates, renewable energy, and the interconnection process for co-generation.

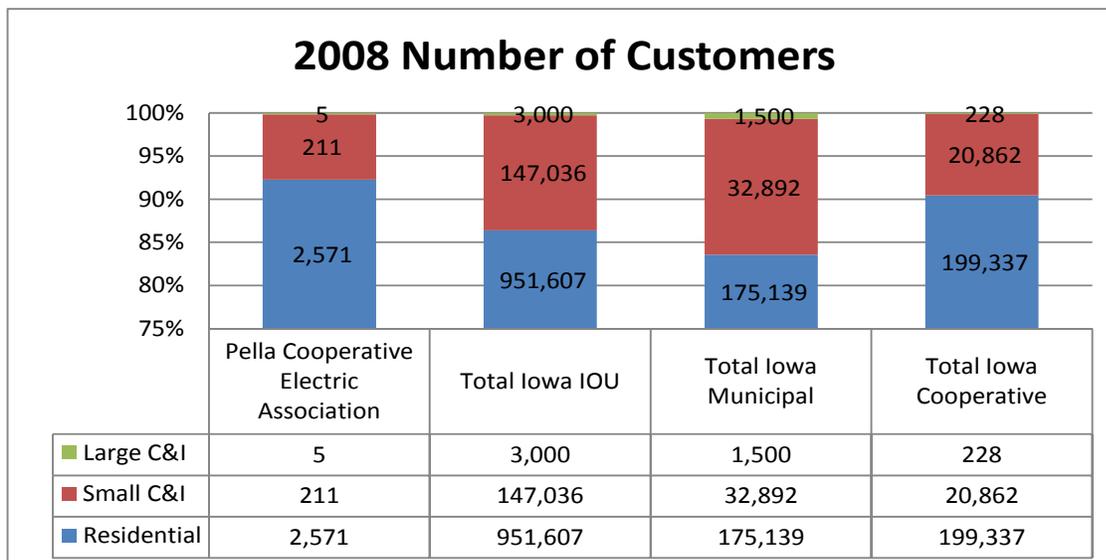
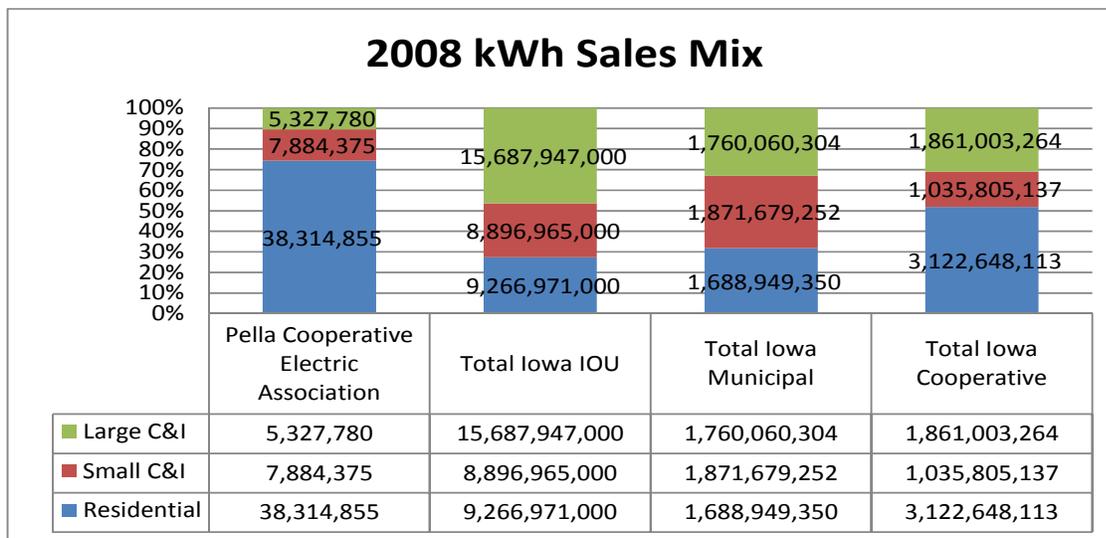
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Pella Cooperative Electric itself. This illustrates that making any comparison of Pella's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

Pella Cooperative Electric has been committed to supply side and demand side energy efficiency for many years. Pella Cooperative Electric has invested \$1,940,845.00 in demand side energy efficiency programs from 1992 through 2007. Going forward, Pella Cooperative Electric has a planned demand side investment of \$819,734 for 2010 through 2014. In 2010, our board of directors has approved offering more than 90 distinct energy efficiency programs for our members. Some of the energy efficiency measures offered to members include rebates on appliances, geothermal systems, air source heat pumps, and lighting. We will also have rebates for weatherization and Energy Star windows and doors. PCEA also plans on participating in an appliance recycling program for it's' members. This is just a small list of the programs available to residential members. The Cooperative will also offer several dozen programs for our commercial and agricultural members, though participation in these programs is expected to be low because the vast majority of our system is residential members.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	92	\$241,712	24,259,337	3,441,134	1,212,967
	Air Source Heat Pump	45	\$31,171	5,263,960	1,052,792	350,931
	Residential Contractor Rebates	151	\$30,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	5,134	\$13,346	2,436,979	1,038,757	333,833
	Local CFL Rebate Program(s)	3,981	\$10,349	1,889,679	805,451	258,860
	T8 or better Lighting Fixtures	1,502	\$17,051	844,926	146,285	51,520
	2 ft. T8 or better Fixture w/ electronic ballasts	313	\$1,624	28,286	4,899	1,725
	4 ft. T8 or better Fixture w/ electronic ballasts	1,189	\$15,427	816,639	141,386	49,795
	ENERGY STAR Ceiling Fan	10	\$195	29,955	4,993	1,664
Residential Water Heating (low income included)						
	High Efficiency Water Heater	300	\$42,852	1,155,552	228,818	77,037
	50-79 gallon	240	\$31,163	825,252	162,758	55,017
	80 gallon+	60	\$11,689	330,299	66,060	22,020
	Heat Pump Water Heater - (Integrated)	21	\$13,587	481,860	97,519	40,155
	Flow Restrictors - Faucet	183	\$7,121	606,263	188,468	67,363
	Flow Restrictors - Shower	183	\$11,868	1,149,601	321,637	114,960
	Tank Insulation	15	\$292	25,459	7,638	2,546
	Pipe Insulation	15	\$292	26,533	5,307	1,769
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	90	\$6,364	218,216	59,513	19,838
	ENERGY STAR Qualified Dishwasher	60	\$1,948	77,103	21,028	7,009
	ENERGY STAR Qualified Refrigerator	135	\$4,381	212,016	41,356	14,134
	ENERGY STAR Qualified Dehumidifier	60	\$1,948	169,018	42,255	14,085
	ENERGY STAR Qualified Freezer	55	\$1,786	60,919	12,184	4,061
	Appliance Recycling	235	\$17,971	2,522,079	828,768	280,231
	Refrigerator	235	\$17,971	2,522,079	828,768	280,231
	Efficient Television	55	\$2,854	109,108	25,624	9,092
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	32	\$20,760	1,058,016	100,291	35,267
	Advanced Lighting Package	5	\$1,299	42,982	6,447	2,149
Additional Low Income						
	Energy Efficiency Kits	21	\$957	212,879	81,097	23,653
	Weatherization Rebates	10	\$1,948	46,454	4,645	1,548
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$974	23,805	2,381	794
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	5	\$974	22,648	2,265	755
Building Shell - Existing Home Only						
	Weatherization Rebates	133	\$37,494	1,800,495	179,829	60,769
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$6,429	453,624	45,362	15,121
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	54	\$8,671	257,098	24,440	8,570
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,793	433,787	43,379	14,460
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	49	\$9,536	221,952	20,987	7,398
	Foundation (Bring Up to R-10)	5	\$3,896	321,207	32,121	10,707
	Infiltration Control	5	\$1,169	112,827	13,539	4,513
Residential Total		12,523	\$519,748	44,699,388	8,741,835	2,985,441
Residential Average kWh Sales (3 yr Ave actual and projected)						189,173,197
Residential kWh Savings as percentage of Residential kWh Sales						1.6%

		2010-2014				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	768	\$1,996	414,404	358,376	115,112
	High Efficiency Interior Lighting	1,276	\$22,262	1,531,891	834,732	294,880
	T-8 or 46" T5 - 4 ft	591	\$15,333	817,042	358,579	127,663
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	22	\$2,568	123,032	44,303	15,978
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	48	\$2,988	240,736	87,280	31,264
	CFL lamps - Energy Star- 9W and up	605	\$1,178	298,180	328,699	114,685
	Occupancy Sensors - Must control >150 Watts	10	\$195	52,901	15,870	5,290
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	20	\$9,121	851,703	149,048	42,585
	Commercial Contractor Rebate (GS & AS)	20	\$1,042			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	5	\$7,793	1,851,197	370,239	123,413
Agricultural						
	Livestock Ventilation Fans	32	\$3,801	168,859	40,016	14,072
	36"-47"	32	\$3,801	168,859	40,016	14,072
	Circulating Fans -- BESS Lab Ratings	22	\$1,045	86,995	20,101	7,250
	36"-47"	22	\$1,045	86,995	20,101	7,250
	Efficient Livestock Waterers	5	\$325	47,346	11,837	3,946
	Hog Farrowing - Heat Lamps (<= 175W)	42	\$164	27,958	20,136	6,990
	Hog Farrowing - Single Crate Heating Pads (<=85W)	5	\$162	9,974	2,992	997
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	5	\$82,217	6,697,440	1,519,245	506,415
Ag, Commercial and Industrial Total		2,200	\$129,929	11,687,768	3,326,723	1,115,659
C & I Average kWh Sales (3 yr Ave actual and projected)**						74,926,624
C & I kWh Savings as percentage of C & I kWh Sales						1.5%

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	25	\$7,500			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$5,000			
	Expert Energy Services - C&I	5	\$5,000			
IV. Educational & Research Programs						
	Member Information and Education	14,690	\$151,701			
	Peak Alert	14,690	\$856			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$28,845			
TOTAL		44,138	\$848,579	56,387,155	12,068,558	4,101,100
Total Average kWh Sales (3 yr Ave actual and projected)**						264,099,821
Total kWh Savings as percentage of Total kWh Sales						1.55%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	15	\$39,967	3,955,327	197,766	6
	Air Source Heat Pump	9	\$6,316	1,052,792	70,186	3
	Residential Contractor Rebates	24	\$4,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,109	\$2,918	526,414	72,112	67
	Local CFL Rebate Program(s)	860	\$2,263	408,220	55,921	52
	T8 or better Lighting Fixtures	249	\$2,866	140,005	8,537	2
	2 ft. T8 or better Fixture w/ electronic ballasts	52	\$274	4,699	287	
	4 ft. T8 or better Fixture w/ electronic ballasts	197	\$2,592	135,305	8,250	2
	ENERGY STAR Ceiling Fan	2	\$39	5,991	333	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	58	\$8,421	224,233	14,949	2
	50-79 gallon	46	\$6,053	158,173	10,545	1
	80 gallon+	12	\$2,368	66,060	4,404	1
	Heat Pump Water Heater - (Integrated)	2	\$1,316	45,891	3,824	0
	Flow Restrictors - Faucet	27	\$1,066	89,449	9,939	1
	Flow Restrictors - Shower	27	\$1,776	169,613	16,961	1
	Tank Insulation	3	\$59	5,092	509	0
	Pipe Insulation	3	\$59	5,307	354	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,289	43,643	3,968	1
	ENERGY STAR Qualified Dishwasher	12	\$395	15,421	1,402	1
	ENERGY STAR Qualified Refrigerator	25	\$822	39,262	2,617	0
	ENERGY STAR Qualified Dehumidifier	12	\$395	33,804	2,817	0
	ENERGY STAR Qualified Freezer	11	\$362	12,184	812	0
	Appliance Recycling	45	\$3,441	482,951	53,661	9
	Refrigerator	45	\$3,441	482,951	53,661	9
	Efficient Television	9	\$474	17,854	1,488	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	5	\$3,289	165,315	5,511	1
	Advanced Lighting Package	1	\$263	8,596	430	0
Additional Low Income						
	Energy Efficiency Kits	5	\$230	50,686	5,632	1
	Weatherization Rebates	2	\$395	9,291	310	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$197	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$197	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	23	\$6,952	343,376	11,596	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,303	90,725	3,024	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	9	\$1,465	42,850	1,428	1
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,579	86,757	2,892	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	8	\$1,579	36,237	1,208	1
	Foundation (Bring Up to R-10)	1	\$789	64,241	2,141	0
	Infiltration Control	1	\$237	22,565	903	0
Residential Total		2,556	\$90,175	7,850,715	541,634	151
Residential Average kWh Sales (3 yr Ave actual and projected)					37,420,473	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

		2010				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	166	\$437	89,572	24,881	10
	High Efficiency Interior Lighting	200	\$3,350	233,408	45,761	1
	T-8 or 46" T5 - 4 ft	88	\$2,316	121,658	19,009	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	3	\$355	16,777	2,179	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	7	\$442	35,107	4,559	0
	CFL lamps - Energy Star- 9W and up	100	\$197	49,286	18,956	0
	Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	10	\$4,605	425,851	21,293	1
	Commercial Contractor Rebate (GS & AS)	10	\$526			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	1	\$1,579	370,239	24,683	2
Agricultural						
	Livestock Ventilation Fans	5	\$602	26,384	2,199	1
	36"-47"	5	\$602	26,384	2,199	1
	Circulating Fans -- BESS Lab Ratings	3	\$145	11,863	989	0
	36"-47"	3	\$145	11,863	989	0
	Efficient Livestock Waterers	1	\$66	9,469	789	
	Hog Farrowing - Heat Lamps (<= 175W)	7	\$28	4,660	1,165	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	1	\$33	1,995	199	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$16,658	1,339,488	101,283	10
Ag, Commercial and Industrial Total		405	\$28,029	2,512,930	223,241	25
C & I Average kWh Sales (3 yr Ave actual and projected)**					13,631,617	
C & I kWh Savings as percentage of C & I kWh Sales					1.6%	

II. Demand Response Programs						
	Commercial and Industrial Time-of-Day Price	5	\$1,500			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$1,000			
	Expert Energy Services - C&I	1	\$1,000			
IV. Educational & Research Programs						
	Member Information and Education	2,878	\$28,581			
	Peak Alert	2,878	\$172			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$5,769			
TOTAL		8,724	\$156,226	10,363,645	764,875	176
Total Average kWh Sales (3 yr Ave actual and projected)**					51,052,090	
Total kWh Savings as percentage of Total kWh Sales					1.50%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	17	\$45,000	4,482,704	224,135	7
	Air Source Heat Pump	9	\$6,275	1,052,792	70,186	3
	Residential Contractor Rebates	28	\$5,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,109	\$2,899	526,414	72,112	67
	Local CFL Rebate Program(s)	860	\$2,248	408,220	55,921	52
	T8 or better Lighting Fixtures	274	\$3,135	154,193	9,402	2
	2 ft. T8 or better Fixture w/ electronic ballasts	57	\$298	5,151	314	
	4 ft. T8 or better Fixture w/ electronic ballasts	217	\$2,837	149,042	9,088	2
	ENERGY STAR Ceiling Fan	2	\$39	5,991	333	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	59	\$8,497	227,672	15,178	2
	50-79 gallon	47	\$6,144	161,612	10,774	1
	80 gallon+	12	\$2,353	66,060	4,404	1
	Heat Pump Water Heater - (Integrated)	3	\$1,961	68,837	5,736	1
	Flow Restrictors - Faucet	34	\$1,333	112,639	12,515	1
	Flow Restrictors - Shower	34	\$2,222	213,587	21,359	2
	Tank Insulation	3	\$59	5,092	509	0
	Pipe Insulation	3	\$59	5,307	354	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,281	43,643	3,968	1
	ENERGY STAR Qualified Dishwasher	12	\$392	15,421	1,402	1
	ENERGY STAR Qualified Refrigerator	26	\$850	40,833	2,722	0
	ENERGY STAR Qualified Dehumidifier	12	\$392	33,804	2,817	0
	ENERGY STAR Qualified Freezer	11	\$359	12,184	812	0
	Appliance Recycling	46	\$3,518	493,683	54,854	9
	Refrigerator	46	\$3,518	493,683	54,854	9
	Efficient Television	10	\$523	19,838	1,653	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	6	\$3,922	198,378	6,613	1
	Advanced Lighting Package	1	\$261	8,596	430	0
Additional Low Income						
	Energy Efficiency Kits	6	\$275	60,823	6,758	1
	Weatherization Rebates	2	\$392	9,291	310	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$196	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$196	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$7,265	352,666	11,906	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,294	90,725	3,024	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	10	\$1,618	47,611	1,587	1
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,569	86,757	2,892	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	9	\$1,765	40,767	1,359	1
	Foundation (Bring Up to R-10)	1	\$784	64,241	2,141	0
	Infiltration Control	1	\$235	22,565	903	0
Residential Total		2,610	\$98,757	8,552,606	581,984	153
Residential Average kWh Sales (3 yr Ave actual and projected)					37,535,400	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

2011					
Estimated Achievable Potential Goals					
Pella Cooperative Electric Association	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	166	\$434	89,572	24,881	10
High Efficiency Interior Lighting	240	\$4,176	286,839	55,386	1
T-8 or 46" T5 - 4 ft	110	\$2,876	152,072	23,761	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	4	\$471	22,370	2,905	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	9	\$565	45,138	5,862	0
CFL lamps - Energy Star- 9W and up	115	\$225	56,679	21,800	0
Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,569	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	6	\$718	31,661	2,638	1
36"-47"	6	\$718	31,661	2,638	1
Circulating Fans -- BESS Lab Ratings	4	\$192	15,817	1,318	0
36"-47"	4	\$192	15,817	1,318	0
Efficient Livestock Waterers	1	\$65	9,469	789	
Hog Farrowing - Heat Lamps (<= 175W)	8	\$31	5,325	1,331	
Hog Farrowing - Single Crate Heating Pads (<=85W)	1	\$33	1,995	199	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	1	\$16,550	1,339,488	101,283	10
Ag, Commercial and Industrial Total	428	\$23,767	2,150,406	212,509	24
C & I Average kWh Sales (3 yr Ave actual and projected)**				13,883,329	
C & I kWh Savings as percentage of C & I kWh Sales				1.5%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	5	\$1,500			
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$1,000			
Expert Energy Services - C&I	1	\$1,000			
IV. Educational & Research Programs					
Member Information and Education	2,908	\$29,433			
Peak Alert	2,908	\$168			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$5,769			
TOTAL	8,861	\$161,393	10,703,012	794,493	177
Total Average kWh Sales (3 yr Ave actual and projected)**				51,418,729	
Total kWh Savings as percentage of Total kWh Sales				1.55%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	19	\$49,968	5,010,080	250,504	8
	Air Source Heat Pump	9	\$6,234	1,052,792	70,186	3
	Residential Contractor Rebates	31	\$6,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	1,054	\$2,738	500,307	68,535	63
	Local CFL Rebate Program(s)	817	\$2,122	387,809	53,125	49
	T8 or better Lighting Fixtures	307	\$3,488	172,683	10,529	2
	2 ft. T8 or better Fixture w/ electronic ballasts	64	\$332	5,784	353	
	4 ft. T8 or better Fixture w/ electronic ballasts	243	\$3,156	166,899	10,177	2
	ENERGY STAR Ceiling Fan	2	\$39	5,991	333	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	60	\$8,571	231,110	15,407	2
	50-79 gallon	48	\$6,234	165,050	11,003	1
	80 gallon+	12	\$2,338	66,060	4,404	1
	Heat Pump Water Heater - (Integrated)	4	\$2,597	91,783	7,649	1
	Flow Restrictors - Faucet	39	\$1,519	129,204	14,356	1
	Flow Restrictors - Shower	39	\$2,532	244,997	24,500	2
	Tank Insulation	3	\$58	5,092	509	0
	Pipe Insulation	3	\$58	5,307	354	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,273	43,643	3,968	1
	ENERGY STAR Qualified Dishwasher	12	\$390	15,421	1,402	1
	ENERGY STAR Qualified Refrigerator	27	\$877	42,403	2,827	0
	ENERGY STAR Qualified Dehumidifier	12	\$390	33,804	2,817	0
	ENERGY STAR Qualified Freezer	11	\$357	12,184	812	0
	Appliance Recycling	47	\$3,594	504,416	56,046	9
	Refrigerator	47	\$3,594	504,416	56,046	9
	Efficient Television	11	\$571	21,822	1,818	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	7	\$4,545	231,441	7,715	1
	Advanced Lighting Package	1	\$260	8,596	430	0
Additional Low Income						
	Energy Efficiency Kits	5	\$227	50,686	5,632	1
	Weatherization Rebates	2	\$390	9,291	310	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$195	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$195	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	27	\$7,573	361,957	12,216	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,286	90,725	3,024	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	11	\$1,768	52,372	1,746	1
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,558	86,757	2,892	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	10	\$1,948	45,296	1,510	1
	Foundation (Bring Up to R-10)	1	\$779	64,241	2,141	
	Infiltration Control	1	\$234	22,565	903	0
Residential Total		2,567	\$106,572	9,172,817	611,978	149
Residential Average kWh Sales (3 yr Ave actual and projected)					37,608,864	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

2012					
Estimated Achievable Potential Goals					
Pella Cooperative Electric Association	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	158	\$410	85,255	23,682	9
High Efficiency Interior Lighting	270	\$4,791	326,370	62,521	1
T-8 or 46" T5 - 4 ft	127	\$3,299	175,574	27,433	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	5	\$584	27,962	3,631	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	10	\$623	50,153	6,513	0
CFL lamps - Energy Star- 9W and up	126	\$245	62,100	23,885	0
Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,558	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	7	\$832	36,938	3,078	1
36"-47"	7	\$832	36,938	3,078	1
Circulating Fans -- BESS Lab Ratings	5	\$238	19,772	1,648	1
36"-47"	5	\$238	19,772	1,648	1
Efficient Livestock Waterers	1	\$65	9,469	789	
Hog Farrowing - Heat Lamps (<= 175W)	9	\$35	5,991	1,498	
Hog Farrowing - Single Crate Heating Pads (<=85W)	1	\$32	1,995	199	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	1	\$16,442	1,339,488	101,283	10
Ag, Commercial and Industrial Total	453	\$24,404	2,195,517	219,381	24
C & I Average kWh Sales (3 yr Ave actual and projected)**				14,658,138	
C & I kWh Savings as percentage of C & I kWh Sales				1.5%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	5	\$1,500			
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$1,000			
Expert Energy Services - C&I	1	\$1,000			
IV. Educational & Research Programs					
Member Information and Education	2,938	\$30,312			
Peak Alert	2,938	\$165			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$5,769			
TOTAL	8,903	\$170,723	11,368,334	831,359	174
Total Average kWh Sales (3 yr Ave actual and projected)**				52,267,002	
Total kWh Savings as percentage of Total kWh Sales				1.59%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	20	\$52,258	5,273,769	263,688	9
	Air Source Heat Pump	9	\$6,194	1,052,792	70,186	3
	Residential Contractor Rebates	33	\$6,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	970	\$2,503	460,434	63,073	58
	Local CFL Rebate Program(s)	752	\$1,941	356,955	48,898	45
	T8 or better Lighting Fixtures	331	\$3,737	186,185	11,353	3
	2 ft. T8 or better Fixture w/ electronic ballasts	69	\$356	6,236	380	
	4 ft. T8 or better Fixture w/ electronic ballasts	262	\$3,381	179,949	10,973	3
	ENERGY STAR Ceiling Fan	2	\$39	5,991	333	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	61	\$8,645	234,549	15,637	2
	50-79 gallon	49	\$6,323	168,489	11,233	1
	80 gallon+	12	\$2,323	66,060	4,404	1
	Heat Pump Water Heater - (Integrated)	5	\$3,226	114,729	9,561	1
	Flow Restrictors - Faucet	41	\$1,587	135,829	15,092	1
	Flow Restrictors - Shower	41	\$2,645	257,561	25,756	2
	Tank Insulation	3	\$58	5,092	509	0
	Pipe Insulation	3	\$58	5,307	354	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,265	43,643	3,968	1
	ENERGY STAR Qualified Dishwasher	12	\$387	15,421	1,402	1
	ENERGY STAR Qualified Refrigerator	28	\$903	43,974	2,932	0
	ENERGY STAR Qualified Dehumidifier	12	\$387	33,804	2,817	0
	ENERGY STAR Qualified Freezer	11	\$355	12,184	812	0
	Appliance Recycling	48	\$3,671	515,148	57,239	9
	Refrigerator	48	\$3,671	515,148	57,239	9
	Efficient Television	12	\$619	23,805	1,984	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	7	\$4,516	231,441	7,715	1
	Advanced Lighting Package	1	\$258	8,596	430	0
Additional Low Income						
	Energy Efficiency Kits	3	\$135	30,411	3,379	0
	Weatherization Rebates	2	\$387	9,291	310	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$194	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$194	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	29	\$7,877	371,248	12,525	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,277	90,725	3,024	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	12	\$1,916	57,133	1,904	1
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,548	86,757	2,892	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	11	\$2,129	49,826	1,661	1
	Foundation (Bring Up to R-10)	1	\$774	64,241	2,141	0
	Infiltration Control	1	\$232	22,565	903	0
Residential Total		2,454	\$110,252	9,428,158	619,951	142
Residential Average kWh Sales (3 yr Ave actual and projected)					38,059,315	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

2013					
Estimated Achievable Potential Goals					
Pella Cooperative Electric Association	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	145	\$374	78,240	21,733	9
High Efficiency Interior Lighting	283	\$4,988	342,637	65,606	1
T-8 or 46" T5 - 4 ft	133	\$3,432	183,869	28,730	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	5	\$581	27,962	3,631	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	11	\$681	55,169	7,165	0
CFL lamps - Energy Star- 9W and up	132	\$255	65,057	25,022	0
Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	10	\$4,516	425,851	21,293	1
Commercial Contractor Rebate (GS & AS)	10	\$516			
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,548	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	7	\$827	36,938	3,078	1
36"-47"	7	\$827	36,938	3,078	1
Circulating Fans -- BESS Lab Ratings	5	\$236	19,772	1,648	1
36"-47"	5	\$236	19,772	1,648	1
Efficient Livestock Waterers	1	\$65	9,469	789	
Hog Farrowing - Heat Lamps (<= 175W)	9	\$35	5,991	1,498	
Hog Farrowing - Single Crate Heating Pads (<=85W)	1	\$32	1,995	199	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	1	\$16,336	1,339,488	101,283	10
Ag, Commercial and Industrial Total	473	\$29,474	2,630,621	241,810	25
C & I Average kWh Sales (3 yr Ave actual and projected)**				15,811,614	
C & I kWh Savings as percentage of C & I kWh Sales				1.5%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	5	\$1,500			
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$1,000			
Expert Energy Services - C&I	1	\$1,000			
IV. Educational & Research Programs					
Member Information and Education	2,968	\$31,219			
Peak Alert	2,968	\$170			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$5,769			
TOTAL	8,870	\$180,384	12,058,779	861,761	166
Total Average kWh Sales (3 yr Ave actual and projected)**				53,870,928	
Total kWh Savings as percentage of Total kWh Sales				1.60%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Pella Cooperative Electric Association		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Geothermal Heat Pump	21	\$54,519	5,537,457	276,873	9
	Air Source Heat Pump	9	\$6,154	1,052,792	70,186	3
	Residential Contractor Rebates	35	\$7,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	892	\$2,287	423,410	58,001	54
	Local CFL Rebate Program(s)	692	\$1,774	328,475	44,997	42
	T8 or better Lighting Fixtures	341	\$3,826	191,860	11,699	3
	2 ft. T8 or better Fixture w/ electronic ballasts	71	\$364	6,416	391	
	4 ft. T8 or better Fixture w/ electronic ballasts	270	\$3,462	185,444	11,308	3
	ENERGY STAR Ceiling Fan	2	\$38	5,991	333	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	62	\$8,718	237,987	15,866	2
	50-79 gallon	50	\$6,410	171,928	11,462	2
	80 gallon+	12	\$2,308	66,060	4,404	1
	Heat Pump Water Heater - (Integrated)	7	\$4,487	160,620	13,385	1
	Flow Restrictors - Faucet	42	\$1,615	139,142	15,460	1
	Flow Restrictors - Shower	42	\$2,692	263,843	26,384	2
	Tank Insulation	3	\$58	5,092	509	0
	Pipe Insulation	3	\$58	5,307	354	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	18	\$1,256	43,643	3,968	1
	ENERGY STAR Qualified Dishwasher	12	\$385	15,421	1,402	1
	ENERGY STAR Qualified Refrigerator	29	\$929	45,544	3,036	0
	ENERGY STAR Qualified Dehumidifier	12	\$385	33,804	2,817	0
	ENERGY STAR Qualified Freezer	11	\$353	12,184	812	0
	Appliance Recycling	49	\$3,747	525,880	58,431	9
	Refrigerator	49	\$3,747	525,880	58,431	9
	Efficient Television	13	\$667	25,789	2,149	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	7	\$4,487	231,441	7,715	1
	Advanced Lighting Package	1	\$256	8,596	430	0
Additional Low Income						
	Energy Efficiency Kits	2	\$90	20,274	2,253	0
	Weatherization Rebates	2	\$385	9,291	310	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$192	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$192	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	29	\$7,827	371,248	12,525	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$1,269	90,725	3,024	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	12	\$1,904	57,133	1,904	1
	Wall (Bring Up to R19) - Elect. Heat Only	2	\$1,538	86,757	2,892	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	11	\$2,115	49,826	1,661	1
	Foundation (Bring Up to R-10)	1	\$769	64,241	2,141	0
	Infiltration Control	1	\$231	22,565	903	0
Residential Total		2,336	\$113,993	9,695,091	629,894	135
Residential Average kWh Sales (3 yr Ave actual and projected)					38,549,145	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%	

2014					
Estimated Achievable Potential Goals					
Pella Cooperative Electric Association	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	133	\$341	71,765	19,935	8
High Efficiency Interior Lighting	283	\$4,956	342,637	65,606	1
T-8 or 46" T5 - 4 ft	133	\$3,410	183,869	28,730	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	5	\$577	27,962	3,631	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	11	\$677	55,169	7,165	0
CFL lamps - Energy Star- 9W and up	132	\$254	65,057	25,022	0
Occupancy Sensors - Must control >150 Watts	2	\$38	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,538	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	7	\$822	36,938	3,078	1
36"-47"	7	\$822	36,938	3,078	1
Circulating Fans -- BESS Lab Ratings	5	\$235	19,772	1,648	1
36"-47"	5	\$235	19,772	1,648	1
Efficient Livestock Waterers	1	\$64	9,469	789	
Hog Farrowing - Heat Lamps (<= 175W)	9	\$35	5,991	1,498	
Hog Farrowing - Single Crate Heating Pads (<=85W)	1	\$32	1,995	199	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	1	\$16,231	1,339,488	101,283	10
Ag, Commercial and Industrial Total	441	\$24,254	2,198,295	218,718	23
C & I Average kWh Sales (3 yr Ave actual and projected)**				16,941,926	
C & I kWh Savings as percentage of C & I kWh Sales				1.3%	

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	5	\$1,500			
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$1,000			
Expert Energy Services - C&I	1	\$1,000			
IV. Educational & Research Programs					
Member Information and Education	2,998	\$32,157			
Peak Alert	2,998	\$180			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$5,769			
TOTAL	8,780	\$179,853	11,893,385	848,613	157
Total Average kWh Sales (3 yr Ave actual and projected)**				55,491,071	
Total kWh Savings as percentage of Total kWh Sales				1.53%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Pella Cooperative Electric Association		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	Geothermal Heat Pump	0.46	2.24	4.86	1.18
	Air Source Heat Pump	0.47	7.61	5.34	3.95
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.54	14.00	8.44	6.71
	Local CFL Rebate Program(s)	0.54	13.58	8.44	7.40
	T8 or better Lighting Fixtures				
	2 ft. T8 or better Fixture w/ electronic ballasts	0.32	2.23	0.74	0.84
	4 ft. T8 or better Fixture w/ electronic ballasts	0.41	6.42	2.09	2.82
	ENERGY STAR Ceiling Fan	0.46	2.94	6.04	1.81
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	0.30	2.38	0.75	0.76
	80 gallon+	0.33	3.75	0.92	1.18
	Heat Pump Water Heater - (Integrated)	0.37	3.14	1.42	1.30
	Flow Restrictors - Faucet	0.41	94.62	3.36	4.16
	Flow Restrictors - Shower	0.43	16.19	3.89	4.88
	Tank Insulation	0.41	20.15	2.87	3.61
	Pipe Insulation	0.45	20.28	3.74	4.98
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.36	0.99	1.39	0.45
	ENERGY STAR Qualified Dishwasher	0.44	2.85	1.87	1.35
	ENERGY STAR Qualified Refrigerator	0.40	3.07	1.95	1.48
	ENERGY STAR Qualified Dehumidifier	0.43	8.70	3.49	3.90
	ENERGY STAR Qualified Freezer	0.37	3.50	1.41	1.50
	Appliance Recycling				
	Refrigerator	0.42	3.19	2.96	1.48
	Efficient Television	0.38	infinite	1.59	8.49
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.40	1.86	1.80	1.10
	Advanced Lighting Package	0.39	2.48	1.39	1.24
Additional Low Income					
	Energy Efficiency Kits	0.46	25.55	9.06	11.23
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.45	0.58	1.19	0.42
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.44	0.38	1.13	0.27
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.40	4.40	2.35	2.41
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.43	0.55	1.30	0.38
	Wall (Bring Up to R19) - Elect. Heat Only	0.39	2.93	1.86	1.60
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.40	0.38	1.04	0.25
	Foundation (Bring Up to R-10)	0.41	1.68	2.69	1.03
	Infiltration Control	0.43	6.11	3.41	3.34

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Cost Effectiveness Analysis					
Benefit/Cost Ratios					
Pella Cooperative Electric Association	Rate Payer	Participant	Utility	Societal	
	Agriculture/Commercial & Industrial Lighting				
Interior Lighting					
Change a Light Rebate Program	0.52	13.05	8.20	6.01	
High Efficiency Interior Lighting					
T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16	
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57	
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55	
CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64	
Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	0.45	3.29	5.61	2.00	
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78	
Agricultural					
Livestock Ventilation Fans					
36"-47"	0.38	5.42	1.75	2.24	
Circulating Fans -- BESS Lab Ratings					
36"-47"	0.46	7.42	3.64	3.73	
Efficient Livestock Waterers	0.50	5.62	6.38	2.88	
Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97	
Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	0.41	4.35	2.88	2.14	

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
Commercial and Industrial Time-of-Day Price	#	#	#	#	
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural					
Expert Energy Services - C&I					
IV. Educational & Research Programs					
Member Information and Education					
Peak Alert					
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network					

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Pleasant Hill Community Line

BACKGROUND

Pleasant Hill Community Line (Pleasant Hill) provides reliable electric service to a rural region in central Iowa.

Pleasant Hill is a small town not-for-profit cooperative, based out of Webster City, Iowa. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by advocating energy efficient practices.

Pleasant Hill is governed by a five member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Hamilton county. The cooperative provides electric service to 104 member-consumers, all of which are residential customers.

Pleasant Hill procures power supply from Webster City Municipal Electric Cooperative.

Due to Pleasant Hill's size, rather than investing money on consultants, Pleasant Hill has passed the attached board resolution.

Iowa Association of Electric Coops
8525 Douglas
Suite 49
Des Moines IA 50322-2992



December 17, 2009

Dear Reggie;

The following energy resolution was passed.

Pleasant Hill Community Line will offer energy efficient bulbs at cost. This will be accomplished by partnering with the City of Webster City and selling them to our customers at City Hall. Energy efficient bulbs are to be given to all attendees at the annual meetings. We will also advertise conserving energy in all of our billings. Buying appliances featuring the energy star will also be advocated.

We assume that 50% of our members will take advantage of this offer. This could save approximately 6000 KWH the first year.

Any questions please call 515-826-3379

Sincerely

Leonard Rotschaffer Sec.

P.H.Cb.

PRAIRIE ENERGY COOPERATIVE (CLARION)

Prairie Energy Cooperative (PECO), headquartered in Clarion, IA, is an electric distribution cooperative serving approximately 3,300 members through 4,900 meters. The primary service territory for PECO is Wright, Hancock, Webster as well as members in Cerro Gordo, Franklin, Hamilton, Hardin, Humboldt, Kossuth, Winnebago and Worth Counties. Prairie Energy Cooperative was formed in July 2000 through the consolidation of Hancock County Rural Electric Cooperative, Garner, Iowa and Wright County Rural Electric Cooperative, Clarion, Iowa. Wright County REC and Hancock County REC were formed in 1937. PECO has 2.11 member-owners per mile of distribution line. The majority of our kWh sales are large and small commercial.

PECO employs thirty-one full-time employees and has a Board consisting of seven directors. The website for Prairie Energy Cooperative is www.prairieenergy.coop. The website is one of the resources used to promote energy efficiency programs. The cooperative assists member-owners in managing their electric needs and working to lower their carbon footprints by offering a menu of energy efficiency and renewable-energy rebates.

Corn Belt Power Cooperative (Corn Belt) (Iowa – 84 Humboldt) provides total power requirements for PECO. Corn Belt is headquartered in Humboldt, IA. In September 2009, Corn Belt became a Class A member of Basin Electric, Bismarck, ND. These combined facilities, along with numerous interconnects with neighboring utilities, provide a dependable supply of electricity for Prairie Energy's present and future needs.

PECO leases and receives power through 20 substations. The substations receive service from Corn Belt's 69 kV transmission grid. Corn Belt provides transmission line extensions to new distribution substations.

Historically, the system peak demand of the year typically occurs during October crop drying season. The peak month 15-minute non-coincident system demand to date was 51.027 MW that occurred in October 2006. Over the past five years, the non-coincident peak month demand has increased at an average annual rate of 1.75%. This is attributable to the ethanol industry growth in our area; although we don't currently provide service to any ethanol plants,

local farmers have dramatically increased corn production, which has in turn led to many new grain drying facilities. We continue to see growth in swine and poultry facilities.

Non-coincident summer peak demand is expected to increase from 51 MW in 2008 to 55 MW in 2014. PECO's total energy sales are expected to increase at an average annual rate of .8% from 2008 to 2014 compared with a growth rate of 12.62% over the most recent 5-year period. The rapid and sustained economic growth of the middle 2000s is unlikely to be matched in the next decade. Total energy requirements include energy sales, PECO's own use and distribution losses. Total energy requirements are expected to remain about the same from 240,497 MWH in 2006 to 256,891 MWH in 2014, a total increase of 6.82%.

Assessment of Potential Process

The assessment of potential process commenced prior to 7/12/2008 as required by Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386, the IAEC filed a progress report on 12/31/2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperative continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our member for purposes of this filing.

Commitment to Energy Efficiency

Prairie Energy Cooperative has been committed to energy efficiency for many years. Going forward, PECO has a planned demand side investment of \$1,420,137 for 2010 through 2014.

Through its power supplier Corn Belt Power Cooperative, PECO is aggressively pursuing a load management program expected to be implemented in the next couple years. Items currently being completed include load research, infrastructure review, implementation strategies and benefit-cost evaluation.

New energy efficiency measures offered to member-owners are planned with these goals in mind:

Energy Efficiency Goals

1. Energy efficiency programs available to all revenue classes of member-owners.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of member-owners.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperative principles and in particular the education and training principle; concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals

1. Offer member-owners rebate or incentive programs for efficient technologies
2. Participate in education energy efficiency programs
3. Participate in research programs related to energy efficiency

4. Will be offering member-owners demand response programs in 2011
5. Offer member-owners energy audit & technical support programs
6. Offer cost of operation studies for member-owners

Energy Efficiency Measure Goals

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014					
		Estimated Achievable Potential Goals					
Prairie Energy Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014	
I. Incentive Programs for Energy Efficient Technologies							
Residential Cooling & Heating (low income included)							
	ENERGY STAR Central Air Conditioning	60	\$12,450	264,102	56,593	18,864	
	SEER 15 +	45	\$8,775	179,720	38,511	12,837	
	SEER 16 (and EER 13)	15	\$3,675	84,382	18,082	6,027	
	Geothermal Heat Pump	75	\$135,525	19,918,395	2,987,759	995,920	
	Air Source Heat Pump	185	\$120,250	21,795,849	4,005,724	1,453,057	
	Heat Recovery Ventilators	25	\$4,065	313,020	46,953	15,651	
Residential Lighting (low income included)							
Interior Lighting							
	Change a Light Rebate Program (or similar program)	4,274	\$9,744	2,043,301	829,234	279,904	
	Local CFL Rebate Program(s)	2,741	\$10,690	1,310,409	537,345	179,508	
	T8 or better Lighting Fixtures	225	\$1,755	155,644	26,363	9,491	
	4 ft. T8 or better Fixture w/ electronic ballasts	225	\$1,755	155,644	26,363	9,491	
	CFL Recycling	100	\$1,200				
Exterior Lighting							
	High Efficiency Exterior Lighting	30	\$120	29,104	38,806	14,552	
	CFL	30	\$120	29,104	38,806	14,552	
	LED Holiday Lighting	120	\$312	111,888	26,030	9,324	
Residential Water Heating (low income included)							
	High Efficiency Water Heater	217	\$46,930	1,051,214	214,262	70,081	
	50-79 gallon	73	\$9,490	252,814	51,255	16,854	
	80 gallon+	144	\$37,440	798,401	163,007	53,227	
	Heat Pump Water Heater - (Add-On)	10	\$3,900	192,585	50,072	19,259	
	Flow Restrictors - Faucet	750	\$6,535	2,502,495	834,165	278,055	
	Flow Restrictors - Shower	375	\$6,535	2,372,625	711,788	237,263	
	Pipe Insulation	375	\$2,438	668,081	133,616	44,539	
Residential Appliances (low income included)							
	ENERGY STAR Qualified Clothes Washer	125	\$8,125	305,250	83,250	27,750	
	ENERGY STAR Qualified Dishwasher	200	\$6,500	258,852	70,596	23,532	
	ENERGY STAR Qualified Refrigerator	175	\$5,690	276,806	55,361	18,454	
	ENERGY STAR Qualified Freezer	25	\$815	27,889	5,578	1,859	
	Appliance Recycling	260	\$17,890	2,241,673	749,267	249,756	
	Refrigerator	125	\$8,600	1,351,148	450,383	150,128	
	Freezer	125	\$8,600	882,866	294,289	98,096	
	Window AC Unit	10	\$690	7,659	4,595	1,532	
Efficient Home Incentives (low income included)							
	Energy Efficient Home Construction Rebates *	5	\$6,500	166,500	16,650	5,550	
Additional Low Income							
	Energy Efficiency Kits	150	\$4,875	1,525,473	508,491	169,497	
Building Shell - Existing Home Only							
	Weatherization Rebates	125	\$46,005	4,589,989	470,363	156,788	
	Ceiling (Bring up to R-38) - Elect. Heat Only	50	\$21,450	2,284,380	228,438	76,146	
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	25	\$5,365	119,880	11,988	3,996	
	Foundation (Bring Up to R-10)	25	\$16,380	1,617,548	161,755	53,918	
	Infiltration Control	25	\$2,810	568,181	68,182	22,727	
Residential Total		10,627	\$458,847	62,121,145	12,458,265	4,278,652	
Residential Average kWh Sales (3 yr Ave actual and projected)							302,521,531
Residential kWh Savings as percentage of Residential kWh Sales							1.4%

		2010-2014				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program					
	High Efficiency Interior Lighting					
	T8 or T-5 fixtures - 2 ft	210	\$2,625	36,503	9,291	6,294
	T-8 or 46" T5 - 4 ft	1,228	\$18,420	1,709,848	747,971	267,164
	T8 or T-5 fixtures - 8 ft	614	\$7,675	732,792	320,559	114,499
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	951	\$82,680	5,356,482	1,925,282	695,647
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	421	\$16,365	2,126,588	760,972	276,180
	CFL lamps - Energy Star- 9W and up	6,125	\$15,313	3,040,401	3,280,960	1,169,385
	Occupancy Sensors - Must control >150 Watts	67	\$1,257	356,976	140,126	35,698
	Compact fluorescent fixtures (Hard-Wired)	300	\$3,750	572,760	110,734	57,276
	LED Exit Signs	133	\$831	346,694	119,589	30,412
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning					
	Rebate for ENERGY STAR air conditioning.	72	\$14,555	106,693	19,659	7,113
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater					
	80 gallon+	35	\$9,100	194,056	35,115	12,937
		35	\$9,100	194,056	35,115	12,937
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA					
	Rebate for premium motors.	10	\$6,875	106,893	18,528	7,126
	Variable Speed Drive Motor Incentive					
	Incentives for variable speed drive motors.	10	\$21,750	3,728,934	646,349	248,596
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program					
		80	\$80,000	5,297,808	2,953,528	1,059,562
Ag, Commercial and Industrial Total		10,706	\$282,222	23,957,983	11,360,390	4,055,819
C & I Average kWh Sales (3 yr Ave actual and projected)**						903,842,534
C & I kWh Savings as percentage of C & I kWh Sales						0.4%

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	Expert Energy Services - Agricultural	110	\$79,200		
	Expert Energy Services - C&I	Expert Energy Services - Commercial and Industrial.	220	\$158,400		
	Energy Audit Services - Residential *	Energy Audit Services - Residential	415	\$149,400		
IV. Educational & Research Programs						
	Member Information and Education	Member Information and Education	16,444	\$259,749		
	Peak Alert	Peak Alert	16,444			
	Living with Energy in Iowa	Living with Energy in Iowa magazine.	16,444	\$22,988		
	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	16,444	\$92,090		
TOTAL			87,854	\$1,502,895	86,079,128	23,818,655
Total Average kWh Sales (3 yr Ave actual and projected)**						8,334,471
Total kWh Savings as percentage of Total kWh Sales						1,206,364,065
						0.7%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,490	52,820	3,773	4
	SEER 15 +	9	\$1,755	35,944	2,567	3
	SEER 16 (and EER 13)	3	\$735	16,876	1,205	1
	Geothermal Heat Pump	15	\$27,105	3,983,679	199,184	23
	Air Source Heat Pump	25	\$16,250	2,945,385	196,359	26
	Heat Recovery Ventilators	5	\$813	62,604	3,130	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	816	\$1,860	390,111	53,440	49
	Local CFL Rebate Program(s)	541	\$2,110	258,640	35,430	32
	T8 or better Lighting Fixtures	25	\$195	17,294	1,055	0
	4 ft. T8 or better Fixture w/ electronic ballasts	25	\$195	17,294	1,055	0
	CFL Recycling	10	\$200			
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$20	4,851	2,425	0
	CFL	5	\$20	4,851	2,425	0
	LED Holiday Lighting	20	\$52	18,648	1,554	5
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,750	218,282	14,552	2
	50-79 gallon	15	\$1,950	51,948	3,463	0
	80 gallon+	30	\$7,800	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	1	\$390	19,259	1,926	0
	Flow Restrictors - Faucet	150	\$1,307	500,499	55,611	3
	Flow Restrictors - Shower	75	\$1,307	474,525	47,453	4
	Pipe Insulation	75	\$488	133,616	8,908	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,625	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	40	\$1,300	51,770	4,706	4
	ENERGY STAR Qualified Refrigerator	35	\$1,138	55,361	3,691	0
	ENERGY STAR Qualified Freezer	5	\$163	5,578	372	0
	Appliance Recycling	52	\$3,578	448,335	49,951	9
	Refrigerator	25	\$1,720	270,230	30,026	5
	Freezer	25	\$1,720	176,573	19,619	4
	Window AC Unit	2	\$138	1,532	306	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,300	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	30	\$975	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,201	917,998	31,358	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$4,290	456,876	15,229	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$1,073	23,976	799	1
	Foundation (Bring Up to R-10)	5	\$3,276	323,510	10,784	
	Infiltration Control	5	\$562	113,636	4,545	0
Residential Total		2,033	\$83,615	10,958,698	755,436	171
Residential Average kWh Sales (3 yr Ave actual and projected)					60,352,787	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%	

		2010				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	150	\$342	81,518	22,644	9
	High Efficiency Interior Lighting	1,564	\$22,495	2,216,873	417,276	7
	T8 or T-5 fixtures - 2 ft					
	T-8 or 46" T5 - 4 ft	200	\$3,000	278,477	43,512	1
	T8 or T-5 fixtures - 8 ft	100	\$1,250	119,347	18,648	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	140	\$12,600	788,546	102,409	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	64	\$2,520	323,282	41,985	1
	CFL lamps - Energy Star- 9W and up	1,000	\$2,500	496,392	190,920	3
	Occupancy Sensors - Must control >150 Watts	20	\$375	106,560	10,656	
	Compact fluorescent fixtures (Hard-Wired)					
	LED Exit Signs	40	\$250	104,269	9,146	1
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	11	\$2,570	16,300	1,087	1
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	5	\$1,300	27,722	1,848	0
	80 gallon+	5	\$1,300	27,722	1,848	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	1	\$750	10,689	713	0
	Variable Speed Drive Motor Incentive	1	\$3,750	372,893	24,860	2
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	12	\$12,500	794,671	158,934	32
Ag, Commercial and Industrial Total		1,744	\$43,707	3,520,668	627,361	52
C & I Average kWh Sales (3 yr Ave actual and projected)**					177,573,931	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	20	\$14,400			
	Expert Energy Services - C&I	40	\$28,800			
	Energy Audit Services - Residential *	65	\$23,400			
IV. Educational & Research Programs						
	Member Information and Education	3,289	\$48,925			
	Peak Alert	3,289				
	Living with Energy in Iowa	3,289	\$4,618			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,289	\$18,418			
TOTAL		17,058	\$265,882	14,479,366	1,382,797	222
Total Average kWh Sales (3 yr Ave actual and projected)**					237,926,719	
Total kWh Savings as percentage of Total kWh Sales					0.6%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,490	52,820	3,773	4
	SEER 15 +	9	\$1,755	35,944	2,567	3
	SEER 16 (and EER 13)	3	\$735	16,876	1,205	1
	Geothermal Heat Pump	15	\$27,105	3,983,679	199,184	23
	Air Source Heat Pump	35	\$22,750	4,123,539	274,903	36
	Heat Recovery Ventilators	5	\$813	62,604	3,130	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	808	\$1,842	386,286	52,916	48
	Local CFL Rebate Program(s)	550	\$2,145	262,942	36,020	33
	T8 or better Lighting Fixtures	50	\$390	34,588	2,109	1
	4 ft. T8 or better Fixture w/ electronic ballasts	50	\$390	34,588	2,109	1
	CFL Recycling	15	\$200			
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$20	4,851	2,425	0
	CFL	5	\$20	4,851	2,425	0
	LED Holiday Lighting	20	\$52	18,648	1,554	5
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,750	218,282	14,552	2
	50-79 gallon	15	\$1,950	51,948	3,463	0
	80 gallon+	30	\$7,800	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	2	\$780	38,517	3,852	0
	Flow Restrictors - Faucet	150	\$1,307	500,499	55,611	3
	Flow Restrictors - Shower	75	\$1,307	474,525	47,453	4
	Pipe Insulation	75	\$488	133,616	8,908	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,625	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	40	\$1,300	51,770	4,706	4
	ENERGY STAR Qualified Refrigerator	35	\$1,138	55,361	3,691	0
	ENERGY STAR Qualified Freezer	5	\$163	5,578	372	0
	Appliance Recycling	52	\$3,578	448,335	49,951	9
	Refrigerator	25	\$1,720	270,230	30,026	5
	Freezer	25	\$1,720	176,573	19,619	4
	Window AC Unit	2	\$138	1,532	306	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,300	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	30	\$975	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,201	917,998	31,358	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$4,290	456,876	15,229	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$1,073	23,976	799	1
	Foundation (Bring Up to R-10)	5	\$3,276	323,510	10,784	
	Infiltration Control	5	\$562	113,636	4,545	0
Residential Total		2,075	\$90,719	12,173,882	837,025	182
Residential Average kWh Sales (3 yr Ave actual and projected)					60,400,506	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%	

		2011				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	150	\$342	81,518	22,644	9
	High Efficiency Interior Lighting	1,744	\$26,053	2,569,394	475,995	8
	T8 or T-5 fixtures - 2 ft					
	T-8 or 46" T5 - 4 ft	220	\$3,300	306,324	47,863	1
	T8 or T-5 fixtures - 8 ft	110	\$1,375	131,282	20,513	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	174	\$15,060	980,050	127,279	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	74	\$2,880	373,794	48,545	1
	CFL lamps - Energy Star- 9W and up	1,100	\$2,750	546,031	210,012	3
	Occupancy Sensors - Must control >150 Watts	22	\$413	117,216	11,722	
	Compact fluorescent fixtures (Hard-Wired)					
	LED Exit Signs	44	\$275	114,696	10,061	1
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	13	\$2,535	19,264	1,284	1
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	6	\$1,560	33,267	2,218	0
	80 gallon+	6	\$1,560	33,267	2,218	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$1,250	21,379	1,425	0
	Variable Speed Drive Motor Incentive	2	\$4,000	745,787	49,719	4
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	15	\$15,000	993,339	198,668	41
Ag, Commercial and Industrial Total		1,932	\$50,740	4,463,948	751,953	63
C & I Average kWh Sales (3 yr Ave actual and projected)**					178,508,382	
C & I kWh Savings as percentage of C & I kWh Sales					0.4%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	21	\$15,120			
	Expert Energy Services - C&I	42	\$30,240			
	Energy Audit Services - Residential *	75	\$27,000			
IV. Educational & Research Programs						
	Member Information and Education	3,287	\$50,393			
	Peak Alert	3,287				
	Living with Energy in Iowa	3,287	\$4,615			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,287	\$18,418			
TOTAL		17,293	\$287,244	16,637,830	1,588,978	245
Total Average kWh Sales (3 yr Ave actual and projected)**					238,908,888	
Total kWh Savings as percentage of Total kWh Sales					0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,490	52,820	3,773	4
	SEER 15 +	9	\$1,755	35,944	2,567	3
	SEER 16 (and EER 13)	3	\$735	16,876	1,205	1
	Geothermal Heat Pump	15	\$27,105	3,983,679	199,184	23
	Air Source Heat Pump	40	\$26,000	4,712,616	314,174	41
	Heat Recovery Ventilators	5	\$813	62,604	3,130	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	900	\$2,052	430,269	58,941	54
	Local CFL Rebate Program(s)	550	\$2,145	262,942	36,020	33
	T8 or better Lighting Fixtures	50	\$390	34,588	2,109	1
	4 ft. T8 or better Fixture w/ electronic ballasts	50	\$390	34,588	2,109	1
	CFL Recycling	20	\$200			
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$20	4,851	2,425	0
	CFL	5	\$20	4,851	2,425	0
	LED Holiday Lighting	25	\$65	23,310	1,943	6
Residential Water Heating (low income included)						
	High Efficiency Water Heater	45	\$9,750	218,282	14,552	2
	50-79 gallon	15	\$1,950	51,948	3,463	0
	80 gallon+	30	\$7,800	166,334	11,089	2
	Heat Pump Water Heater - (Add-On)	2	\$780	38,517	3,852	0
	Flow Restrictors - Faucet	150	\$1,307	500,499	55,611	3
	Flow Restrictors - Shower	75	\$1,307	474,525	47,453	4
	Pipe Insulation	75	\$488	133,616	8,908	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,625	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	40	\$1,300	51,770	4,706	4
	ENERGY STAR Qualified Refrigerator	35	\$1,138	55,361	3,691	0
	ENERGY STAR Qualified Freezer	5	\$163	5,578	372	0
	Appliance Recycling	52	\$3,578	448,335	49,951	9
	Refrigerator	25	\$1,720	270,230	30,026	5
	Freezer	25	\$1,720	176,573	19,619	4
	Window AC Unit	2	\$138	1,532	306	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,300	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	30	\$975	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,201	917,998	31,358	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$4,290	456,876	15,229	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$1,073	23,976	799	1
	Foundation (Bring Up to R-10)	5	\$3,276	323,510	10,784	
	Infiltration Control	5	\$562	113,636	4,545	0
Residential Total		2,182	\$94,192	12,811,604	882,711	193
Residential Average kWh Sales (3 yr Ave actual and projected)					59,409,853	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%	

		2012				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	150	\$342	81,518	22,644	9
	High Efficiency Interior Lighting	2,012	\$29,927	3,015,450	542,829	9
	T8 or T-5 fixtures - 2 ft					
	T-8 or 46" T5 - 4 ft	242	\$3,630	336,957	52,650	1
	T8 or T-5 fixtures - 8 ft	121	\$1,512	144,410	22,564	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	192	\$16,620	1,081,435	140,446	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	83	\$3,240	419,256	54,449	1
	CFL lamps - Energy Star- 9W and up	1,210	\$3,025	600,634	231,013	3
	Occupancy Sensors - Must control >150 Watts	25	\$469	133,200	13,320	
	Compact fluorescent fixtures (Hard-Wired)	90	\$1,125	171,828	17,183	
	LED Exit Signs	49	\$306	127,729	11,204	1
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	14	\$2,730	20,746	1,383	1
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	7	\$1,820	38,811	2,587	0
	80 gallon+	7	\$1,820	38,811	2,587	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$1,500	21,379	1,425	0
	Variable Speed Drive Motor Incentive	2	\$4,500	745,787	49,719	4
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	16	\$16,250	1,059,562	211,912	43
Ag, Commercial and Industrial Total		2,203	\$57,069	4,983,252	832,500	67
C & I Average kWh Sales (3 yr Ave actual and projected)**					176,896,740	
C & I kWh Savings as percentage of C & I kWh Sales					0.5%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	22	\$15,840			
	Expert Energy Services - C&I	44	\$31,680			
	Energy Audit Services - Residential *	85	\$30,600			
IV. Educational & Research Programs						
	Member Information and Education	3,290	\$51,905			
	Peak Alert	3,290				
	Living with Energy in Iowa	3,290	\$4,519			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,290	\$18,418			
TOTAL		17,696	\$304,222	17,794,857	1,715,211	260
Total Average kWh Sales (3 yr Ave actual and projected)**					236,306,593	
Total kWh Savings as percentage of Total kWh Sales					0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,490	52,820	3,773	4
	SEER 15 +	9	\$1,755	35,944	2,567	3
	SEER 16 (and EER 13)	3	\$735	16,876	1,205	1
	Geothermal Heat Pump	15	\$27,105	3,983,679	199,184	23
	Air Source Heat Pump	40	\$26,000	4,712,616	314,174	41
	Heat Recovery Ventilators	5	\$813	62,604	3,130	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	900	\$2,052	430,269	58,941	54
	Local CFL Rebate Program(s)	550	\$2,145	262,942	36,020	33
	T8 or better Lighting Fixtures	50	\$390	34,588	2,109	1
	4 ft. T8 or better Fixture w/ electronic ballasts	50	\$390	34,588	2,109	1
	CFL Recycling	25	\$300			
Exterior Lighting						
	High Efficiency Exterior Lighting	5	\$20	4,851	2,425	0
	CFL	5	\$20	4,851	2,425	0
	LED Holiday Lighting	25	\$65	23,310	1,943	6
Residential Water Heating (low income included)						
	High Efficiency Water Heater	41	\$8,840	198,185	13,212	2
	50-79 gallon	14	\$1,820	48,485	3,232	0
	80 gallon+	27	\$7,020	149,700	9,980	1
	Heat Pump Water Heater - (Add-On)	2	\$780	38,517	3,852	0
	Flow Restrictors - Faucet	150	\$1,307	500,499	55,611	3
	Flow Restrictors - Shower	75	\$1,307	474,525	47,453	4
	Pipe Insulation	75	\$488	133,616	8,908	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,625	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	40	\$1,300	51,770	4,706	4
	ENERGY STAR Qualified Refrigerator	35	\$1,138	55,361	3,691	0
	ENERGY STAR Qualified Freezer	5	\$163	5,578	372	0
	Appliance Recycling	52	\$3,578	448,335	49,951	9
	Refrigerator	25	\$1,720	270,230	30,026	5
	Freezer	25	\$1,720	176,573	19,619	4
	Window AC Unit	2	\$138	1,532	306	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,300	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	30	\$975	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,201	917,998	31,358	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$4,290	456,876	15,229	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$1,073	23,976	799	1
	Foundation (Bring Up to R-10)	5	\$3,276	323,510	10,784	
	Infiltration Control	5	\$562	113,636	4,545	0
	Residential Total	2,183	\$93,382	12,791,508	881,371	193
	Residential Average kWh Sales (3 yr Ave actual and projected)				60,921,297	
	Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

		2013				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program					
	High Efficiency Interior Lighting	2,249	\$33,778	3,093,427	580,186	9
	T8 or T-5 fixtures - 2 ft	100	\$1,250	17,383	2,997	0
	T-8 or 46" T5 - 4 ft	266	\$3,990	370,374	57,871	1
	T8 or T-5 fixtures - 8 ft	133	\$1,663	158,732	24,802	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	215	\$18,600	1,210,982	157,270	2
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	95	\$3,675	479,871	62,321	1
	CFL lamps - Energy Star- 9W and up	1,340	\$3,350	665,165	255,833	4
	Occupancy Sensors - Must control >150 Watts					
	Compact fluorescent fixtures (Hard-Wired)	100	\$1,250	190,920	19,092	
	LED Exit Signs					
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	16	\$3,210	23,710	1,581	1
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	8	\$2,080	44,356	2,957	0
	80 gallon+	8	\$2,080	44,356	2,957	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	2	\$1,500	21,379	1,425	0
	Variable Speed Drive Motor Incentive	2	\$4,500	745,787	49,719	4
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	18	\$17,500	1,192,007	238,401	49
Ag, Commercial and Industrial Total		2,295	\$62,568	5,120,664	874,269	63
C & I Average kWh Sales (3 yr Ave actual and projected)**					183,906,740	
C & I kWh Savings as percentage of C & I kWh Sales					0.5%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	23	\$16,560			
	Expert Energy Services - C&I	46	\$33,120			
	Energy Audit Services - Residential *	90	\$32,400			
IV. Educational & Research Programs						
	Member Information and Education	3,289	\$53,462			
	Peak Alert	3,289				
	Living with Energy in Iowa	3,289	\$4,618			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,289	\$18,418			
TOTAL		17,793	\$314,527	17,912,172	1,755,640	256
Total Average kWh Sales (3 yr Ave actual and projected)**					244,828,037	
Total kWh Savings as percentage of Total kWh Sales					0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	12	\$2,490	52,820	3,773	4
	SEER 15 +	9	\$1,755	35,944	2,567	3
	SEER 16 (and EER 13)	3	\$735	16,876	1,205	1
	Geothermal Heat Pump	15	\$27,105	3,983,679	199,184	23
	Air Source Heat Pump	45	\$29,250	5,301,693	353,446	46
	Heat Recovery Ventilators	5	\$813	62,604	3,130	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	850	\$1,938	406,365	55,667	51
	Local CFL Rebate Program(s)	550	\$2,145	262,942	36,020	33
	T8 or better Lighting Fixtures	50	\$390	34,588	2,109	1
	4 ft. T8 or better Fixture w/ electronic ballasts	50	\$390	34,588	2,109	1
	CFL Recycling	30	\$300			
Exterior Lighting						
	High Efficiency Exterior Lighting	10	\$40	9,701	4,851	0
	CFL	10	\$40	9,701	4,851	0
	LED Holiday Lighting	30	\$78	27,972	2,331	8
Residential Water Heating (low income included)						
	High Efficiency Water Heater	41	\$8,840	198,185	13,212	2
	50-79 gallon	14	\$1,820	48,485	3,232	0
	80 gallon+	27	\$7,020	149,700	9,980	1
	Heat Pump Water Heater - (Add-On)	3	\$1,170	57,776	5,778	1
	Flow Restrictors - Faucet	150	\$1,307	500,499	55,611	3
	Flow Restrictors - Shower	75	\$1,307	474,525	47,453	4
	Pipe Insulation	75	\$488	133,616	8,908	2
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	25	\$1,625	61,050	5,550	2
	ENERGY STAR Qualified Dishwasher	40	\$1,300	51,770	4,706	4
	ENERGY STAR Qualified Refrigerator	35	\$1,138	55,361	3,691	0
	ENERGY STAR Qualified Freezer	5	\$163	5,578	372	0
	Appliance Recycling	52	\$3,578	448,335	49,951	9
	Refrigerator	25	\$1,720	270,230	30,026	5
	Freezer	25	\$1,720	176,573	19,619	4
	Window AC Unit	2	\$138	1,532	306	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,300	33,300	1,110	0
Additional Low Income						
	Energy Efficiency Kits	30	\$975	305,095	33,899	4
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,201	917,998	31,358	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$4,290	456,876	15,229	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$1,073	23,976	799	1
	Foundation (Bring Up to R-10)	5	\$3,276	323,510	10,784	
	Infiltration Control	5	\$562	113,636	4,545	0
	Residential Total	2,154	\$96,941	13,385,452	922,108	197
	Residential Average kWh Sales (3 yr Ave actual and projected)				61,437,088	
	Residential kWh Savings as percentage of Residential kWh Sales				1.5%	

		2014				
		Estimated Achievable Potential Goals				
Prairie Energy Cooperative		Projected	Projected	Lifetime kWh	Annual kWh	KW Savings
		Participants	Cost	Savings	Savings	
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program					
	High Efficiency Interior Lighting	2,480	\$36,663	3,383,900	636,269	10
	T8 or T-5 fixtures - 2 ft	110	\$1,375	19,121	3,297	0
	T-8 or 46" T5 - 4 ft	300	\$4,500	417,715	65,268	1
	T8 or T-5 fixtures - 8 ft	150	\$1,875	179,021	27,972	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	230	\$19,800	1,295,469	168,243	3
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	105	\$4,050	530,384	68,881	1
	CFL lamps - Energy Star- 9W and up	1,475	\$3,688	732,178	281,607	4
	Occupancy Sensors - Must control >150 Watts					
	Compact fluorescent fixtures (Hard-Wired)	110	\$1,375	210,012	21,001	
	LED Exit Signs					
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	18	\$3,510	26,673	1,778	1
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	9	\$2,340	49,900	3,327	0
	80 gallon+	9	\$2,340	49,900	3,327	0
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	3	\$1,875	32,068	2,138	0
	Variable Speed Drive Motor Incentive	3	\$5,000	1,118,680	74,579	6
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	19	\$18,750	1,258,229	251,646	51
Ag, Commercial and Industrial Total		2,532	\$68,138	5,869,451	969,736	69
C & I Average kWh Sales (3 yr Ave actual and projected)**					186,956,740	
C & I kWh Savings as percentage of C & I kWh Sales					0.5%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	24	\$17,280			
	Expert Energy Services - C&I	48	\$34,560			
	Energy Audit Services - Residential *	100	\$36,000			
IV. Educational & Research Programs						
	Member Information and Education	3,289	\$55,066			
	Peak Alert	3,289				
	Living with Energy in Iowa	3,289	\$4,618			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,289	\$18,418			
TOTAL		18,014	\$331,020	19,254,903	1,891,844	266
Total Average kWh Sales (3 yr Ave actual and projected)**					248,393,828	
Total kWh Savings as percentage of Total kWh Sales					0.8%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Prairie Energy Cooperative		Rate Payer	Participant	Utility	Societal
		I. Incentive Programs for Energy Efficient Technologies			
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 15 +	0.96	1.19	2.39	1.45
	SEER 16 (and EER 13)	0.86	1.08	2.35	1.20
	Geothermal Heat Pump	0.44	1.96	4.70	0.95
	Air Source Heat Pump	0.48	6.55	6.62	3.55
	Heat Recovery Ventilators	0.23	1.05	1.41	0.33
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.99	13.34	17.77	14.02
	Local CFL Rebate Program(s)	0.96	13.21	11.74	14.15
	T8 or better Lighting Fixtures				
	4 ft. T8 or better Fixture w/ electronic ballasts	0.42	3.51	3.04	1.84
	CFL Recycling				
Exterior Lighting					
	High Efficiency Exterior Lighting				
	CFL	0.31	28.10	6.85	7.81
	LED Holiday Lighting	0.90	4.67	25.26	5.19
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	1.43	0.90	4.19	1.70
	80 gallon+	1.27	1.71	3.29	2.71
	Heat Pump Water Heater - (Add-On)	0.35	2.05	1.60	0.84
	Flow Restrictors - Faucet	0.30	57.34	3.57	4.40
	Flow Restrictors - Shower	0.36	20.76	5.08	6.32
	Pipe Insulation	0.38	38.59	1.45	1.91
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.45	1.15	1.69	0.65
	ENERGY STAR Qualified Dishwasher	0.74	2.68	3.00	2.31
	ENERGY STAR Qualified Refrigerator	0.35	2.72	1.59	1.16
	ENERGY STAR Qualified Freezer	0.38	3.13	1.39	1.43
	Appliance Recycling				
	Refrigerator	0.53	4.87	6.90	3.01
	Freezer	0.54	3.29	4.80	2.09
	Window AC Unit	0.56	0.43	1.17	0.30
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.30	1.95	0.77	0.84
Additional Low Income					
	Energy Efficiency Kits	0.36	30.97	9.33	11.49
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.30	3.60	2.19	1.51
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.36	0.54	0.85	0.31
	Foundation (Bring Up to R-10)	0.22	1.45	1.32	0.48
	Infiltration Control	0.32	4.96	4.27	2.16

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Prairie Energy Cooperative		Rate Payer	Participant	Utility	Societal
		Agriculture/Commercial & Industrial Lighting			
Interior Lighting					
	Change a Light Rebate Program	0.87	8.82	12.32	8.00
	High Efficiency Interior Lighting				
	T8 or T-5 fixtures - 2 ft	0.22	1.45	1.32	0.48
	T-8 or 46" T5 - 4 ft	0.32	4.96	4.27	2.16
	T8 or T-5 fixtures - 8 ft	0.27	1.32	1.20	0.49
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.28	3.81	1.13	1.14
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.34	3.69	3.22	1.43
	CFL lamps - Energy Star- 9W and up	0.34	9.20	3.78	3.07
	Occupancy Sensors - Must control >150 Watts	0.33	6.69	5.93	2.58
	Compact fluorescent fixtures (Hard-Wired)	0.34	3.87	21.21	1.63
	LED Exit Signs	0.47	3.44	9.70	1.97
Ag/Commercial & Industrial Heating and Cooling					
	ENERGY STAR Air Conditioning	1.00	1.17	2.01	1.52
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater				
	80 gallon+	1.43	1.48	3.22	2.67
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.36	5.96	2.40	2.48
	Variable Speed Drive Motor Incentive	0.39	6.11	13.46	3.04
Ag/Commercial & Industrial Custom Rebates					
	Custom Rebate Program	0.59	1.51	3.25	1.03

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Peak Alert				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

Sac County Rural Electric Cooperative

BACKGROUND

Sac County Rural Electric Cooperative (Sac), formed in 1938, provides reliable electric service to a rural region in northwestern Iowa.

Sac is a small town not-for-profit cooperative, based out of Sac City, Iowa. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates.

Sac is governed by a seven member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Buena Vista, Calhoun, Crawford, Ida and Sac counties. The cooperative provides electric service to 770 members.

Sac serves the members with a staff of 8 employees. Sac has 2.1 members per mile of distribution line. Sac procures power supply from Corn Belt Power Cooperative along with 10 other distribution cooperatives. On January 1, 2010 Sac and Glidden Rural Electric Cooperative will merge and become Raccoon Valley Electric Cooperative.

The Website for Sac is <http://www.sarec.coop/>. The Website for Raccoon Valley is <http://www.raccoonvalleyec.coop/>. The website is one of the mechanisms used to promote energy efficiency programs.

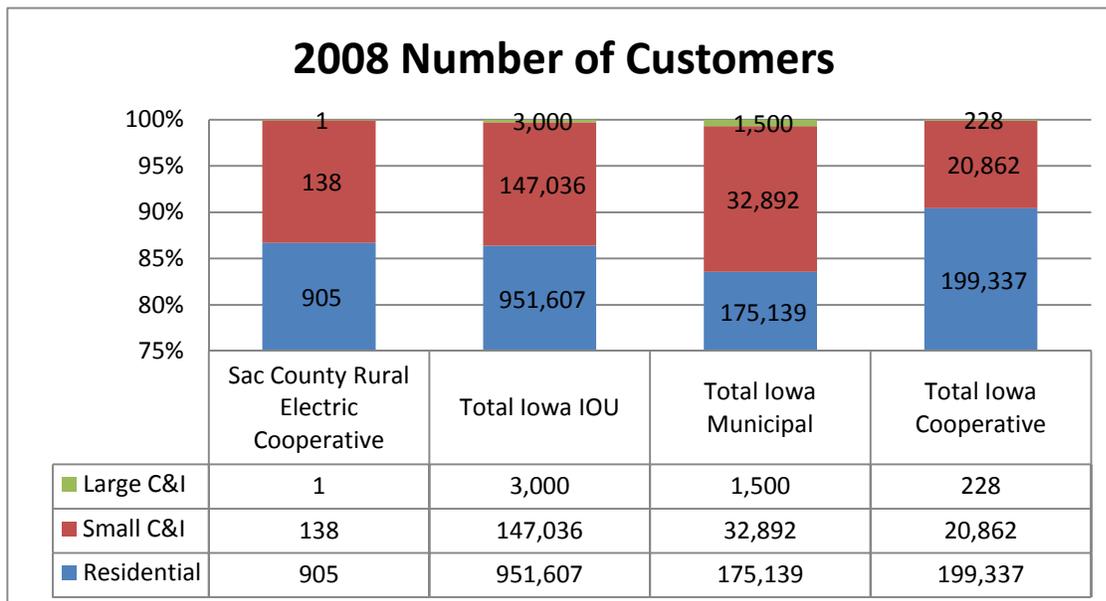
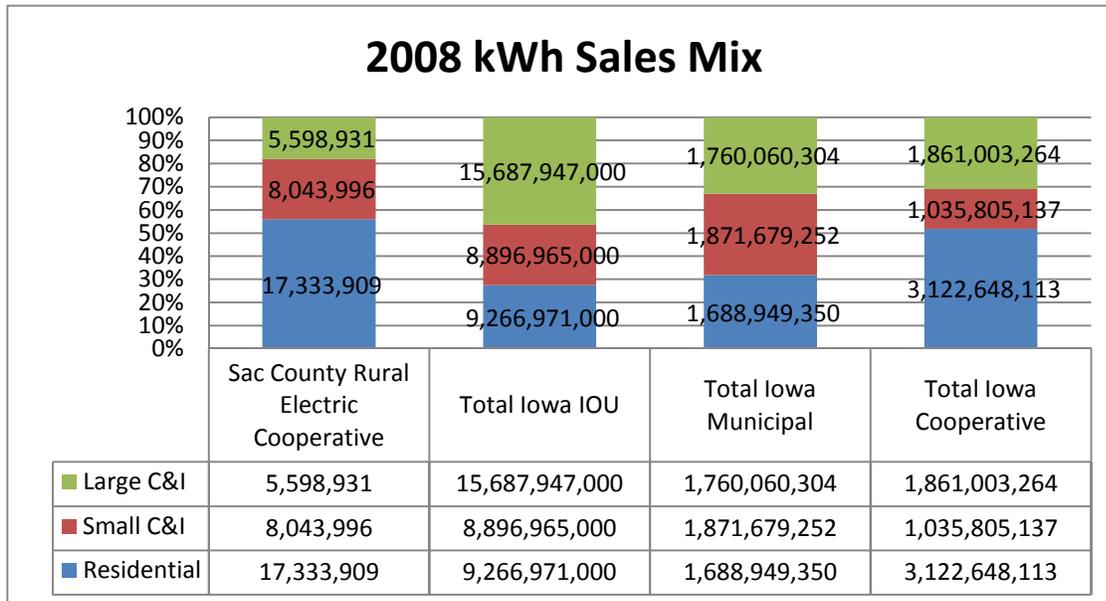
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to 7/1/2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on 12/31/2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Sac itself. This illustrates that making any comparison of Sac's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Sac has been committed to supply side and demand side energy efficiency for many years. Sac has invested \$857,038 in demand side energy efficiency programs from 1992 through 2007. Going forward, Sac has a planned demand side investment of \$275,553 for 2010 through 2014.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Sac County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	17	\$2,939	66,589	11,542	4,756
	SEER 14.5 (and EER 12)	7	\$875	21,756	3,996	1,554
	SEER 15 +	7	\$1,314	27,956	5,135	1,997
	SEER 16 (and EER 13)	3	\$750	16,876	2,411	1,205
	Geothermal Heat Pump	19	\$33,013	5,045,993	730,341	252,300
	Air Source Heat Pump	46	\$28,750	5,419,508	1,068,193	361,301
	Heat Recovery Ventilators	5	\$785	62,604	9,391	3,130
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,177	\$4,769	1,040,774	379,318	142,572
	Local CFL Rebate Program(s)	985	\$3,695	470,906	172,566	64,508
	T8 or better Lighting Fixtures	160	\$1,202	110,680	17,969	6,749
	4 ft. T8 or better Fixture w/ electronic ballasts	160	\$1,202	110,680	17,969	6,749
	ENERGY STAR LED lighting	80	\$301	107,093	14,130	5,950
Exterior Lighting						
	LED Holiday Lighting	168	\$421	156,643	36,597	13,054
Residential Water Heating (low income included)						
	High Efficiency Water Heater	125	\$24,375	578,588	115,718	38,573
	50-79 gallon	55	\$6,875	190,476	38,095	12,698
	80 gallon+	70	\$17,500	388,112	77,622	25,874
	Heat Pump Water Heater - (Add-On)	8	\$3,000	154,068	40,443	15,407
	Flow Restrictors - Faucet	274	\$2,297	914,245	304,007	101,583
	Flow Restrictors - Shower	150	\$2,515	949,050	284,715	94,905
	Tank Insulation	25	\$155	42,735	12,821	4,274
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	10	\$650	24,420	5,772	2,220
	ENERGY STAR Qualified Dishwasher	64	\$2,000	82,833	20,002	7,530
	ENERGY STAR Qualified Refrigerator	50	\$1,563	79,088	14,130	5,273
	ENERGY STAR Qualified Freezer	74	\$2,313	82,551	14,651	5,503
	Appliance Recycling	120	\$6,600	1,040,841	347,968	115,989
	Refrigerator	60	\$3,300	648,551	216,184	72,061
	Freezer	55	\$3,025	388,461	129,487	43,162
	Window AC Unit	5	\$275	3,830	2,298	766
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	2	\$2,500	66,600	3,330	2,220
Building Shell - Existing Home Only						
	Weatherization Rebates	103	\$36,909	3,290,384	292,865	115,981
	Ceiling (Bring up to R-38) - Elect. Heat Only	8	\$3,301	365,501	31,981	12,183
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	10	\$2,064	47,952	4,156	1,598
	Wall (Bring Up to R19) - Elect. Heat Only	4	\$2,460	174,758	14,563	5,825
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	10	\$3,074	45,621	3,954	1,521
	Foundation (Bring Up to R-10)	31	\$19,530	2,005,759	168,225	66,859
	Infiltration Control	20	\$2,160	454,545	45,455	18,182
	Duct Insulation (in unconditioned space)	20	\$4,320	196,248	24,531	9,812
Residential Total		4,662	\$160,752	19,786,192	3,896,467	1,363,775
Residential Average kWh Sales (3 yr Ave actual and projected)						88,849,019
Residential kWh Savings as percentage of Residential kWh Sales						1.5%

Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	5	\$1,250	82,778	49,667	16,556
Ag, Commercial and Industrial Total		5	\$1,250	82,778	49,667	16,556
C & I Average kWh Sales (3 yr Ave actual and projected)**						22,311,042
C & I kWh Savings as percentage of C & I kWh Sales						0.1%

II. Demand Response Programs						
	Water Heater Load Control	121	\$30,250			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$1,000			
	Energy Audit Services - Residential *	70	\$7,000			
IV. Educational & Research Programs						
	Model Housing Education	25	\$1,250			
	Member Information and Education	3,835	\$47,206			
	Peak Alert	3,835	\$3,835			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	3,835	\$23,010			
TOTAL		16,393	\$275,553	19,868,970	3,946,134	1,380,331
Total Average kWh Sales (3 yr Ave actual and projected)**						111,160,061
Total kWh Savings as percentage of Total kWh Sales						1.2%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Sac County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	2	\$313	7,102	507	1
	SEER 14.5 (and EER 12)	1	\$125	3,108	222	0
	SEER 15 +	1	\$188	3,994	285	0
	SEER 16 (and EER 13)					
	Geothermal Heat Pump	3	\$5,213	796,736	39,837	5
	Air Source Heat Pump	9	\$5,625	1,060,339	70,689	9
	Heat Recovery Ventilators	1	\$157	12,521	626	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	288	\$631	137,686	18,861	17
	Local CFL Rebate Program(s)	133	\$499	63,584	8,710	8
	T8 or better Lighting Fixtures	21	\$158	14,527	886	0
	4 ft. T8 or better Fixture w/ electronic ballasts	21	\$158	14,527	886	0
	ENERGY STAR LED lighting	6	\$23	8,032	446	0
Exterior Lighting						
	LED Holiday Lighting	27	\$68	25,175	2,098	7
Residential Water Heating (low income included)						
	High Efficiency Water Heater	25	\$4,875	115,718	7,715	1
	50-79 gallon	11	\$1,375	38,095	2,540	0
	80 gallon+	14	\$3,500	77,622	5,175	1
	Heat Pump Water Heater - (Add-On)	1	\$375	19,259	1,926	0
	Flow Restrictors - Faucet	54	\$453	180,180	20,020	1
	Flow Restrictors - Shower	30	\$503	189,810	18,981	2
	Tank Insulation	5	\$31	8,547	855	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	1	\$65	2,442	222	0
	ENERGY STAR Qualified Dishwasher	8	\$250	10,354	941	1
	ENERGY STAR Qualified Refrigerator	7	\$219	11,072	738	0
	ENERGY STAR Qualified Freezer	10	\$313	11,156	744	0
	Appliance Recycling	24	\$1,320	208,168	23,198	4
	Refrigerator	12	\$660	129,710	14,412	2
	Freezer	11	\$605	77,692	8,632	2
	Window AC Unit	1	\$55	766	153	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *					
Building Shell - Existing Home Only						
	Weatherization Rebates	10	\$3,464	314,230	11,104	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$413	45,688	1,523	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$206	4,795	160	0
	Wall (Bring Up to R19) - Elect. Heat Only					
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$307	4,562	152	0
	Foundation (Bring Up to R-10)	3	\$1,890	194,106	6,470	
	Infiltration Control	2	\$216	45,455	1,818	0
	Duct Insulation (in unconditioned space)	2	\$432	19,625	981	0
	Residential Total	665	\$24,555	3,196,636	229,104	56
	Residential Average kWh Sales (3 yr Ave actual and projected)				16,793,356	
	Residential kWh Savings as percentage of Residential kWh Sales					1.4%

Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$250	16,556	3,311	1
	Ag, Commercial and Industrial Total	1	\$250	16,556	3,311	1
	C & I Average kWh Sales (3 yr Ave actual and projected)**				6,208,643	
	C & I kWh Savings as percentage of C & I kWh Sales					0.1%

II. Demand Response Programs						
	Water Heater Load Control	21	\$5,250			11
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	12	\$1,200			
IV. Educational & Research Programs						
	Model Housing Education	5	\$250			
	Member Information and Education	765	\$11,475			
	Peak Alert	765	\$765			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	765	\$4,590			
	TOTAL	3,000	\$48,535	3,213,191	232,415	67
	Total Average kWh Sales (3 yr Ave actual and projected)**				23,001,998	
	Total kWh Savings as percentage of Total kWh Sales					1.0%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Sac County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	2	\$313	7,102	507	1
	SEER 14.5 (and EER 12)	1	\$125	3,108	222	0
	SEER 15 +	1	\$188	3,994	285	0
	SEER 16 (and EER 13)					
	Geothermal Heat Pump	4	\$6,950	1,062,314	53,116	6
	Air Source Heat Pump	9	\$5,625	1,060,339	70,689	9
	Heat Recovery Ventilators	1	\$157	12,521	626	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	361	\$791	172,586	23,642	22
	Local CFL Rebate Program(s)	165	\$619	78,883	10,806	10
	T8 or better Lighting Fixtures	27	\$203	18,677	1,139	0
	4 ft. T8 or better Fixture w/ electronic ballasts	27	\$203	18,677	1,139	0
	ENERGY STAR LED lighting	11	\$41	14,725	818	0
Exterior Lighting						
	LED Holiday Lighting	30	\$75	27,972	2,331	8
Residential Water Heating (low income included)						
	High Efficiency Water Heater	25	\$4,875	115,718	7,715	1
	50-79 gallon	11	\$1,375	38,095	2,540	0
	80 gallon+	14	\$3,500	77,622	5,175	1
	Heat Pump Water Heater - (Add-On)	1	\$375	19,259	1,926	0
	Flow Restrictors - Faucet	55	\$461	183,516	20,391	1
	Flow Restrictors - Shower	30	\$503	189,810	18,981	2
	Tank Insulation	5	\$31	8,547	855	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	2	\$130	4,884	444	0
	ENERGY STAR Qualified Dishwasher	11	\$344	14,237	1,294	1
	ENERGY STAR Qualified Refrigerator	8	\$250	12,654	844	0
	ENERGY STAR Qualified Freezer	12	\$375	13,387	892	0
	Appliance Recycling	24	\$1,320	208,168	23,198	4
	Refrigerator	12	\$660	129,710	14,412	2
	Freezer	11	\$605	77,692	8,632	2
	Window AC Unit	1	\$55	766	153	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *					
Building Shell - Existing Home Only						
	Weatherization Rebates	17	\$6,178	529,220	18,586	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	1	\$413	45,688	1,523	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$413	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$615	9,124	304	0
	Foundation (Bring Up to R-10)	5	\$3,150	323,510	10,784	
	Infiltration Control	3	\$324	68,182	2,727	0
	Duct Insulation (in unconditioned space)	3	\$648	29,437	1,472	0
	Residential Total	800	\$29,616	3,754,518	258,799	66
	Residential Average kWh Sales (3 yr Ave actual and projected)				17,414,451	
	Residential kWh Savings as percentage of Residential kWh Sales					1.5%

Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$250	16,556	3,311	1
	Ag, Commercial and Industrial Total	1	\$250	16,556	3,311	1
	C & I Average kWh Sales (3 yr Ave actual and projected)**				5,044,396	
	C & I kWh Savings as percentage of C & I kWh Sales					0.1%

II. Demand Response Programs						
	Water Heater Load Control	22	\$5,500			11
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	13	\$1,300			
IV. Educational & Research Programs						
	Model Housing Education	5	\$250			
	Member Information and Education	766	\$1,171			
	Peak Alert	766	\$766			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	766	\$4,596			
	TOTAL	3,140	\$43,649	3,771,074	262,110	78
	Total Average kWh Sales (3 yr Ave actual and projected)**				22,458,848	
	Total kWh Savings as percentage of Total kWh Sales					1.2%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Sac County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	3	\$563	12,727	909	1
	SEER 14.5 (and EER 12)	1	\$125	3,108	222	0
	SEER 15 +	1	\$188	3,994	285	0
	SEER 16 (and EER 13)	1	\$250	5,625	402	0
	Geothermal Heat Pump	4	\$6,950	1,062,314	53,116	6
	Air Source Heat Pump	9	\$5,625	1,060,339	70,689	9
	Heat Recovery Ventilators	1	\$157	12,521	626	0
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	435	\$953	207,963	28,488	26
	Local CFL Rebate Program(s)	197	\$739	94,181	12,902	12
	T8 or better Lighting Fixtures	32	\$240	22,136	1,350	0
	4 ft. T8 or better Fixture w/ electronic ballasts	32	\$240	22,136	1,350	0
	ENERGY STAR LED lighting	16	\$60	21,419	1,190	1
Exterior Lighting						
	LED Holiday Lighting	34	\$85	31,702	2,642	9
Residential Water Heating (low income included)						
	High Efficiency Water Heater	25	\$4,875	115,718	7,715	1
	50-79 gallon	11	\$1,375	38,095	2,540	0
	80 gallon+	14	\$3,500	77,622	5,175	1
	Heat Pump Water Heater - (Add-On)	2	\$750	38,517	3,852	0
	Flow Restrictors - Faucet	55	\$461	183,516	20,391	1
	Flow Restrictors - Shower	30	\$503	189,810	18,981	2
	Tank Insulation	5	\$31	8,547	855	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	2	\$130	4,884	444	0
	ENERGY STAR Qualified Dishwasher	13	\$406	16,825	1,530	1
	ENERGY STAR Qualified Refrigerator	10	\$313	15,818	1,055	0
	ENERGY STAR Qualified Freezer	15	\$469	16,733	1,116	0
	Appliance Recycling	24	\$1,320	208,168	23,198	4
	Refrigerator	12	\$660	129,710	14,412	2
	Freezer	11	\$605	77,692	8,632	2
	Window AC Unit	1	\$55	766	153	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *					
Building Shell - Existing Home Only						
	Weatherization Rebates	21	\$7,544	672,149	23,665	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$825	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$413	9,590	320	0
	Wall (Bring up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
	Wall (Bring up to R19) - Central AC Only (LP Heat)	2	\$615	9,124	304	0
	Foundation (Bring Up to R-10)	6	\$3,780	388,211	12,940	0
	Infiltration Control	4	\$432	90,909	3,636	0
	Duct Insulation (in unconditioned space)	4	\$864	39,250	1,962	0
	Residential Total	933	\$32,174	3,995,988	274,711	75
	Residential Average kWh Sales (3 yr Ave actual and projected)				17,695,764	
	Residential kWh Savings as percentage of Residential kWh Sales				1.6%	

Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$250	16,556	3,311	1
	Ag, Commercial and Industrial Total	1	\$250	16,556	3,311	1
	C & I Average kWh Sales (3 yr Ave actual and projected)**				3,593,408	
	C & I kWh Savings as percentage of C & I kWh Sales				0.1%	

II. Demand Response Programs						
	Water Heater Load Control	24	\$6,000			12
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	14	\$1,400			
IV. Educational & Research Programs						
	Model Housing Education	5	\$250			
	Member Information and Education	767	\$11,505			
	Peak Alert	767	\$767			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	767	\$4,602			
	TOTAL	3,279	\$57,148	4,012,543	278,022	87
	Total Average kWh Sales (3 yr Ave actual and projected)**				21,289,172	
	Total kWh Savings as percentage of Total kWh Sales				1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Sac County Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	5	\$875	19,829	1,416	2
	SEER 14.5 (and EER 12)	2	\$250	6,216	444	0
	SEER 15 +	2	\$375	7,988	571	1
	SEER 16 (and EER 13)	1	\$250	5,625	402	0
	Geothermal Heat Pump	4	\$6,950	1,062,314	53,116	6
	Air Source Heat Pump	9	\$5,625	1,060,339	70,689	9
	Heat Recovery Ventilators	1	\$157	12,521	626	
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	510	\$1,117	243,819	33,400	31
	Local CFL Rebate Program(s)	229	\$859	109,480	14,997	14
	T8 or better Lighting Fixtures	37	\$278	25,595	1,561	0
	4 ft. T8 or better Fixture w/ electronic ballasts	37	\$278	25,595	1,561	0
	ENERGY STAR LED lighting	21	\$79	28,112	1,562	1
Exterior Lighting						
	LED Holiday Lighting	37	\$93	34,499	2,875	9
Residential Water Heating (low income included)						
	High Efficiency Water Heater	25	\$4,875	115,718	7,715	1
	50-79 gallon	11	\$1,375	38,095	2,540	0
	80 gallon+	14	\$3,500	77,622	5,175	1
	Heat Pump Water Heater - (Add-On)	2	\$750	38,517	3,852	0
	Flow Restrictors - Faucet	55	\$461	183,516	20,391	1
	Flow Restrictors - Shower	30	\$503	189,810	18,981	2
	Tank Insulation	5	\$31	8,547	855	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	2	\$130	4,884	444	0
	ENERGY STAR Qualified Dishwasher	15	\$469	19,414	1,765	1
	ENERGY STAR Qualified Refrigerator	12	\$375	18,981	1,265	0
	ENERGY STAR Qualified Freezer	17	\$531	18,964	1,264	0
	Appliance Recycling	24	\$1,320	208,168	23,198	4
	Refrigerator	12	\$660	129,710	14,412	2
	Freezer	11	\$605	77,692	8,632	2
	Window AC Unit	1	\$55	766	153	0
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Building Shell - Existing Home Only						
	Weatherization Rebates	25	\$9,128	834,093	29,378	1
	Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$825	91,375	3,046	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	2	\$413	9,590	320	0
	Wall (Bring Up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	2	\$615	9,124	304	0
	Foundation (Bring Up to R-10)	8	\$5,040	517,615	17,254	
	Infiltration Control	5	\$540	113,636	4,545	0
	Duct Insulation (in unconditioned space)	5	\$1,080	49,062	2,453	0
	Residential Total	1,066	\$35,856	4,270,419	290,459	83
	Residential Average kWh Sales (3 yr Ave actual and projected)				18,169,008	
	Residential kWh Savings as percentage of Residential kWh Sales				1.6%	

Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$250	16,556	3,311	1
	Ag, Commercial and Industrial Total	1	\$250	16,556	3,311	1
	C & I Average kWh Sales (3 yr Ave actual and projected)**				3,707,766	
	C & I kWh Savings as percentage of C & I kWh Sales				0.1%	

II. Demand Response Programs						
	Water Heater Load Control	26	\$6,500			13
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	15	\$1,500			
IV. Educational & Research Programs						
	Model Housing Education	5	\$250			
	Member Information and Education	768	\$11,520			
	Peak Alert	768	\$768			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	768	\$4,608			
	TOTAL	3,418	\$61,452	4,286,975	293,770	97
	Total Average kWh Sales (3 yr Ave actual and projected)**				21,876,774	
	Total kWh Savings as percentage of Total kWh Sales				1.3%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
Sac County Rural Electric Cooperative					
	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	5	\$875	19,829	1,416	2
SEER 14.5 (and EER 12)	2	\$250	6,216	444	0
SEER 15 +	2	\$375	7,988	571	1
SEER 16 (and EER 13)	1	\$250	5,625	402	0
Geothermal Heat Pump	4	\$6,950	1,062,314	53,116	6
Air Source Heat Pump	10	\$6,250	1,178,154	78,544	10
Heat Recovery Ventilators	1	\$157	12,521	626	
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	583	\$1,277	278,719	38,181	35
Local CFL Rebate Program(s)	261	\$979	124,778	17,093	16
T8 or better Lighting Fixtures	43	\$323	29,745	1,814	0
4 ft. T8 or better Fixture w/ electronic ballasts	43	\$323	29,745	1,814	0
ENERGY STAR LED lighting	26	\$98	34,805	1,934	1
Exterior Lighting					
LED Holiday Lighting	40	\$100	37,296	3,108	10
Residential Water Heating (low income included)					
High Efficiency Water Heater	25	\$4,875	115,718	7,715	1
50-79 gallon	11	\$1,375	38,095	2,540	0
80 gallon+	14	\$3,500	77,622	5,175	1
Heat Pump Water Heater - (Add-On)	2	\$750	38,517	3,852	0
Flow Restrictors - Faucet	55	\$461	183,516	20,391	1
Flow Restrictors - Shower	30	\$503	189,810	18,981	2
Tank Insulation	5	\$31	8,547	855	0
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	3	\$195	7,326	666	0
ENERGY STAR Qualified Dishwasher	17	\$531	22,002	2,000	2
ENERGY STAR Qualified Refrigerator	13	\$406	20,563	1,371	0
ENERGY STAR Qualified Freezer	20	\$625	22,311	1,487	0
Appliance Recycling	24	\$1,320	208,168	23,198	4
Refrigerator	12	\$660	129,710	14,412	2
Freezer	11	\$605	77,692	8,632	2
Window AC Unit	1	\$55	766	153	0
Efficient Home Incentives (low income included)					
Energy Efficient Home Construction Rebates *	1	\$1,250	33,300	1,110	0
Building Shell - Existing Home Only					
Weatherization Rebates	30	\$10,595	940,692	33,247	2
Ceiling (Bring up to R-38) - Elect. Heat Only	2	\$825	91,375	3,046	0
Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	3	\$619	14,386	480	0
Wall (Bring up to R19) - Elect. Heat Only	1	\$615	43,690	1,456	0
Wall (Bring up to R19) - Central AC Only (LP Heat)	3	\$922	13,686	456	0
Foundation (Bring up to R-10)	9	\$5,670	582,317	19,411	
Infiltration Control	6	\$648	136,364	5,455	0
Duct Insulation (in unconditioned space)	6	\$1,296	58,874	2,944	0
Residential Total	1,198	\$38,551	4,568,632	310,702	92
Residential Average kWh Sales (3 yr Ave actual and projected)				18,776,440	
Residential kWh Savings as percentage of Residential kWh Sales					1.7%

Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	1	\$250	16,556	3,311	1
Ag, Commercial and Industrial Total	1	\$250	16,556	3,311	1
C & I Average kWh Sales (3 yr Ave actual and projected)**				3,756,828	
C & I kWh Savings as percentage of C & I kWh Sales					0.1%

II. Demand Response Programs					
Water Heater Load Control	28	\$7,000			14
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$200			
Energy Audit Services - Residential *	16	\$1,600			
IV. Educational & Research Programs					
Model Housing Education	5	\$250			
Member Information and Education	769	\$11,535			
Peak Alert	769	\$769			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	769	\$4,614			
TOTAL	3,556	\$64,769	4,585,187	314,013	107
Total Average kWh Sales (3 yr Ave actual and projected)**				22,533,268	
Total kWh Savings as percentage of Total kWh Sales					1.4%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Sac County Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning					
	SEER 14.5 (and EER 12)	1.16	1.16	3.20	1.72
	SEER 15 +	0.96	1.19	2.39	1.45
	SEER 16 (and EER 13)	0.86	1.08	2.35	1.20
	Geothermal Heat Pump	0.44	1.96	4.70	0.95
	Air Source Heat Pump	0.48	6.55	6.62	3.55
	Heat Recovery Ventilators	0.23	1.05	1.41	0.33
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.99	13.34	17.77	14.02
	Local CFL Rebate Program(s)	0.96	13.21	11.74	14.15
	T8 or better Lighting Fixtures				
	4 ft. T8 or better Fixture w/ electronic ballasts	0.42	3.51	3.04	1.84
	ENERGY STAR LED lighting	0.74	3.10	18.61	3.05
Exterior Lighting					
	LED Holiday Lighting	0.90	4.67	25.26	5.19
Residential Water Heating (low income included)					
High Efficiency Water Heater					
	50-79 gallon	1.43	0.90	4.19	1.70
	80 gallon+	1.27	1.71	3.29	2.71
	Heat Pump Water Heater - (Add-On)	0.35	2.05	1.60	0.84
	Flow Restrictors - Faucet	0.30	57.34	3.57	4.40
	Flow Restrictors - Shower	0.36	20.76	5.08	6.32
	Tank Insulation	0.36	52.24	5.67	7.06
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.45	1.15	1.69	0.65
	ENERGY STAR Qualified Dishwasher	0.74	2.68	3.00	2.31
	ENERGY STAR Qualified Refrigerator	0.35	2.72	1.59	1.16
	ENERGY STAR Qualified Freezer	0.38	3.13	1.39	1.43
	Appliance Recycling				
	Refrigerator	0.53	4.87	6.90	3.01
	Freezer	0.54	3.29	4.80	2.09
	Window AC Unit	0.56	0.43	1.17	0.30
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.30	1.95	0.77	0.84
Building Shell - Existing Home Only					
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.30	3.60	2.19	1.51
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.36	0.54	0.85	0.31
	Wall (Bring Up to R19) - Elect. Heat Only	0.28	2.45	1.42	0.98
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.30	0.41	0.56	0.20
	Foundation (Bring Up to R-10)	0.22	1.45	1.32	0.48
	Infiltration Control	0.32	4.96	4.27	2.16
	Duct Insulation (in unconditioned space)	0.27	1.32	1.20	0.49

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	0.59	1.51	3.25	1.03	

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Model Housing Education				
	Member Information and Education				
	Peak Alert				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Southern Iowa Electric Cooperative, Inc.

BACKGROUND

Southern Iowa Electric Cooperative, headquartered in Bloomfield, Iowa serves portions of Appanoose, Davis, Van Buren, and Wapello counties. Southern Iowa is a not-for-profit cooperative providing reliable electric service to member-owners. The cooperative assists member-owners in managing their electric needs including offering a menu of energy efficiency options. Southern Iowa is governed by a board of directors all elected by and from the member-consumers served by the electric cooperative. Southern Iowa has 22 employees and serves approximately 2.8 customers per mile of line.

The cooperative serves approximately 4,501 residential customers. According to the most recent survey data, approximately 50 percent of these were identified as farm-related accounts. Southern Iowa serves 236 customers classified as small commercial (less than 1,000 kVA). The largest contributors to this class include pork producers. The cooperative serves 3 customers classified as large commercial (greater than 1,000 kVA) including a plastic pipe fittings manufacturer, a propane tank welder and a saw mill.

Southern Iowa purchases its power through an all-requirements contract with Northeast Missouri Electric Power Cooperative, which in turn receives power from Associated Electric Cooperative Inc. (AECI), a generation and transmission cooperative located in Springfield, Missouri. AECI provides electric power to six member generation and transmission systems, which in turn provide power to 51 electric distribution cooperatives located in Missouri, Iowa and Oklahoma.

As part of its generation resource planning process, AECI regularly evaluates its resource options to continue providing high quality service and reliable, least-cost power to its members. AECI engaged an independent third-party consultant to prepare an economic evaluation of energy efficiency measures that would be appropriate to offer though the 51 distribution members of the AECI system.

The Website for Southern Iowa is <http://www.southerniowarec.coop>. The website is one of the mechanisms used to promote energy efficiency programs as well as provide energy education and other helpful safety and community information.

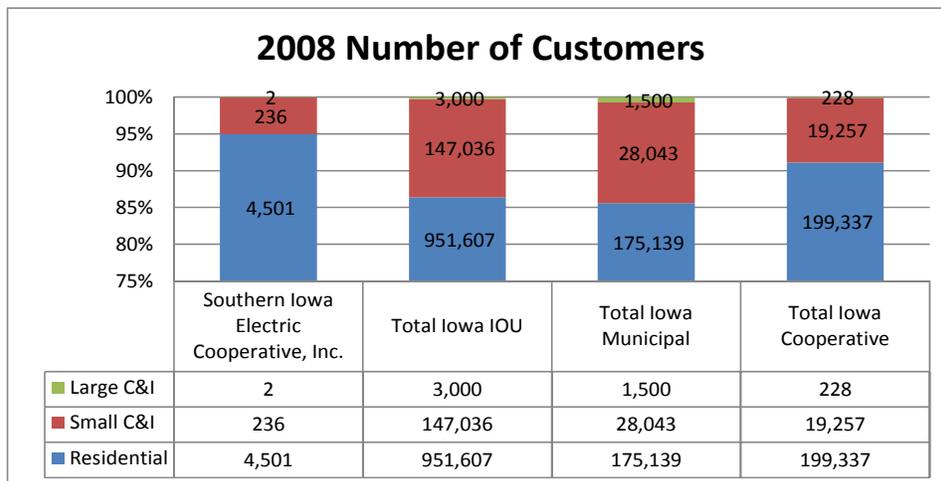
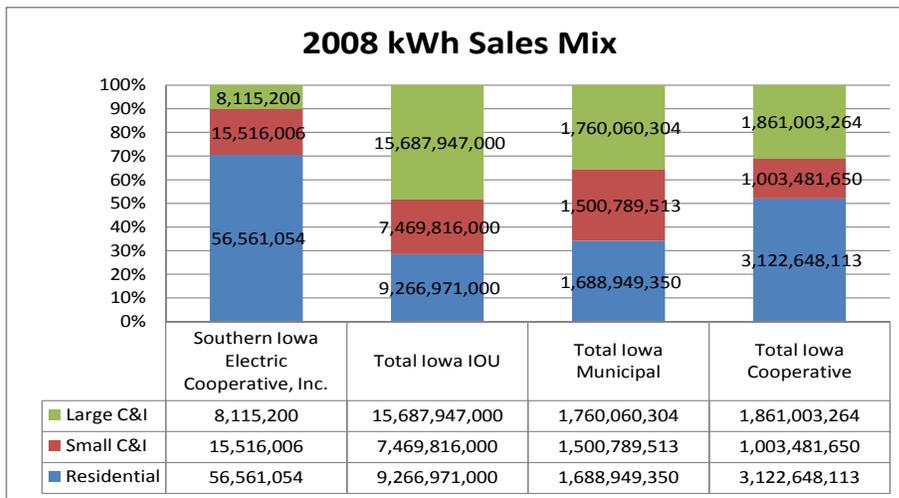
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. Independent qualified third-party consultants were hired to perform the assessments for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined, our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER PROFILE

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Southern Iowa Electric Cooperative itself. This illustrates that making any comparison of Southern Iowa energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

In 2007, Associated Electric Cooperative, Inc. completed a preliminary study of energy efficiency potential with the goal of offering energy efficiency programs that would reduce power supply costs through the 51 member distribution cooperatives. The result of that study was a package of programs that began being offered by AECI member systems (including Southern Iowa) in 2008. These programs include:

1. Compact Fluorescent Light Bulb Giveaway
2. Residential Energy Audit (w/ On-site Measures)
3. Energy Star™ Dishwasher
4. Energy Star™ Clothes Washer
5. Energy Star™ Window Air Conditioner
6. High Efficiency Heat Pump Replacement
7. Commercial and Industrial Energy Grant program

AECI has recently expanded its energy efficiency analysis and studies have recently been completed that focus on the residential-farm and commercial and industrial (C&I) sectors specifically. While no final decision has been the scope and nature of the specific agricultural and C&I program offerings, the proposed program goals will be incorporated into this filing and revised as necessary.

Regardless of the statutory requirements set forth by the state of Iowa, Southern Iowa has been and will continue to be committed to supply side and demand side energy efficiency for its members. Southern Iowa has invested \$1,381,249 in demand side energy efficiency programs from 1992 through 2007. Going forward, Southern Iowa has a planned demand side investment of approximately \$1.1 million for 2010 through 2014.

ENERGY EFFICIENCY GOALS

A number of key goals have been established as part of the on-going energy efficiency program development process, in conjunction with the requirements under the Iowa statutes. These goals include:

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	150	\$37,500	620,435	132,950	44,317
	SEER 14.5 (and EER 12)	100	\$25,000	349,650	74,925	24,975
	SEER 15 +	25	\$6,250	112,665	24,143	8,048
	SEER 16 (and EER 13)	25	\$6,250	158,120	33,883	11,294
	ENERGY STAR Qualified Room Air Conditioner	50	\$3,194	44,456	14,819	4,940
	Geothermal Heat Pump	15	\$80,145	3,983,679	597,552	199,184
	Air Source Heat Pump	15	\$36,569	1,767,231	353,446	117,815
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	2,000	\$53,616	956,154	425,685	130,980
Exterior Lighting						
	High Efficiency Exterior Lighting	425	\$100,938	425,519	290,126	96,709
	High Pressure Sodium - 50 - 100 W	425	\$100,938	425,519	290,126	96,709
Residential Water Heating (low income included)						
	High Efficiency Water Heater	350	\$125,532	1,316,183	263,237	87,746
	50-79 gallon	300	\$106,208	1,038,960	207,792	69,264
	80 gallon+	50	\$19,325	277,223	55,445	18,482
	Flow Restrictors - Faucet	70	\$4,134	233,566	77,855	25,952
	Flow Restrictors - Shower	70	\$9,569	442,890	132,867	44,289
	Tank Insulation	70	\$5,367	119,658	35,897	11,966
	Pipe Insulation	70	\$2,155	124,709	24,942	8,314
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	150	\$22,964	366,300	99,900	33,300
	ENERGY STAR Qualified Dishwasher	75	\$5,827	97,070	26,474	8,825
Additional Low Income						
	Energy Efficiency Kits	120	\$18,000	1,220,378	406,793	135,598
Building Shell - Existing Home Only						
	Weatherization Rebates	150	\$114,354	6,655,838	688,311	229,437
	Ceiling (Bring up to R-38) - Elect. Heat Only	50	\$43,571	2,284,380	228,438	76,146
	Foundation (Bring Up to R-10)	50	\$51,905	3,235,095	323,510	107,837
	Infiltration Control	50	\$18,877	1,136,363	136,364	45,455
Residential Total		3,780	\$619,863	18,374,063	3,570,853	1,179,369
Residential Average kWh Sales (3 yr Ave actual and projected)						274,589,629
Residential kWh Savings as percentage of Residential kWh Sales						0.4%

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	25	\$10,163	24,954	11,926	5,146
	T-8 or 46" T5 - 4 ft	14	\$9,880	19,493	6,962	3,046
	CFL lamps - Energy Star- 9W and up	11	\$283	5,460	4,964	2,100
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	7	\$10,296	121,523	13,888	6,076
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	4	\$5,104	288,711	48,119	19,247
	80 gallon+	4	\$5,104	288,711	48,119	19,247
Agricultural						
	Dairy Pre-coolers Incentive	4	\$10,179	588,411	98,069	39,227
	Livestock Ventilation Fans	4	\$932	21,259	4,429	1,772
	36"-47"	4	\$932	21,259	4,429	1,772
	Circulating Fans --- BESS Lab Ratings	14	\$72,454	4,195,800	639,360	279,720
	High Velocity; Low Speed	14	\$72,454	4,195,800	639,360	279,720
	Scroll compressor (milk cooling)	4	\$4,255	221,445	36,908	14,763
	Variable Speed Drive Motor - Dairy Vacuum Pump	4	\$14,656	888,173	130,614	52,245
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	4	\$47,706	1,776,000	444,000	177,600
Ag, Commercial and Industrial Total		70	\$175,744	8,126,275	1,427,311	595,797
C & I Average kWh Sales (3 yr Ave actual and projected)**						125,238,785
C & I kWh Savings as percentage of C & I kWh Sales						0.5%

II. Demand Response Programs						
	Residential Time-of-Day Price	40	\$9,000			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$1,000			
	Expert Energy Services - C&I	25	\$75,000			
	Energy Audit Services - Residential *	218	\$21,800			
IV. Educational & Research Programs						
	Member Information and Education	5,000	\$50,000			
	Living with Energy in Iowa	22,000	\$52,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	22,000	\$88,580			
TOTAL		53,138	\$1,093,487	26,500,338	4,998,165	1,775,166
Total Average kWh Sales (3 yr Ave actual and projected)**						399,828,414
Total kWh Savings as percentage of Total kWh Sales						0.4%

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$7,500	124,087	8,863	9
	SEER 14.5 (and EER 12)	20	\$5,000	69,930	4,995	5
	SEER 15 +	5	\$1,250	22,533	1,610	2
	SEER 16 (and EER 13)	5	\$1,250	31,624	2,259	2
	ENERGY STAR Qualified Room Air Conditioner	10	\$639	8,891	988	1
	Geothermal Heat Pump	3	\$16,029	796,736	39,837	5
	Air Source Heat Pump	3	\$7,314	353,446	23,563	3
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	250	\$7,040	119,519	16,373	15
Exterior Lighting						
	High Efficiency Exterior Lighting	85	\$20,188	85,104	19,342	
	High Pressure Sodium - 50 - 100 W	85	\$20,188	85,104	19,342	
Residential Water Heating (low income included)						
	High Efficiency Water Heater	70	\$25,106	263,237	17,549	2
	50-79 gallon	60	\$21,242	207,792	13,853	2
	80 gallon+	10	\$3,865	55,445	3,696	1
	Flow Restrictors - Faucet	14	\$827	46,713	5,190	0
	Flow Restrictors - Shower	14	\$1,914	88,578	8,858	1
	Tank Insulation	14	\$1,073	23,932	2,393	0
	Pipe Insulation	14	\$431	24,942	1,663	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	30	\$4,593	73,260	6,660	2
	ENERGY STAR Qualified Dishwasher	15	\$1,165	19,414	1,765	1
Additional Low Income						
	Energy Efficiency Kits	24	\$3,600	244,076	27,120	3
Building Shell - Existing Home Only						
	Weatherization Rebates	30	\$22,871	1,331,168	45,887	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$8,714	456,876	15,229	1
	Foundation (Bring Up to R-10)	10	\$10,381	647,019	21,567	1
	Infiltration Control	10	\$3,775	227,273	9,091	1
Residential Total		606	\$120,289	3,603,101	226,050	46
Residential Average kWh Sales (3 yr Ave actual and projected)					55,681,243	
Residential kWh Savings as percentage of Residential kWh Sales					0.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting					
	T-8 or 46" T5 - 4 ft					
	CFL lamps - Energy Star- 9W and up					
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump					
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater					
	80 gallon+					
Agricultural						
	Dairy Pre-coolers Incentive					
	Livestock Ventilation Fans					
	36"-47"					
	Circulating Fans --- BESS Lab Ratings					
	High Velocity; Low Speed					
	Scroll compressor (milk cooling)					
	Variable Speed Drive Motor - Dairy Vacuum Pump					
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program					
Ag, Commercial and Industrial Total		0	\$0	0	0	0
C & I Average kWh Sales (3 yr Ave actual and projected)**					23,726,476	
C & I kWh Savings as percentage of C & I kWh Sales					0.0%	

II. Demand Response Programs						
	Residential Time-of-Day Price					
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Expert Energy Services - C&I	5	\$15,000			
	Energy Audit Services - Residential *	28	\$2,800			
IV. Educational & Research Programs						
	Member Information and Education	1,000	\$10,000			
	Living with Energy in Iowa	4,400	\$10,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,400	\$17,716			
TOTAL		10,440	\$176,505	3,603,101	226,050	46
Total Average kWh Sales (3 yr Ave actual and projected)**					79,407,719	
Total kWh Savings as percentage of Total kWh Sales					0.3%	

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$7,500	124,087	8,863	9
	SEER 14.5 (and EER 12)	20	\$5,000	69,930	4,995	5
	SEER 15 +	5	\$1,250	22,533	1,610	2
	SEER 16 (and EER 13)	5	\$1,250	31,624	2,259	2
	ENERGY STAR Qualified Room Air Conditioner	10	\$639	8,891	988	1
	Geothermal Heat Pump	3	\$16,029	796,736	39,837	5
	Air Source Heat Pump	3	\$7,314	353,446	23,563	3
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	750	\$21,119	358,558	49,118	45
Exterior Lighting						
	High Efficiency Exterior Lighting	85	\$20,188	85,104	19,342	
	High Pressure Sodium - 50 - 100 W	85	\$20,188	85,104	19,342	
Residential Water Heating (low income included)						
	High Efficiency Water Heater	70	\$25,106	263,237	17,549	2
	50-79 gallon	60	\$21,242	207,792	13,853	2
	80 gallon+	10	\$3,865	55,445	3,696	1
	Flow Restrictors - Faucet	14	\$827	46,713	5,190	0
	Flow Restrictors - Shower	14	\$1,914	88,578	8,858	1
	Tank Insulation	14	\$1,073	23,932	2,393	0
	Pipe Insulation	14	\$431	24,942	1,663	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	30	\$4,593	73,260	6,660	2
	ENERGY STAR Qualified Dishwasher	15	\$1,165	19,414	1,765	1
Additional Low Income						
	Energy Efficiency Kits	24	\$3,600	244,076	27,120	3
Building Shell - Existing Home Only						
	Weatherization Rebates	30	\$22,871	1,331,168	45,887	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$8,714	456,876	15,229	1
	Foundation (Bring Up to R-10)	10	\$10,381	647,019	21,567	1
	Infiltration Control	10	\$3,775	227,273	9,091	1
Residential Total		1,106	\$134,368	3,842,140	258,795	76
Residential Average kWh Sales (3 yr Ave actual and projected)					55,228,862	
Residential kWh Savings as percentage of Residential kWh Sales					0.5%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	4	\$1,463	3,778	817	0
	T-8 or 46" T5 - 4 ft	2	\$1,411	2,785	435	0
	CFL lamps - Energy Star- 9W and up	2	\$51	993	382	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	1	\$1,471	17,360	868	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	2	\$10,351	599,400	39,960	8
	High Velocity; Low Speed	2	\$10,351	599,400	39,960	8
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$11,926	444,000	44,400	12
Ag, Commercial and Industrial Total		13	\$33,992	1,566,538	117,859	28
C & I Average kWh Sales (3 yr Ave actual and projected)**					24,250,130	
C & I kWh Savings as percentage of C & I kWh Sales					0.5%	

II. Demand Response Programs						
	Residential Time-of-Day Price	10	\$2,250			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Expert Energy Services - C&I	5	\$15,000			
	Energy Audit Services - Residential *	40	\$4,000			
IV. Educational & Research Programs						
	Member Information and Education	1,000	\$10,000			
	Living with Energy in Iowa	4,400	\$10,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,400	\$17,716			
TOTAL		10,975	\$228,026	5,408,677	376,654	103
Total Average kWh Sales (3 yr Ave actual and projected)**					79,478,991	
Total kWh Savings as percentage of Total kWh Sales					0.5%	

* Savings for the specific measures are accounted for and included in the applicable programs.
 **Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
 # See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$7,500	124,087	8,863	9
	SEER 14.5 (and EER 12)	20	\$5,000	69,930	4,995	5
	SEER 15 +	5	\$1,250	22,533	1,610	2
	SEER 16 (and EER 13)	5	\$1,250	31,624	2,259	2
	ENERGY STAR Qualified Room Air Conditioner	10	\$639	8,891	988	1
	Geothermal Heat Pump	3	\$16,029	796,736	39,837	5
	Air Source Heat Pump	3	\$7,314	353,446	23,563	3
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	500	\$12,729	239,039	32,745	30
Exterior Lighting						
	High Efficiency Exterior Lighting	85	\$20,188	85,104	19,342	
	High Pressure Sodium - 50 - 100 W	85	\$20,188	85,104	19,342	
Residential Water Heating (low income included)						
	High Efficiency Water Heater	70	\$25,106	263,237	17,549	2
	50-79 gallon	60	\$21,242	207,792	13,853	2
	80 gallon+	10	\$3,865	55,445	3,696	1
	Flow Restrictors - Faucet	14	\$827	46,713	5,190	0
	Flow Restrictors - Shower	14	\$1,914	88,578	8,858	1
	Tank Insulation	14	\$1,073	23,932	2,393	0
	Pipe Insulation	14	\$431	24,942	1,663	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	30	\$4,593	73,260	6,660	2
	ENERGY STAR Qualified Dishwasher	15	\$1,165	19,414	1,765	1
Additional Low Income						
	Energy Efficiency Kits	24	\$3,600	244,076	27,120	3
Building Shell - Existing Home Only						
	Weatherization Rebates	30	\$22,871	1,331,168	45,887	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$8,714	456,876	15,229	1
	Foundation (Bring Up to R-10)	10	\$10,381	647,019	21,567	1
	Infiltration Control	10	\$3,775	227,273	9,091	1
Residential Total		856	\$125,978	3,722,620	242,423	61
Residential Average kWh Sales (3 yr Ave actual and projected)					54,343,025	
Residential kWh Savings as percentage of Residential kWh Sales					0.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	7	\$2,900	7,059	1,443	0
	T-8 or 46" T5 - 4 ft	4	\$2,823	5,570	870	0
	CFL lamps - Energy Star- 9W and up	3	\$77	1,489	573	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	2	\$2,942	34,721	1,736	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	4	\$20,701	1,198,800	79,920	16
	High Velocity; Low Speed	4	\$20,701	1,198,800	79,920	16
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$11,926	444,000	44,400	12
Ag, Commercial and Industrial Total		19	\$47,251	2,186,579	159,313	36
C & I Average kWh Sales (3 yr Ave actual and projected)**					24,951,799	
C & I kWh Savings as percentage of C & I kWh Sales					0.6%	

II. Demand Response Programs						
	Residential Time-of-Day Price	10	\$2,250			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Expert Energy Services - C&I	5	\$15,000			
	Energy Audit Services - Residential *	50	\$5,000			
IV. Educational & Research Programs						
	Member Information and Education	1,000	\$10,000			
	Living with Energy in Iowa	4,400	\$10,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,400	\$17,716			
TOTAL		10,741	\$233,895	5,909,200	401,736	97
Total Average kWh Sales (3 yr Ave actual and projected)**					79,294,824	
Total kWh Savings as percentage of Total kWh Sales					0.5%	

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$7,500	124,087	8,863	9
	SEER 14.5 (and EER 12)	20	\$5,000	69,930	4,995	5
	SEER 15 +	5	\$1,250	22,533	1,610	2
	SEER 16 (and EER 13)	5	\$1,250	31,624	2,259	2
	ENERGY STAR Qualified Room Air Conditioner	10	\$639	8,891	988	1
	Geothermal Heat Pump	3	\$16,029	796,736	39,837	5
	Air Source Heat Pump	3	\$7,314	353,446	23,563	3
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	250	\$6,365	119,519	16,373	15
Exterior Lighting						
	High Efficiency Exterior Lighting	85	\$20,188	85,104	19,342	
	High Pressure Sodium - 50 - 100 W	85	\$20,188	85,104	19,342	
Residential Water Heating (low income included)						
	High Efficiency Water Heater	70	\$25,106	263,237	17,549	2
	50-79 gallon	60	\$21,242	207,792	13,853	2
	80 gallon+	10	\$3,865	55,445	3,696	1
	Flow Restrictors - Faucet	14	\$827	46,713	5,190	0
	Flow Restrictors - Shower	14	\$1,914	88,578	8,858	1
	Tank Insulation	14	\$1,073	23,932	2,393	0
	Pipe Insulation	14	\$431	24,942	1,663	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	30	\$4,593	73,260	6,660	2
	ENERGY STAR Qualified Dishwasher	15	\$1,165	19,414	1,765	1
Additional Low Income						
	Energy Efficiency Kits	24	\$3,600	244,076	27,120	3
Building Shell - Existing Home Only						
	Weatherization Rebates	30	\$22,871	1,331,168	45,887	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$8,714	456,876	15,229	1
	Foundation (Bring Up to R-10)	10	\$10,381	647,019	21,567	1
	Infiltration Control	10	\$3,775	227,273	9,091	1
Residential Total		606	\$119,614	3,603,101	226,050	46
Residential Average kWh Sales (3 yr Ave actual and projected)					54,382,390	
Residential kWh Savings as percentage of Residential kWh Sales					0.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	7	\$2,900	7,059	1,443	0
	T-8 or 46" T5 - 4 ft	4	\$2,823	5,570	870	0
	CFL lamps - Energy Star- 9W and up	3	\$77	1,489	573	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	2	\$2,942	34,721	1,736	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	4	\$20,701	1,198,800	79,920	16
	High Velocity; Low Speed	4	\$20,701	1,198,800	79,920	16
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$11,926	444,000	44,400	12
Ag, Commercial and Industrial Total		19	\$47,251	2,186,579	159,313	36
C & I Average kWh Sales (3 yr Ave actual and projected)**					25,742,915	
C & I kWh Savings as percentage of C & I kWh Sales					0.6%	

II. Demand Response Programs						
	Residential Time-of-Day Price	10	\$2,250			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Expert Energy Services - C&I	5	\$15,000			
	Energy Audit Services - Residential *	50	\$5,000			
IV. Educational & Research Programs						
	Member Information and Education	1,000	\$10,000			
	Living with Energy in Iowa	4,400	\$10,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,400	\$17,716			
TOTAL		10,491	\$227,531	5,789,680	385,363	82
Total Average kWh Sales (3 yr Ave actual and projected)**					80,125,305	
Total kWh Savings as percentage of Total kWh Sales					0.5%	

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Southern Iowa Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$7,500	124,087	8,863	9
	SEER 14.5 (and EER 12)	20	\$5,000	69,930	4,995	5
	SEER 15 +	5	\$1,250	22,533	1,610	2
	SEER 16 (and EER 13)	5	\$1,250	31,624	2,259	2
	ENERGY STAR Qualified Room Air Conditioner	10	\$639	8,891	988	1
	Geothermal Heat Pump	3	\$16,029	796,736	39,837	5
	Air Source Heat Pump	3	\$7,314	353,446	23,563	3
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	250	\$6,365	119,519	16,373	15
Exterior Lighting						
	High Efficiency Exterior Lighting	85	\$20,188	85,104	19,342	
	High Pressure Sodium - 50 - 100 W	85	\$20,188	85,104	19,342	
Residential Water Heating (low income included)						
	High Efficiency Water Heater	70	\$25,106	263,237	17,549	2
	50-79 gallon	60	\$21,242	207,792	13,853	2
	80 gallon+	10	\$3,865	55,445	3,696	1
	Flow Restrictors - Faucet	14	\$827	46,713	5,190	0
	Flow Restrictors - Shower	14	\$1,914	88,578	8,858	1
	Tank Insulation	14	\$1,073	23,932	2,393	0
	Pipe Insulation	14	\$431	24,942	1,663	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	30	\$4,593	73,260	6,660	2
	ENERGY STAR Qualified Dishwasher	15	\$1,165	19,414	1,765	1
Additional Low Income						
	Energy Efficiency Kits	24	\$3,600	244,076	27,120	3
Building Shell - Existing Home Only						
	Weatherization Rebates	30	\$22,871	1,331,168	45,887	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$8,714	456,876	15,229	1
	Foundation (Bring Up to R-10)	10	\$10,381	647,019	21,567	1
	Infiltration Control	10	\$3,775	227,273	9,091	1
Residential Total		606	\$119,614	3,603,101	226,050	46
Residential Average kWh Sales (3 yr Ave actual and projected)					54,954,108	
Residential kWh Savings as percentage of Residential kWh Sales					0.4%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	7	\$2,900	7,059	1,443	0
	T-8 or 46" T5 - 4 ft	4	\$2,823	5,570	870	0
	CFL lamps - Energy Star- 9W and up	3	\$77	1,489	573	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	2	\$2,942	34,721	1,736	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	4	\$20,701	1,198,800	79,920	16
	High Velocity; Low Speed	4	\$20,701	1,198,800	79,920	16
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	1	\$11,926	444,000	44,400	12
Ag, Commercial and Industrial Total		19	\$47,251	2,186,579	159,313	36
C & I Average kWh Sales (3 yr Ave actual and projected)**					26,567,466	
C & I kWh Savings as percentage of C & I kWh Sales					0.6%	

II. Demand Response Programs						
	Residential Time-of-Day Price	10	\$2,250			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Expert Energy Services - C&I	5	\$15,000			
	Energy Audit Services - Residential *	50	\$5,000			
IV. Educational & Research Programs						
	Member Information and Education	1,000	\$10,000			
	Living with Energy in Iowa	4,400	\$10,500			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	4,400	\$17,716			
TOTAL		10,491	\$227,531	5,789,680	385,363	82
Total Average kWh Sales (3 yr Ave actual and projected)**					81,521,574	
Total kWh Savings as percentage of Total kWh Sales					0.5%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Southern Iowa Electric Cooperative, Inc.					
		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning	0.80	2.40	4.80	3.50
	SEER 14.5 (and EER 12)	0.80	2.40	4.80	3.50
	SEER 15 +	0.80	2.40	4.80	3.50
	SEER 16 (and EER 13)	0.80	2.40	4.80	3.50
	ENERGY STAR Qualified Room Air Conditioner	0.80	2.40	4.80	3.50
	Geothermal Heat Pump	0.80	2.40	4.80	3.50
	Air Source Heat Pump	0.80	2.40	4.80	3.50
Residential Lighting (low income included)					
Interior Lighting					
	Local CFL Rebate Program(s)	1.20	3.00	2.90	7.10
Exterior Lighting					
	High Efficiency Exterior Lighting	1.20	3.00	2.90	7.10
	High Pressure Sodium - 50 - 100 W	1.20	3.00	2.90	7.10
Residential Water Heating (low income included)					
	High Efficiency Water Heater	0.80	1.60	2.20	3.30
	50-79 gallon	0.80	1.60	2.20	3.30
	80 gallon+	0.80	1.60	2.20	3.30
	Flow Restrictors - Faucet	0.80	1.60	2.20	3.30
	Flow Restrictors - Shower	0.80	1.60	2.20	3.30
	Tank Insulation	0.80	1.60	2.20	3.30
	Pipe Insulation	0.80	1.60	2.20	3.30
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.80	1.80	3.60	2.70
	ENERGY STAR Qualified Dishwasher	0.80	1.80	3.60	2.70
Additional Low Income					
	Energy Efficiency Kits	0.90	1.60	2.30	2.50
Building Shell - Existing Home Only					
	Weatherization Rebates	0.90	1.60	2.30	2.50
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.90	1.60	2.30	2.50
	Foundation (Bring Up to R-10)	0.90	1.60	2.30	2.50
	Infiltration Control	0.90	1.60	2.30	2.50

Residential Total
Residential Average kWh Sales (3 yr Ave actual and projected)
Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	High Efficiency Interior Lighting	0.90	6.60	3.80	4.50
	T-8 or 46" T5 - 4 ft	0.90	6.60	3.80	4.50
	CFL lamps - Energy Star- 9W and up	1.20	3.00	2.90	7.10
Ag/Commercial & Industrial Heating and Cooling					
	Geothermal Heat Pump	0.80	2.40	4.80	3.50
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater	0.80	1.60	2.20	3.30
	80 gallon+	0.80	1.60	2.20	3.30
Agricultural					
	Dairy Pre-coolers Incentive	0.40	6.70	3.20	2.00
	Livestock Ventilation Fans				
	36"-47"	0.40	7.60	2.30	1.90
	Circulating Fans --- BESS Lab Ratings				
	High Velocity; Low Speed	0.40	7.60	2.30	1.90
	Scroll compressor (milk cooling)	0.40	6.70	3.20	2.00
	Variable Speed Drive Motor - Dairy Vacuum Pump	0.40	6.70	3.20	2.00
Ag/Commercial & Industrial Custom Rebates					
	Custom Rebate Program	1.40	2.60	5.70	2.10

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Residential Time-of-Day Price	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

* Savings for the specific measures are accounted for and included in the applicable programs.
**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.
See Appendix B for details



BACKGROUND

Southwest Iowa Rural Electric Cooperative established itself in 2004 as a result of a consolidation between Southwest Iowa Service Cooperative of Corning and Stanton, and Rideta Electric Cooperative of Mt.Ayr. The three previous Cooperatives have been serving southwest Iowa since 1936.

Southwest Iowa Rural Electric Cooperative is headquartered in Corning, Iowa with other offices in Mt.Ayr and Stanton. The Cooperative operates all three service regions with a total of 29 staff and employees that serve 5894 member/consumers in 11 counties throughout southwest Iowa. Southwest is governed by a 10 member board of directors all elected by and from the member-consumers served by the electric cooperative.

Southwest maintains 2,566 miles of line with an average of 2.3 meters per mile of line. 74% of the membership is made up of residential/farm with 23% commercial and 3% resale. Southwest serves approximately 124 commercial accounts 1000 kVA or less. These are comprised of a number of agriculture hog and chicken facilities, an industrial park served near the town of Corning and a public school near Afton. Energy efficiency measures have been attained at a number of these sites with the help of Southwest Iowa Rural Electric Cooperative's rebates and technical services. East Union Community School was awarded an energy audit, which resulted in the school converting the middle school and high school to geothermal heat pumps and changing to efficient lighting. In addition to Southwest Iowa REC retail customers, we provide efficiency rebates to the city of Stanton who is a resale customer of the REC.

Central Iowa Power Cooperative (CIPCO) is Southwest Iowa Rural Electric Cooperative's wholesale power supplier. More than 95% of the power generated by CIPCO is produced right here in the state and roughly 40 percent is generated from carbon-free resources from a mix of nuclear, wind and hydro.

Southwest Iowa REC, a Touchstone Energy Cooperative strives to meet member/consumer needs through the diverse programs offered. Whether providing electrical assistance through our service departments, or advising member/consumers on energy efficiency, our goal is to provide the most up to date cost-benefit measures to help them with their energy needs, while at the same time educating them on how they use their energy.

Southwest Iowa Rural Electric Cooperative recently installed AMI metering. This smart meter technology allows for better management of energy usage for both Southwest Iowa REC and our member/consumers. More information about Southwest Iowa Rural Electric Cooperative and its programs is available at <http://www.swiarec.coop/>

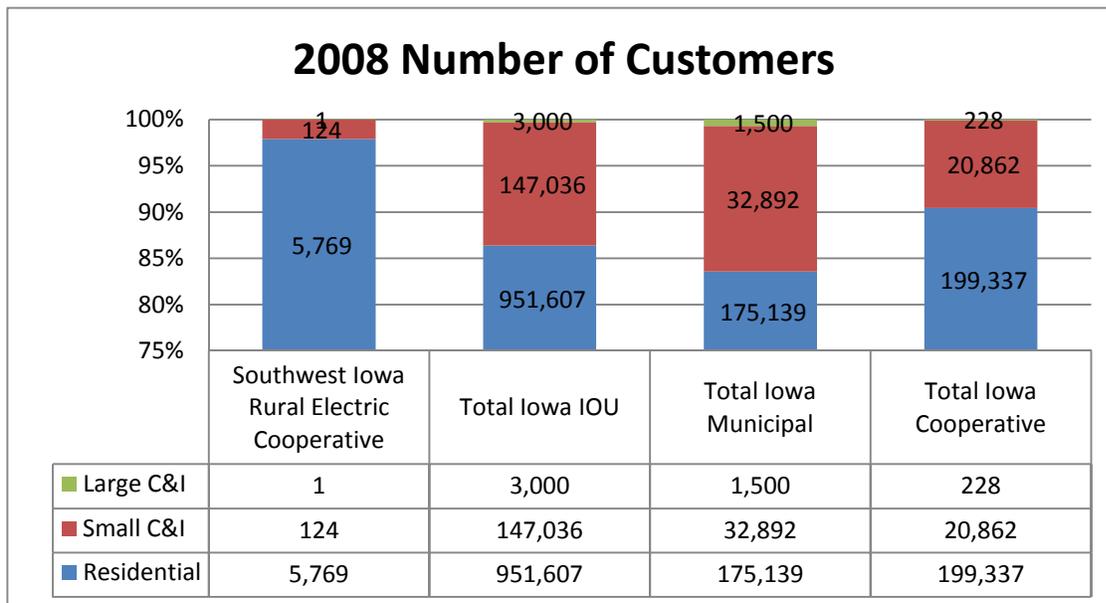
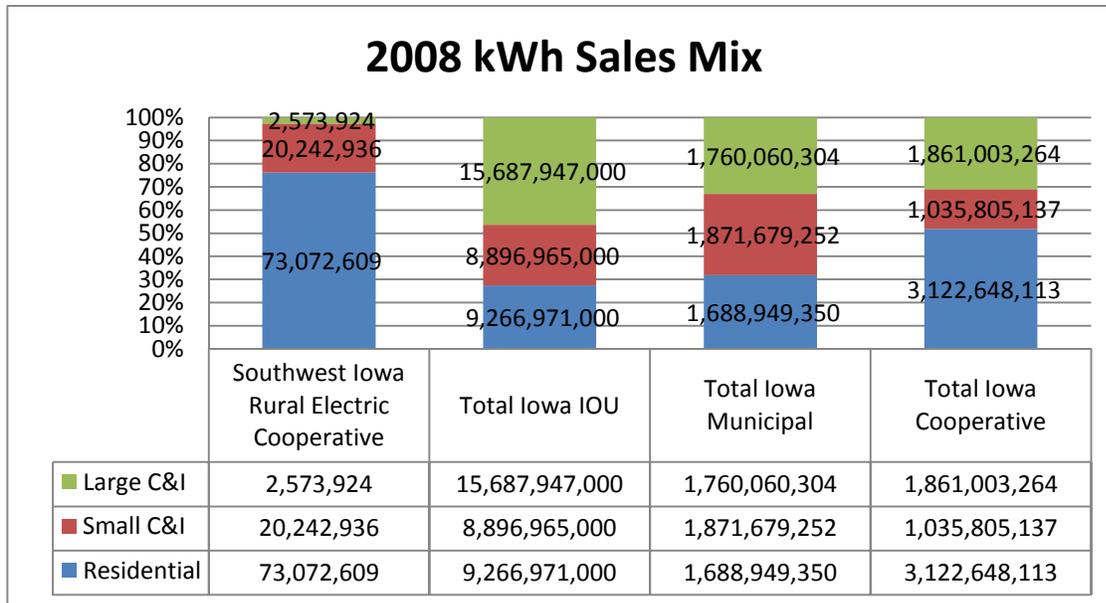
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Southwest Iowa Rural Electric Cooperative itself. This illustrates that making any comparison of Southwest's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

Southwest Iowa Rural Electric Cooperative has been committed to supply side and demand side energy efficiency for many years. Southwest Iowa Rural Electric Cooperative has invested \$3,537,355 in energy efficiency programs from 1992 through 2007. Going forward, Southwest Iowa Rural Electric Cooperative has a planned demand side investment of \$1.9 million for 2010 through 2014. Some of the new energy efficiency measures offered to members include incentives for heat pump and solar water heaters, Energy Star televisions, weatherization material for increasing the tightness of homes and businesses, heat recovery devices for water heating and air quality. As agriculture makes up much of our service territory we are expanding our programs to provide incentives for efficient motors, livestock waterers, ventilation fans as well as others.

Central Iowa Power Cooperative (CIPCO) supplies power to 13 rural electric cooperatives and associations which serve territory in 58 counties. CIPCO currently offers 33 energy efficiency programs in addition to those provided by the distribution cooperatives. In 2007, CIPCO and its member cooperatives realized a savings of over 15 million kilowatt hours annually as a result of the combined efficiency programs. This resulted in savings of \$1.2 million to our members.

CIPCO and its member systems are building on past success by making a significant commitment to energy efficiency in 2010 through the following:

- Completing a comprehensive energy efficiency program review in 2009
- Expanding program offerings in every category for 2010 including agricultural, residential, commercial and industrial
- Adding new programs for custom rebates in commercial/industrial, weatherization and appliance recycling
- Increasing consumer incentives for 2010 by nearly 50 percent over 2009 estimates
- Allocating an additional \$1 million from CIPCO to Member Systems for energy efficiency program expansion

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning SEER 14.5 (and EER 12)	35	\$4,546	121,507	26,037	8,679
	ENERGY STAR Qualified Room Air Conditioner	5	\$162	4,414	1,471	490
	Geothermal Heat Pump	227	\$463,905	59,857,277	8,530,321	2,992,864
	Air Source Heat Pump	285	\$265,691	33,338,415	6,371,341	2,222,561
	Heat Recovery Ventilators	10	\$1,624	124,317	18,648	6,216
	Residential Contractor Rebates	512	\$102,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	2,347	\$6,101	1,114,061	474,870	152,611
	Local CFL Rebate Program(s)	500	\$1,298	237,337	97,536	32,512
	ENERGY STAR Ceiling Fan	5	\$97	14,978	2,496	832
Exterior Lighting						
	High Efficiency Exterior Lighting	260	\$77,649	258,464	173,966	58,742
	High Pressure Sodium - 100+ W	260	\$77,649	258,464	173,966	58,742
Residential Water Heating (low income included)						
	High Efficiency Water Heater	495	\$66,222	1,765,234	348,462	117,682
	40-49 gallon	10	\$649	14,878	2,976	992
	50-79 gallon	445	\$57,780	1,530,156	301,446	102,010
	80 gallon+	40	\$7,793	220,200	44,040	14,680
	Heat Pump Water Heater - (Add-On)	10	\$5,195	191,214	57,364	19,121
	Heat Pump Water Heater - (Integrated)	66	\$46,975	1,514,418	307,855	126,201
	Solar Water Heaters (w/ Electric auxiliary tank)	5	\$2,273	111,422	27,856	9,285
	Flow Restrictors - Faucet	445	\$17,364	1,474,246	484,053	163,805
	Flow Restrictors - Shower	445	\$28,889	2,795,477	826,079	279,548
	Tank Insulation	45	\$877	76,376	22,913	7,638
	Pipe Insulation	45	\$877	79,599	15,920	5,307
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	320	\$24,314	775,878	209,399	70,534
	ENERGY STAR Qualified Dishwasher	150	\$4,868	192,757	51,402	17,523
	ENERGY STAR Qualified Refrigerator	301	\$9,771	472,718	93,287	31,515
	ENERGY STAR Qualified Dehumidifier	155	\$5,031	436,630	106,810	36,386
	ENERGY STAR Qualified Freezer	135	\$4,381	149,527	29,167	9,968
	Appliance Recycling	550	\$42,059	5,902,737	1,931,805	655,860
	Refrigerator	550	\$42,059	5,902,737	1,931,805	655,860
	Efficient Television	117	\$6,073	232,102	55,546	19,342
Additional Low Income						
	Energy Efficiency Kits	74	\$3,376	750,147	297,355	83,350
Weatherization Rebates						
	Rebates for various insulation measures.	10	\$1,948	46,454	4,645	1,548
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	5	\$974	23,805	2,381	794
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	5	\$974	22,648	2,265	755
Building Shell - Existing Home Only						
	Weatherization Rebates	429	\$164,786	9,919,435	972,691	339,643
	Ceiling (Bring up to R-38) - Elect. Heat Only	59	\$37,898	2,676,384	255,542	89,213
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	110	\$17,664	523,718	49,991	17,457
	Wall (Bring Up to R19) - Elect. Heat Only	54	\$42,041	2,342,447	222,677	78,082
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	105	\$20,437	475,611	45,296	15,854
	Foundation (Bring Up to R-10)	42	\$32,705	2,698,139	259,107	89,938
	Infiltration Control	49	\$11,443	1,105,709	125,464	44,228
	Duct Insulation (in unconditioned space)	10	\$2,598	97,426	14,614	4,871
Residential Total		7,983	\$1,358,754	121,957,141	21,539,297	7,469,764
Residential Average kWh Sales (3 yr Ave actual and projected)						352,865,593
Residential kWh Savings as percentage of Residential kWh Sales						2.1%

		2010-2014				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	647	\$1,682	349,114	302,019	96,976
	High Efficiency Interior Lighting	2,969	\$52,144	3,597,459	1,950,753	689,800
	T-8 or 46" T5 - 4 ft	1,363	\$35,361	1,884,312	826,892	294,424
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	56	\$6,536	313,174	112,574	40,672
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	112	\$6,974	561,717	205,824	72,950
	CFL lamps - Energy Star- 9W and up	1,411	\$2,746	695,424	765,259	267,471
	Occupancy Sensors - Must control >150 Watts	27	\$525	142,832	40,205	14,283
Exterior Lighting						
	High Efficiency Exterior Lighting	45	\$1,753	49,818	30,501	10,167
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	45	\$1,753	49,818	30,501	10,167
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	25	\$11,424	1,064,629	202,279	53,231
	Commercial Contractor Rebate (GS & AS)	25	\$1,306			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	5	\$7,793	1,851,197	370,239	123,413
Agricultural						
	Livestock Ventilation Fans	123	\$14,608	649,053	152,589	54,088
	36"-47"	123	\$14,608	649,053	152,589	54,088
	Ventilation Thermostat Controller	10	\$325	27,112	6,778	2,259
	Circulating Fans --- BESS Lab Ratings	109	\$5,180	431,022	101,165	35,919
	36"-47"	109	\$5,180	431,022	101,165	35,919
	Efficient Livestock Waterers	42	\$2,725	397,708	95,482	33,142
	Hog Farrowing - Heat Lamps (<= 175W)	242	\$942	161,092	112,831	40,273
	Hog Farrowing - Single Crate Heating Pads (<=85W)	32	\$1,038	63,834	18,153	6,383
	Hog Farrowing - Heat Lamp or Pad Controller	5	\$325	38,679	7,075	2,358
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	10	\$104,154	8,484,429	1,924,605	641,535
Ag, Commercial and Industrial Total		4,289	\$205,397	17,165,145	5,274,470	1,789,545
C & I Average kWh Sales (3 yr Ave actual and projected)**						119,188,609
C & I kWh Savings as percentage of C & I kWh Sales						1.5%

II. Demand Response Programs						
	Industrial Interruptible Price	5	\$58,580			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$3,886			
	Energy Audit Services - Residential *	5	\$4,143			
IV. Educational & Research Programs						
	Member Information and Education	29,530	\$127,386			
	Living with Energy in Iowa	20,030	\$97,691			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$52,985			
TOTAL		61,847	\$1,908,822	139,122,286	26,813,767	9,259,309
Total Average kWh Sales (3 yr Ave actual and projected)**						472,054,202
Total kWh Savings as percentage of Total kWh Sales						1.96%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	7	\$921	24,301	1,736	2
	SEER 14.5 (and EER 12)	7	\$921	24,301	1,736	2
	ENERGY STAR Qualified Room Air Conditioner	1	\$33	883	98	0
	Geothermal Heat Pump	37	\$76,678	9,756,473	487,824	16
	Air Source Heat Pump	49	\$45,987	5,731,868	382,125	15
	Heat Recovery Ventilators	2	\$329	24,863	1,243	
	Residential Contractor Rebates	86	\$17,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	507	\$1,334	240,660	32,967	30
	Local CFL Rebate Program(s)	100	\$263	47,467	6,502	6
	ENERGY STAR Ceiling Fan	1	\$20	2,996	166	0
Exterior Lighting						
	High Efficiency Exterior Lighting	50	\$15,132	49,705	11,297	1
	High Pressure Sodium - 100+ W	50	\$15,132	49,705	11,297	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	95	\$12,895	339,293	22,620	3
	40-49 gallon	2	\$132	2,976	198	0
	50-79 gallon	85	\$11,184	292,277	19,485	3
	80 gallon+	8	\$1,579	44,040	2,936	0
	Heat Pump Water Heater - (Add-On)	2	\$1,053	38,243	3,824	0
	Heat Pump Water Heater - (Integrated)	7	\$5,066	160,620	13,385	1
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$461	22,284	1,857	0
	Flow Restrictors - Faucet	85	\$3,355	281,598	31,289	2
	Flow Restrictors - Shower	85	\$5,592	533,967	53,397	4
	Tank Insulation	9	\$178	15,275	1,528	0
	Pipe Insulation	9	\$178	15,920	1,061	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	62	\$4,743	150,326	13,666	5
	ENERGY STAR Qualified Dishwasher	28	\$921	35,981	3,271	3
	ENERGY STAR Qualified Refrigerator	58	\$1,908	91,089	6,073	1
	ENERGY STAR Qualified Dehumidifier	29	\$954	81,692	6,808	1
	ENERGY STAR Qualified Freezer	25	\$822	27,690	1,846	0
	Appliance Recycling	104	\$7,953	1,116,154	124,017	20
	Refrigerator	104	\$7,953	1,116,154	124,017	20
	Efficient Television	20	\$1,053	39,676	3,306	1
Additional Low Income						
	Energy Efficiency Kits	19	\$875	192,605	21,401	2
Weatherization Rebates						
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$197	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$197	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	71	\$27,852	1,656,434	56,743	7
	Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$6,513	453,624	15,121	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	18	\$2,931	85,699	2,857	2
	Wall (Bring Up to R19) - Elect. Heat Only	9	\$7,105	390,408	13,014	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	17	\$3,355	77,004	2,567	2
	Foundation (Bring Up to R-10)	7	\$5,526	449,690	14,990	
	Infiltration Control	8	\$1,895	180,524	7,221	1
	Duct Insulation (in unconditioned space)	2	\$526	19,485	974	0
Residential Total		1,551	\$234,148	20,687,354	1,290,357	121
Residential Average kWh Sales (3 yr Ave actual and projected)					70,905,205	
Residential kWh Savings as percentage of Residential kWh Sales					1.8%	

		2010				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	140	\$368	75,542	20,984	8
	High Efficiency Interior Lighting	464	\$7,900	546,146	106,828	2
	T-8 or 46" T5 - 4 ft	203	\$5,342	280,642	43,850	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	8	\$947	44,739	5,810	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	17	\$1,074	85,261	11,073	0
	CFL lamps - Energy Star- 9W and up	232	\$458	114,343	43,978	1
	Occupancy Sensors - Must control >150 Watts	4	\$79	21,160	2,116	
Exterior Lighting						
	High Efficiency Exterior Lighting	9	\$355	9,964	2,033	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	9	\$355	9,964	2,033	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	15	\$6,908	638,777	31,939	2
	Commercial Contractor Rebate (GS & AS)	15	\$789			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	1	\$1,579	370,239	24,683	2
Agricultural						
	Livestock Ventilation Fans	19	\$2,289	100,260	8,355	2
	36"-47"	19	\$2,289	100,260	8,355	2
	Ventilation Thermostat Controller	2	\$66	5,422	452	0
	Circulating Fans --- BESS Lab Ratings	17	\$819	67,224	5,602	2
	36"-47"	17	\$819	67,224	5,602	2
	Efficient Livestock Waterers	7	\$461	66,285	5,524	
	Hog Farrowing - Heat Lamps (<= 175W)	37	\$146	24,630	6,157	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	5	\$164	9,974	997	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$66	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$21,103	1,696,886	128,307	13
Ag, Commercial and Industrial Total		734	\$43,014	3,619,084	342,333	31
C & I Average kWh Sales (3 yr Ave actual and projected)**					23,247,292	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$10,731			105
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$636			
	Energy Audit Services - Residential *	1	\$693			
IV. Educational & Research Programs						
	Member Information and Education	5,900	\$25,350			
	Living with Energy in Iowa	4,000	\$19,200			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,597			
TOTAL		12,188	\$344,369	24,306,438	1,632,690	257

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

94,152,497

1.73%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	7	\$915	24,301	1,736	2
	SEER 14.5 (and EER 12)	7	\$915	24,301	1,736	2
	ENERGY STAR Qualified Room Air Conditioner	1	\$33	883	98	0
	Geothermal Heat Pump	43	\$88,529	11,338,603	566,930	18
	Air Source Heat Pump	53	\$49,608	6,199,775	413,318	16
	Heat Recovery Ventilators	2	\$327	24,863	1,243	
	Residential Contractor Rebates	96	\$19,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	507	\$1,325	240,660	32,967	30
	Local CFL Rebate Program(s)	100	\$261	47,467	6,502	6
	ENERGY STAR Ceiling Fan	1	\$20	2,996	166	0
Exterior Lighting						
	High Efficiency Exterior Lighting	51	\$15,333	50,699	11,522	1
	High Pressure Sodium - 100+ W	51	\$15,333	50,699	11,522	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	97	\$13,072	346,170	23,078	3
	40-49 gallon	2	\$131	2,976	198	0
	50-79 gallon	87	\$11,373	299,154	19,944	3
	80 gallon+	8	\$1,569	44,040	2,936	0
	Heat Pump Water Heater - (Add-On)	2	\$1,046	38,243	3,824	0
	Heat Pump Water Heater - (Integrated)	9	\$6,471	206,511	17,209	2
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$458	22,284	1,857	0
	Flow Restrictors - Faucet	87	\$3,412	288,223	32,025	2
	Flow Restrictors - Shower	87	\$5,686	546,531	54,653	4
	Tank Insulation	9	\$176	15,275	1,528	0
	Pipe Insulation	9	\$176	15,920	1,061	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	63	\$4,804	152,751	13,886	5
	ENERGY STAR Qualified Dishwasher	29	\$948	37,266	3,388	3
	ENERGY STAR Qualified Refrigerator	59	\$1,928	92,659	6,177	1
	ENERGY STAR Qualified Dehumidifier	30	\$980	84,509	7,042	1
	ENERGY STAR Qualified Freezer	26	\$850	28,798	1,920	0
	Appliance Recycling	107	\$8,182	1,148,351	127,595	20
	Refrigerator	107	\$8,182	1,148,351	127,595	20
	Efficient Television	22	\$1,150	43,643	3,637	1
Additional Low Income						
	Energy Efficiency Kits	23	\$1,052	233,154	25,906	3
Weatherization Rebates						
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$196	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$196	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	81	\$31,194	1,859,854	63,674	8
	Ceiling (Bring up to R-38) - Elect. Heat Only	11	\$7,118	498,987	16,633	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	21	\$3,397	99,983	3,333	3
	Wall (Bring Up to R19) - Elect. Heat Only	10	\$7,843	433,787	14,460	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	20	\$3,922	90,593	3,020	2
	Foundation (Bring Up to R-10)	8	\$6,275	513,931	17,131	
	Infiltration Control	9	\$2,118	203,089	8,124	1
	Duct Insulation (in unconditioned space)	2	\$523	19,485	974	0
Residential Total		1,604	\$257,529	23,099,682	1,423,254	127
Residential Average kWh Sales (3 yr Ave actual and projected)					71,346,519	
Residential kWh Savings as percentage of Residential kWh Sales					2.0%	

		2011				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	140	\$366	75,542	20,984	8
	High Efficiency Interior Lighting	557	\$9,756	670,438	129,066	2
	T-8 or 46" T5 - 4 ft	254	\$6,641	351,148	54,867	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	10	\$1,176	55,924	7,263	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	21	\$1,318	105,322	13,678	0
	CFL lamps - Energy Star- 9W and up	267	\$524	131,593	50,613	1
	Occupancy Sensors - Must control >150 Watts	5	\$98	26,450	2,645	
Exterior Lighting						
	High Efficiency Exterior Lighting	9	\$353	9,964	2,033	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	9	\$353	9,964	2,033	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump					
	Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	1	\$1,569	370,239	24,683	2
Agricultural						
	Livestock Ventilation Fans	23	\$2,752	121,368	10,114	3
	36"-47"	23	\$2,752	121,368	10,114	3
	Ventilation Thermostat Controller	2	\$65	5,422	452	0
	Circulating Fans --- BESS Lab Ratings	20	\$958	79,087	6,591	2
	36"-47"	20	\$958	79,087	6,591	2
	Efficient Livestock Waterers	8	\$523	75,754	6,313	
	Hog Farrowing - Heat Lamps (<= 175W)	44	\$173	29,289	7,322	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	6	\$196	11,969	1,197	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$20,965	1,696,886	128,307	13
Ag, Commercial and Industrial Total		813	\$37,741	3,153,694	337,533	30
C & I Average kWh Sales (3 yr Ave actual and projected)**					23,337,645	
C & I kWh Savings as percentage of C & I kWh Sales					1.4%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$11,523			110
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$800			
	Energy Audit Services - Residential *	1	\$850			
IV. Educational & Research Programs						
	Member Information and Education	5,900	\$25,350			
	Living with Energy in Iowa	4,000	\$19,200			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,597			
TOTAL		12,320	\$363,590	26,253,376	1,760,787	268

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

94,684,164

1.86%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	7	\$909	24,301	1,736	2
	SEER 14.5 (and EER 12)	7	\$909	24,301	1,736	2
	ENERGY STAR Qualified Room Air Conditioner	1	\$32	883	98	0
	Geothermal Heat Pump	47	\$96,136	12,393,357	619,668	20
	Air Source Heat Pump	58	\$54,156	6,784,660	452,311	18
	Heat Recovery Ventilators	2	\$325	24,863	1,243	
	Residential Contractor Rebates	105	\$21,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	482	\$1,252	228,793	31,342	29
	Local CFL Rebate Program(s)	100	\$260	47,467	6,502	6
	ENERGY STAR Ceiling Fan	1	\$19	2,996	166	0
Exterior Lighting						
	High Efficiency Exterior Lighting	52	\$15,532	51,693	11,748	1
	High Pressure Sodium - 100+ W	52	\$15,532	51,693	11,748	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	99	\$13,247	353,047	23,536	3
	40-49 gallon	2	\$130	2,976	198	0
	50-79 gallon	89	\$11,558	306,031	20,402	3
	80 gallon+	8	\$1,558	44,040	2,936	0
	Heat Pump Water Heater - (Add-On)	2	\$1,039	38,243	3,824	0
	Heat Pump Water Heater - (Integrated)	12	\$8,571	275,349	22,946	3
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$455	22,284	1,857	0
	Flow Restrictors - Faucet	89	\$3,467	294,849	32,761	2
	Flow Restrictors - Shower	89	\$5,779	559,095	55,910	4
	Tank Insulation	9	\$175	15,275	1,528	0
	Pipe Insulation	9	\$175	15,920	1,061	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	64	\$4,864	155,176	14,107	5
	ENERGY STAR Qualified Dishwasher	30	\$974	38,551	3,505	3
	ENERGY STAR Qualified Refrigerator	60	\$1,948	94,230	6,282	1
	ENERGY STAR Qualified Dehumidifier	31	\$1,006	87,326	7,277	1
	ENERGY STAR Qualified Freezer	27	\$877	29,905	1,994	0
	Appliance Recycling	110	\$8,412	1,180,547	131,172	21
	Refrigerator	110	\$8,412	1,180,547	131,172	21
	Efficient Television	24	\$1,247	47,611	3,968	1
Additional Low Income						
	Energy Efficiency Kits	18	\$818	182,468	20,274	2
Weatherization Rebates						
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$195	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$195	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	89	\$34,138	2,053,984	70,295	9
	Ceiling (Bring up to R-38) - Elect. Heat Only	12	\$7,714	544,349	18,145	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	23	\$3,696	109,505	3,650	3
	Wall (Bring Up to R19) - Elect. Heat Only	11	\$8,571	477,165	15,906	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	22	\$4,286	99,652	3,322	3
	Foundation (Bring Up to R-10)	9	\$7,013	578,173	19,272	
	Infiltration Control	10	\$2,338	225,655	9,026	1
	Duct Insulation (in unconditioned space)	2	\$519	19,485	974	0
Residential Total		1,620	\$277,205	25,012,164	1,527,420	131
Residential Average kWh Sales (3 yr Ave actual and projected)					70,363,432	
Residential kWh Savings as percentage of Residential kWh Sales					2.2%	

2012					
Estimated Achievable Potential Goals					
Southwest Iowa Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	133	\$345	71,765	19,935	8
High Efficiency Interior Lighting	628	\$11,173	767,800	146,328	2
T-8 or 46" T5 - 4 ft	292	\$7,584	403,682	63,075	1
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	12	\$1,403	67,109	8,715	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	24	\$1,496	120,368	15,632	0
CFL lamps - Energy Star- 9W and up	294	\$573	144,901	55,731	1
Occupancy Sensors - Must control >150 Watts	6	\$117	31,740	3,174	
Exterior Lighting					
High Efficiency Exterior Lighting	9	\$351	9,964	2,033	0
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	9	\$351	9,964	2,033	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,558	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	26	\$3,091	137,198	11,433	3
36"-47"	26	\$3,091	137,198	11,433	3
Ventilation Thermostat Controller	2	\$65	5,422	452	0
Circulating Fans --- BESS Lab Ratings	23	\$1,094	90,950	7,579	2
36"-47"	23	\$1,094	90,950	7,579	2
Efficient Livestock Waterers	9	\$584	85,223	7,102	
Hog Farrowing - Heat Lamps (<= 175W)	51	\$199	33,949	8,487	
Hog Farrowing - Single Crate Heating Pads (<=85W)	7	\$227	13,964	1,396	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	2	\$20,829	1,696,886	128,307	13
Ag, Commercial and Industrial Total	892	\$39,582	3,291,096	358,207	31
C & I Average kWh Sales (3 yr Ave actual and projected)**				23,837,869	
C & I kWh Savings as percentage of C & I kWh Sales				1.5%	

II. Demand Response Programs					
Industrial Interruptible Price	1	\$11,811			110
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$800			
Energy Audit Services - Residential *	1	\$850			
IV. Educational & Research Programs					
Member Information and Education	5,910	\$25,393			
Living with Energy in Iowa	4,010	\$19,633			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,597			
TOTAL	12,435	\$385,871	28,303,260	1,885,627	272

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

94,201,300

2.00%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	7	\$903	24,301	1,736	2
	SEER 14.5 (and EER 12)	7	\$903	24,301	1,736	2
	ENERGY STAR Qualified Room Air Conditioner	1	\$32	883	98	0
	Geothermal Heat Pump	49	\$99,581	12,920,734	646,037	21
	Air Source Heat Pump	61	\$56,710	7,135,591	475,706	19
	Heat Recovery Ventilators	2	\$323	24,863	1,243	
	Residential Contractor Rebates	110	\$22,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	443	\$1,143	210,281	28,806	27
	Local CFL Rebate Program(s)	100	\$258	47,467	6,502	6
	ENERGY STAR Ceiling Fan	1	\$19	2,996	166	0
Exterior Lighting						
	High Efficiency Exterior Lighting	53	\$15,729	52,687	11,974	1
	High Pressure Sodium - 100+ W	53	\$15,729	52,687	11,974	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	101	\$13,419	359,924	23,995	3
	40-49 gallon	2	\$129	2,976	198	0
	50-79 gallon	91	\$11,742	312,908	20,861	3
	80 gallon+	8	\$1,548	44,040	2,936	0
	Heat Pump Water Heater - (Add-On)	2	\$1,032	38,243	3,824	0
	Heat Pump Water Heater - (Integrated)	16	\$11,355	367,132	30,594	3
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$452	22,284	1,857	0
	Flow Restrictors - Faucet	91	\$3,552	301,475	33,497	2
	Flow Restrictors - Shower	91	\$5,871	571,659	57,166	5
	Tank Insulation	9	\$174	15,275	1,528	0
	Pipe Insulation	9	\$174	15,920	1,061	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	65	\$4,923	157,600	14,327	5
	ENERGY STAR Qualified Dishwasher	31	\$1,000	39,837	3,622	3
	ENERGY STAR Qualified Refrigerator	61	\$1,968	95,800	6,387	1
	ENERGY STAR Qualified Dehumidifier	32	\$1,032	90,143	7,512	1
	ENERGY STAR Qualified Freezer	28	\$903	31,013	2,068	0
	Appliance Recycling	113	\$8,641	1,212,744	134,749	21
	Refrigerator	113	\$8,641	1,212,744	134,749	21
	Efficient Television	25	\$1,290	49,595	4,133	1
Additional Low Income						
	Energy Efficiency Kits	9	\$406	91,234	10,137	1
Weatherization Rebates						
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$194	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$194	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	94	\$35,916	2,174,581	74,466	9
	Ceiling (Bring up to R-38) - Elect. Heat Only	13	\$8,303	589,712	19,657	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	24	\$3,832	114,266	3,809	3
	Wall (Bring Up to R19) - Elect. Heat Only	12	\$9,290	520,544	17,351	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	23	\$4,452	104,182	3,473	3
	Foundation (Bring Up to R-10)	9	\$6,968	578,173	19,272	
	Infiltration Control	11	\$2,555	248,220	9,929	1
	Duct Insulation (in unconditioned space)	2	\$516	19,485	974	0
Residential Total		1,607	\$289,194	26,063,552	1,583,501	132
Residential Average kWh Sales (3 yr Ave actual and projected)					70,205,221	
Residential kWh Savings as percentage of Residential kWh Sales					2.3%	

2013					
Estimated Achievable Potential Goals					
Southwest Iowa Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	122	\$315	65,830	18,286	7
High Efficiency Interior Lighting	660	\$11,695	806,538	153,789	2
T-8 or 46" T5 - 4 ft	307	\$7,923	424,420	66,316	1
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	13	\$1,510	72,701	9,442	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	25	\$1,548	125,383	16,284	0
CFL lamps - Energy Star- 9W and up	309	\$598	152,293	58,574	1
Occupancy Sensors - Must control >150 Watts	6	\$116	31,740	3,174	
Exterior Lighting					
High Efficiency Exterior Lighting	9	\$348	9,964	2,033	0
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	9	\$348	9,964	2,033	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	10	\$4,516	425,851	21,293	1
Commercial Contractor Rebate (GS & AS)	10	\$516			
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,548	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	27	\$3,189	142,475	11,873	4
36"-47"	27	\$3,189	142,475	11,873	4
Ventilation Thermostat Controller	2	\$65	5,422	452	0
Circulating Fans --- BESS Lab Ratings	24	\$1,134	94,904	7,909	2
36"-47"	24	\$1,134	94,904	7,909	2
Efficient Livestock Waterers	9	\$581	85,223	7,102	
Hog Farrowing - Heat Lamps (<= 175W)	54	\$209	35,946	8,987	
Hog Farrowing - Single Crate Heating Pads (<=85W)	7	\$226	13,964	1,396	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	2	\$20,695	1,696,886	128,307	13
Ag, Commercial and Industrial Total	938	\$45,101	3,760,978	386,581	32
C & I Average kWh Sales (3 yr Ave actual and projected)**				24,312,897	
C & I kWh Savings as percentage of C & I kWh Sales				1.6%	

II. Demand Response Programs					
Industrial Interruptible Price	1	\$12,106			110
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$825			
Energy Audit Services - Residential *	1	\$875			
IV. Educational & Research Programs					
Member Information and Education	5,910	\$25,393			
Living with Energy in Iowa	4,010	\$19,633			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,597			
TOTAL	12,468	\$403,725	29,824,530	1,970,081	273

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

94,518,118

2.08%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	7	\$897	24,301	1,736	2
	SEER 14.5 (and EER 12)	7	\$897	24,301	1,736	2
	ENERGY STAR Qualified Room Air Conditioner	1	\$32	883	98	0
	Geothermal Heat Pump	51	\$102,981	13,448,111	672,406	22
	Air Source Heat Pump	64	\$59,231	7,486,521	499,101	20
	Heat Recovery Ventilators	2	\$321	24,863	1,243	
	Residential Contractor Rebates	115	\$23,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	408	\$1,046	193,667	26,530	24
	Local CFL Rebate Program(s)	100	\$256	47,467	6,502	6
	ENERGY STAR Ceiling Fan	1	\$19	2,996	166	0
Exterior Lighting						
	High Efficiency Exterior Lighting	54	\$15,923	53,681	12,200	1
	High Pressure Sodium - 100+ W	54	\$15,923	53,681	12,200	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	103	\$13,589	366,801	24,453	3
	40-49 gallon	2	\$128	2,976	198	0
	50-79 gallon	93	\$11,923	319,785	21,319	3
	80 gallon+	8	\$1,538	44,040	2,936	0
	Heat Pump Water Heater - (Add-On)	2	\$1,026	38,243	3,824	0
	Heat Pump Water Heater - (Integrated)	22	\$15,513	504,806	42,067	5
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$449	22,284	1,857	0
	Flow Restrictors - Faucet	93	\$3,577	308,101	34,233	2
	Flow Restrictors - Shower	93	\$5,961	584,223	58,422	5
	Tank Insulation	9	\$173	15,275	1,528	0
	Pipe Insulation	9	\$173	15,920	1,061	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	66	\$4,981	160,025	14,548	5
	ENERGY STAR Qualified Dishwasher	32	\$1,026	41,122	3,738	3
	ENERGY STAR Qualified Refrigerator	63	\$2,019	98,941	6,596	1
	ENERGY STAR Qualified Dehumidifier	33	\$1,058	92,960	7,747	1
	ENERGY STAR Qualified Freezer	29	\$929	32,121	2,141	0
	Appliance Recycling	116	\$8,871	1,244,941	138,327	22
	Refrigerator	116	\$8,871	1,244,941	138,327	22
	Efficient Television	26	\$1,333	51,578	4,298	1
Additional Low Income						
	Energy Efficiency Kits	5	\$224	50,686	5,632	1
Weatherization Rebates						
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	1	\$192	4,761	159	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	1	\$192	4,530	151	0
Building Shell - Existing Home Only						
	Weatherization Rebates	94	\$35,686	2,174,581	74,466	9
	Ceiling (Bring up to R-38) - Elect. Heat Only	13	\$8,250	589,712	19,657	2
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	24	\$3,808	114,266	3,809	3
	Wall (Bring Up to R19) - Elect. Heat Only	12	\$9,231	520,544	17,351	1
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	23	\$4,423	104,182	3,473	3
	Foundation (Bring Up to R-10)	9	\$6,923	578,173	19,272	
	Infiltration Control	11	\$2,538	248,220	9,929	1
	Duct Insulation (in unconditioned space)	2	\$513	19,485	974	0
Residential Total		1,601	\$300,678	27,094,389	1,645,231	133
Residential Average kWh Sales (3 yr Ave actual and projected)					70,045,217	
Residential kWh Savings as percentage of Residential kWh Sales					2.3%	

		2014				
		Estimated Achievable Potential Goals				
Southwest Iowa Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	112	\$287	60,434	16,787	7
	High Efficiency Interior Lighting	660	\$11,620	806,538	153,789	2
	T-8 or 46" T5 - 4 ft	307	\$7,872	424,420	66,316	1
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	13	\$1,500	72,701	9,442	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	25	\$1,538	125,383	16,284	0
	CFL lamps - Energy Star- 9W and up	309	\$594	152,293	58,574	1
	Occupancy Sensors - Must control >150 Watts	6	\$115	31,740	3,174	
Exterior Lighting						
	High Efficiency Exterior Lighting	9	\$346	9,964	2,033	0
	High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	9	\$346	9,964	2,033	0
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump					
	Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	1	\$1,538	370,239	24,683	2
Agricultural						
	Livestock Ventilation Fans	28	\$3,286	147,752	12,313	4
	36"-47"	28	\$3,286	147,752	12,313	4
	Ventilation Thermostat Controller	2	\$64	5,422	452	0
	Circulating Fans --- BESS Lab Ratings	25	\$1,174	98,858	8,238	3
	36"-47"	25	\$1,174	98,858	8,238	3
	Efficient Livestock Waterers	9	\$577	85,223	7,102	
	Hog Farrowing - Heat Lamps (<= 175W)	56	\$215	37,277	9,319	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	7	\$224	13,964	1,396	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$64	7,736	472	
Ag/Commercial & Industrial Custom Rebates						
	Custom Rebate Program	2	\$20,562	1,696,886	128,307	13
Ag, Commercial and Industrial Total		912	\$39,959	3,340,293	364,892	30
C & I Average kWh Sales (3 yr Ave actual and projected)**					24,452,907	
C & I kWh Savings as percentage of C & I kWh Sales					1.5%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$12,409			110
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$825			
	Energy Audit Services - Residential *	1	\$875			
IV. Educational & Research Programs						
	Member Information and Education	5,910	\$25,900			
	Living with Energy in Iowa	4,010	\$20,025			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,597			
TOTAL		12,436	\$411,268	30,434,682	2,010,123	273

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

94,498,123

2.13%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Southwest Iowa Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning SEER 14.5 (and EER 12)	0.44	1.39	1.29	0.77
	ENERGY STAR Qualified Room Air Conditioner	0.44	1.33	1.44	0.71
	Geothermal Heat Pump	0.46	2.24	4.86	1.18
	Air Source Heat Pump	0.47	7.61	5.34	3.95
	Heat Recovery Ventilators	0.43	1.28	2.96	0.77
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.54	14.00	8.44	6.71
	Local CFL Rebate Program(s)	0.54	13.58	8.44	7.40
	ENERGY STAR Ceiling Fan	0.46	2.94	6.04	1.81
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.25	2.68	0.55	0.55
Residential Water Heating (low income included)					
High Efficiency Water Heater					
	40-49 gallon	0.34	1.37	0.96	0.59
	50-79 gallon	0.30	2.38	0.75	0.76
	80 gallon+	0.33	3.75	0.92	1.18
	Heat Pump Water Heater - (Add-On)	0.39	2.26	1.94	1.04
	Heat Pump Water Heater - (Integrated)	0.37	3.14	1.42	1.30
	Solar Water Heaters (w/ Electric auxiliary tank)	0.40	1.32	2.00	0.66
	Flow Restrictors - Faucet	0.41	94.62	3.36	4.16
	Flow Restrictors - Shower	0.43	16.19	3.89	4.88
	Tank Insulation	0.41	20.15	2.87	3.61
	Pipe Insulation	0.45	20.28	3.74	4.98
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.36	0.99	1.39	0.45
	ENERGY STAR Qualified Dishwasher	0.44	2.85	1.87	1.35
	ENERGY STAR Qualified Refrigerator	0.40	3.07	1.95	1.48
	ENERGY STAR Qualified Dehumidifier	0.43	8.70	3.49	3.90
	ENERGY STAR Qualified Freezer	0.37	3.50	1.41	1.50
	Appliance Recycling				
	Refrigerator	0.42	3.19	2.96	1.48
	Efficient Television	0.38	infinite	1.59	8.49
Additional Low Income					
	Energy Efficiency Kits	0.46	25.55	9.06	11.23
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.45	0.58	1.19	0.42
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.44	0.38	1.13	0.27
Building Shell - Existing Home Only					
Weatherization Rebates					
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.40	4.40	2.35	2.41
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.43	0.55	1.30	0.38
	Wall (Bring Up to R19) - Elect. Heat Only	0.39	2.93	1.86	1.60
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.40	0.38	1.04	0.25
	Foundation (Bring Up to R-10)	0.41	1.68	2.69	1.03
	Infiltration Control	0.43	6.11	3.41	3.34
	Duct Insulation (in unconditioned space)	0.36	1.59	1.40	0.78

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Cost Effectiveness Analysis					
Benefit/Cost Ratios					
Southwest Iowa Rural Electric Cooperative	Rate Payer	Participant	Utility	Societal	
	Agriculture/Commercial & Industrial Lighting				
Interior Lighting					
Change a Light Rebate Program	0.52	13.05	8.20	6.01	
High Efficiency Interior Lighting					
T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16	
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57	
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55	
CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64	
Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79	
Exterior Lighting					
High Efficiency Exterior Lighting					
High Pressure Sodium Fixture (ballast & lamp replacement) - >100 W	0.35	2.68	1.03	0.82	
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	0.45	3.29	5.61	2.00	
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78	
Agricultural					
Livestock Ventilation Fans					
36"-47"	0.38	5.42	1.75	2.24	
Ventilation Thermostat Controller	0.42	3.36	3.33	1.66	
Circulating Fans --- BESS Lab Ratings					
36"-47"	0.46	7.42	3.64	3.73	
Efficient Livestock Waterers	0.50	5.62	6.38	2.88	
Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97	
Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54	
Hog Farrowing - Heat Lamp or Pad Controller	0.47	3.31	4.82	1.81	
Ag/Commercial & Industrial Custom Rebates					
Custom Rebate Program	0.41	4.35	2.88	2.14	

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	#	#	#	#	
Industrial Interruptible Price					
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural					
Energy Audit Services - Residential *					
IV. Educational & Research Programs					
Member Information and Education					
Living with Energy in Iowa					
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network					

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

T.I.P. Rural Electric Cooperative

BACKGROUND

T.I.P. Rural Electric Cooperative, formed in 1938, provides reliable electric service to a rural region in central Iowa. T.I.P. Rural Electric Cooperative is a not-for-profit cooperative, based out of Brooklyn, with an outpost in Sigourney. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency, renewable energy and efficiency rebates.

T.I.P. Rural Electric Cooperative is governed by a nine member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Benton, Iowa, Jefferson, Johnson, Keokuk, Mahaska, Poweshiek, Tama, Wapello, and Washington counties.

The cooperative provides electric service to 5,902 member-consumers which serve 6,233 meters. We have 328 meters that are small commercial (less than 1,000 KVA) and 3 meters that are large commercial (Over 1,000 KVA), with the remaining 5,902 meters that are residential and/or farm member-consumers. Our small commercial accounts are very diversified, with the majority of these accounts being newer than 1980 which are already energy efficient in many aspects due to the relatively new facilities.

T.I.P. Rural Electric Cooperative serves the members with a staff of 26 employees and has 3.49 meters per mile of distribution line.

T.I.P. Rural Electric Cooperative procures its power supply from Central Iowa Power Cooperative in Cedar Rapids, Iowa which it is a part owner of. They have a combination of resources from nuclear, hydro, wind, coal and natural gas for generating electricity.

The Website for T.I.P. Rural Electric Cooperative is <http://www.tiprec.com>. The website is one of the mechanisms used to promote energy efficiency programs.

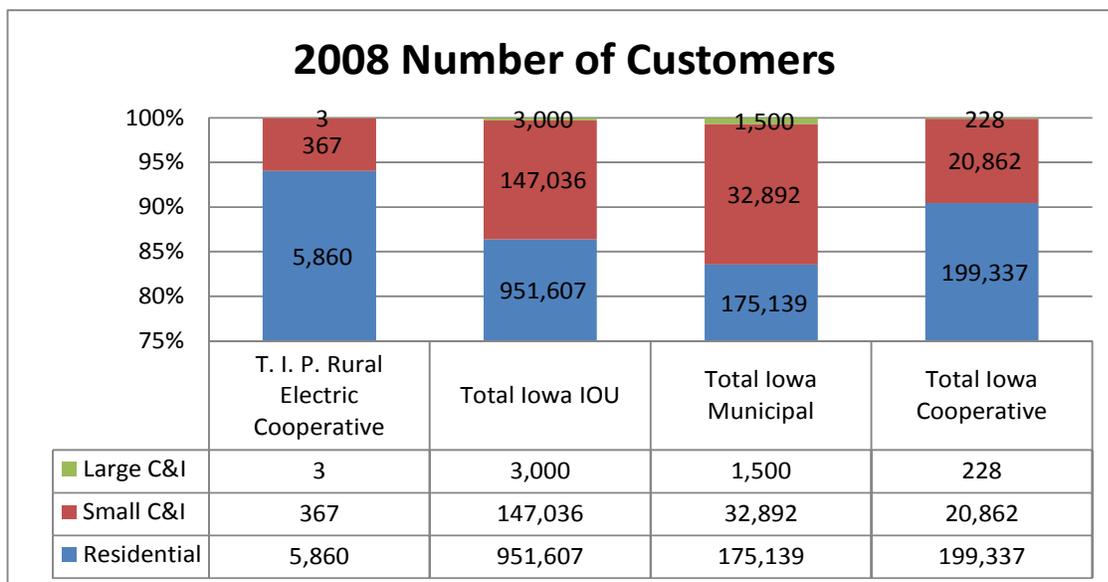
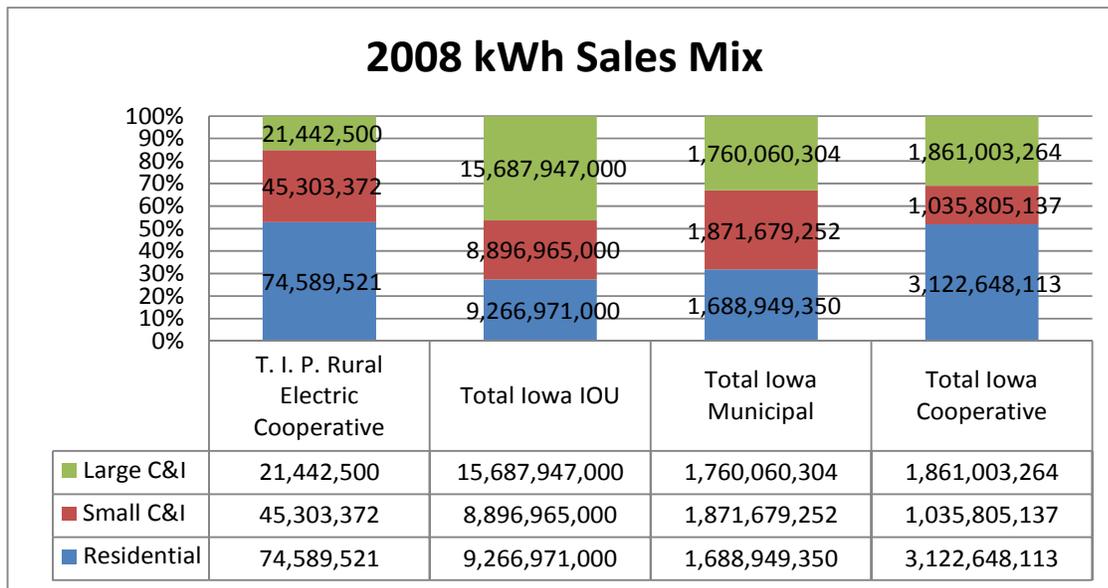
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and T.I.P. Rural Electric Cooperative itself. This illustrates that making any comparison of T.I.P. Rural Electric Cooperative's energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	105	\$16,885	504,927	108,199	36,066
	SEER 14.5 (and EER 12)	55	\$7,143	190,939	40,915	13,638
	SEER 16 (and EER 13)	50	\$9,741	313,988	67,283	22,428
	ENERGY STAR Qualified Room Air Conditioner	40	\$1,299	35,311	11,770	3,923
	Geothermal Heat Pump	185	\$378,055	48,782,363	6,935,006	2,439,118
	Air Source Heat Pump	50	\$45,399	5,848,845	1,091,784	389,923
	Residential Contractor Rebates	140	\$28,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	4,472	\$11,625	2,122,744	904,808	290,787
	Local CFL Rebate Program(s)	58,750	\$153,298	27,887,125	12,352,330	3,820,154
	ENERGY STAR CFL Fixtures	34	\$353	74,193	10,256	3,710
	T8 or better Lighting Fixtures	122	\$1,835	85,908	14,683	5,238
	2 ft. T8 or better Fixture w/ electronic ballasts	39	\$202	3,525	601	215
	4 ft. T8 or better Fixture w/ electronic ballasts	44	\$571	30,220	5,193	1,843
	8 ft. T8 or better Fixture w/ electronic ballasts	39	\$1,062	52,163	8,890	3,181
	ENERGY STAR LED lighting	5	\$195	6,646	1,108	369
	ENERGY STAR Ceiling Fan	15	\$292	44,933	7,489	2,496
Exterior Lighting						
	High Efficiency Exterior Lighting	113	\$4,337	117,440	77,726	26,285
	High Pressure Sodium - 100+ W	103	\$4,012	102,392	68,683	23,271
	Metal Halide - 70 - 250 W	5	\$130	3,005	1,670	557
	Metal Halide - 250+ W (pulse start lamp and ballasts)	5	\$195	12,043	7,373	2,458
Residential Water Heating (low income included)						
	High Efficiency Water Heater	645	\$168,145	2,238,530	440,829	149,235
	50-79 gallon	635	\$164,898	2,183,481	429,819	145,565
	80 gallon+	10	\$3,247	55,050	11,010	3,670
	Heat Pump Water Heater - (Add-On)	15	\$5,845	286,822	86,046	28,682
	Heat Pump Water Heater - (Integrated)	57	\$44,258	1,307,906	265,788	108,992
	Solar Water Heaters (w/ Electric auxiliary tank)	5	\$2,273	111,422	27,856	9,285
	Flow Restrictors - Faucet	487	\$18,951	1,613,388	501,354	179,265
	Flow Restrictors - Shower	487	\$31,584	3,059,319	855,604	305,932
	Tank Insulation	35	\$682	59,403	17,821	5,940
	Pipe Insulation	35	\$682	61,910	12,382	4,127
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	350	\$26,133	848,617	229,237	77,147
	ENERGY STAR Qualified Dishwasher	175	\$5,680	224,884	60,164	20,444
	ENERGY STAR Qualified Refrigerator	340	\$11,036	533,967	104,700	35,598
	ENERGY STAR Qualified Dehumidifier	155	\$5,031	436,630	106,810	36,386
	ENERGY STAR Qualified Freezer	140	\$4,544	155,065	30,275	10,338
	Appliance Recycling	560	\$42,829	6,010,060	1,967,579	667,784
	Refrigerator	560	\$42,829	6,010,060	1,967,579	667,784
	Efficient Television	117	\$6,073	232,102	55,546	19,342
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	15	\$9,741	495,945	49,595	16,532
	Advanced Lighting Package	24	\$6,221	206,313	27,508	10,316
Additional Low Income						
	Energy Efficiency Kits	56	\$2,554	567,678	223,017	63,075
Building Shell - Existing Home Only						
	Weatherization Rebates	163	\$60,591	3,627,171	362,337	123,974
	Ceiling (Bring up to R-38) - Elect. Heat Only	27	\$17,338	1,224,786	114,918	40,826
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	49	\$7,867	233,293	22,060	7,776
	Wall (Bring Up to R19) - Elect. Heat Only	15	\$11,689	650,680	65,068	21,689
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	37	\$7,202	167,596	16,005	5,587
	Foundation (Bring Up to R-10)	15	\$11,689	963,621	96,362	32,121
	Infiltration Control	15	\$3,507	338,482	40,618	13,539
	Duct Insulation (in unconditioned space)	5	\$1,299	48,713	7,307	2,436
Residential Total		67,892	\$1,094,424	107,587,569	26,939,606	8,890,465
Residential Average kWh Sales (3 yr Ave actual and projected)						370,762,206
Residential kWh Savings as percentage of Residential kWh Sales						2.4%

		2010-2014				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	492	\$1,279	265,477	229,175	73,744
	High Efficiency Interior Lighting	5,413	\$27,137	3,627,117	3,409,444	1,114,809
	T-8 or 46" T5 - 4 ft	134	\$3,477	185,252	81,436	28,946
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	56	\$6,536	313,174	112,574	40,672
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	112	\$6,974	561,717	205,824	72,950
	CFL lamps - Energy Star- 9W and up	5,101	\$9,955	2,514,074	2,993,740	966,952
	Occupancy Sensors - Must control >150 Watts	10	\$195	52,901	15,870	5,290
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	35	\$1,136	51,496	10,299	3,433
	Geothermal Heat Pump	188	\$45,742	8,006,007	1,967,434	400,300
	Commercial Contractor Rebate (GS & AS)	188	\$3,047			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	3	\$4,676	1,110,718	222,144	74,048
Agricultural						
	Livestock Ventilation Fans	99	\$11,756	522,409	121,807	43,534
	36"-47"	99	\$11,756	522,409	121,807	43,534
	Ventilation Thermostat Controller	5	\$162	13,556	3,389	1,130
	Circulating Fans --- BESS Lab Ratings	66	\$3,136	260,986	60,963	21,749
	36"-47"	66	\$3,136	260,986	60,963	21,749
	Efficient Livestock Waterers	27	\$1,751	255,670	59,972	21,306
	Hog Farrowing - Heat Lamps (<= 175W)	131	\$510	87,203	61,241	21,801
	Hog Farrowing - Single Crate Heating Pads (<=85W)	10	\$325	19,948	5,984	1,995
	Hog Farrowing - Heat Lamp or Pad Controller	5	\$325	38,679	7,075	2,358
Ag, Commercial and Industrial Total		6,662	\$100,981	14,259,265	6,158,928	1,780,207
C & I Average kWh Sales (3 yr Ave actual and projected)**						309,214,462
C & I kWh Savings as percentage of C & I kWh Sales						0.6%

II. Demand Response Programs						
	Industrial Interruptible Price	5	\$122,222			
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	20	\$7,500			
IV. Educational & Research Programs						
	Member Information and Education	31,000	\$133,000			
	Peak Alert	31,000				
	Living with Energy in Iowa	25,500	\$114,750			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	31,000	\$71,685			
TOTAL		193,079	\$1,644,563	121,846,835	33,098,534	10,670,672
Total Average kWh Sales (3 yr Ave actual and projected)**						679,976,668
Total kWh Savings as percentage of Total kWh Sales						1.57%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	21	\$3,421	100,985	7,213	7
	SEER 14.5 (and EER 12)	11	\$1,447	38,188	2,728	3
	SEER 16 (and EER 13)	10	\$1,974	62,798	4,486	4
	ENERGY STAR Qualified Room Air Conditioner	8	\$263	7,062	785	1
	Geothermal Heat Pump	30	\$62,171	7,910,653	395,533	13
	Air Source Heat Pump	8	\$7,368	935,815	62,388	2
	Residential Contractor Rebates	23	\$4,600			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	966	\$2,542	458,536	62,813	58
	Local CFL Rebate Program(s)	13,716	\$36,095	6,510,635	891,868	823
	ENERGY STAR CFL Fixtures	5	\$53	10,911	546	0
	T8 or better Lighting Fixtures	19	\$289	13,375	816	0
	2 ft. T8 or better Fixture w/ electronic ballasts	6	\$32	542	33	
	4 ft. T8 or better Fixture w/ electronic ballasts	7	\$92	4,808	293	0
	8 ft. T8 or better Fixture w/ electronic ballasts	6	\$166	8,025	489	0
	ENERGY STAR LED lighting	1	\$39	1,329	74	0
	ENERGY STAR Ceiling Fan	3	\$59	8,987	499	0
Exterior Lighting						
	High Efficiency Exterior Lighting	22	\$855	22,891	5,121	0
	High Pressure Sodium - 100+ W	20	\$789	19,882	4,519	0
	Metal Halide - 70 - 250 W	1	\$26	601	111	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$39	2,409	492	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	123	\$32,500	427,075	28,472	4
	50-79 gallon	121	\$31,842	416,065	27,738	4
	80 gallon+	2	\$658	11,010	734	0
	Heat Pump Water Heater - (Add-On)	3	\$1,184	57,364	5,736	1
	Heat Pump Water Heater - (Integrated)	6	\$4,737	137,674	11,473	1
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$461	22,284	1,857	0
	Flow Restrictors - Faucet	72	\$2,842	238,530	26,503	1
	Flow Restrictors - Shower	72	\$4,737	452,302	45,230	4
	Tank Insulation	7	\$138	11,881	1,188	0
	Pipe Insulation	7	\$138	12,382	825	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	68	\$5,112	164,874	14,989	5
	ENERGY STAR Qualified Dishwasher	33	\$1,086	42,407	3,855	3
	ENERGY STAR Qualified Refrigerator	64	\$2,105	100,512	6,701	1
	ENERGY STAR Qualified Dehumidifier	29	\$954	81,692	6,808	1
	ENERGY STAR Qualified Freezer	26	\$855	28,798	1,920	0
	Appliance Recycling	106	\$8,107	1,137,618	126,402	20
	Refrigerator	106	\$8,107	1,137,618	126,402	20
	Efficient Television	20	\$1,053	39,676	3,306	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$1,974	99,189	3,306	1
	Advanced Lighting Package	3	\$789	25,789	1,289	1
Additional Low Income						
	Energy Efficiency Kits	14	\$645	141,920	15,769	2
Building Shell - Existing Home Only						
	Weatherization Rebates	28	\$10,803	647,015	22,181	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	4	\$2,605	181,450	6,048	0
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	8	\$1,303	38,089	1,270	1
	Wall (Bring Up to R19) - Elect. Heat Only	3	\$2,368	130,136	4,338	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	6	\$1,184	27,178	906	1
	Foundation (Bring Up to R-10)	3	\$2,368	192,724	6,424	
	Infiltration Control	3	\$711	67,696	2,708	0
	Duct Insulation (in unconditioned space)	1	\$263	9,743	487	0
Residential Total		15,507	\$197,975	19,850,161	1,755,466	952
Residential Average kWh Sales (3 yr Ave actual and projected)					74,776,374	
Residential kWh Savings as percentage of Residential kWh Sales					2.3%	

2010					
Estimated Achievable Potential Goals					
T.I.P. Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	106	\$279	57,196	15,888	6
High Efficiency Interior Lighting	1,031	\$4,529	653,203	208,790	3
T-8 or 46" T5 - 4 ft	20	\$526	27,649	4,320	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	8	\$947	44,739	5,810	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	17	\$1,074	85,261	11,073	0
CFL lamps - Energy Star- 9W and up	984	\$1,942	484,973	186,528	3
Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	7	\$230	10,299	687	0
Geothermal Heat Pump	180	\$42,105	7,665,326	383,266	22
Commercial Contractor Rebate (GS & AS)	180	\$2,632			
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,579	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	15	\$1,807	79,153	6,596	2
36"-47"	15	\$1,807	79,153	6,596	2
Ventilation Thermostat Controller	1	\$33	2,711	226	0
Circulating Fans --- BESS Lab Ratings	10	\$482	39,543	3,295	1
36"-47"	10	\$482	39,543	3,295	1
Efficient Livestock Waterers	4	\$263	37,877	3,156	
Hog Farrowing - Heat Lamps (<= 175W)	20	\$79	13,313	3,328	
Hog Farrowing - Single Crate Heating Pads (<=85W)	2	\$66	3,990	399	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$66	7,736	472	
Ag, Commercial and Industrial Total	1,558	\$54,149	8,940,587	650,786	37
C & I Average kWh Sales (3 yr Ave actual and projected)**				63,663,974	
C & I kWh Savings as percentage of C & I kWh Sales				1.0%	

II. Demand Response Programs					
Industrial Interruptible Price	1	\$21,723			230
III. Energy Audit & Technical Support Programs					
Energy Audit Services - Residential *	4	\$1,500			
IV. Educational & Research Programs					
Member Information and Education	6,200	\$26,600			
Peak Alert	6,200				
Living with Energy in Iowa	5,100	\$22,950			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	6,200	\$14,337			
TOTAL	40,770	\$339,235	28,790,748	2,406,251	1,219
Total Average kWh Sales (3 yr Ave actual and projected)**				138,440,347	
Total kWh Savings as percentage of Total kWh Sales				1.74%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	21	\$3,399	100,985	7,213	7
	SEER 14.5 (and EER 12)	11	\$1,438	38,188	2,728	3
	SEER 16 (and EER 13)	10	\$1,961	62,798	4,486	4
	ENERGY STAR Qualified Room Air Conditioner	8	\$261	7,062	785	1
	Geothermal Heat Pump	35	\$72,059	9,229,096	461,455	15
	Air Source Heat Pump	9	\$8,235	1,052,792	70,186	3
	Residential Contractor Rebates	26	\$5,200			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	966	\$2,525	458,536	62,813	58
	Local CFL Rebate Program(s)	13,716	\$35,859	6,510,635	891,868	823
	ENERGY STAR CFL Fixtures	6	\$63	13,093	655	0
	T8 or better Lighting Fixtures	22	\$333	15,490	944	0
	2 ft. T8 or better Fixture w/ electronic ballasts	7	\$37	633	39	
	4 ft. T8 or better Fixture w/ electronic ballasts	8	\$105	5,495	335	0
	8 ft. T8 or better Fixture w/ electronic ballasts	7	\$192	9,363	571	0
	ENERGY STAR LED lighting	1	\$39	1,329	74	0
	ENERGY STAR Ceiling Fan	3	\$59	8,987	499	0
Exterior Lighting						
	High Efficiency Exterior Lighting	22	\$850	22,891	5,121	0
	High Pressure Sodium - 100+ W	20	\$784	19,882	4,519	0
	Metal Halide - 70 - 250 W	1	\$26	601	111	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$39	2,409	492	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	126	\$33,072	437,390	29,159	4
	50-79 gallon	124	\$32,418	426,380	28,425	4
	80 gallon+	2	\$654	11,010	734	0
	Heat Pump Water Heater - (Add-On)	3	\$1,176	57,364	5,736	1
	Heat Pump Water Heater - (Integrated)	8	\$6,275	183,566	15,297	2
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$458	22,284	1,857	0
	Flow Restrictors - Faucet	90	\$3,529	298,162	33,129	2
	Flow Restrictors - Shower	90	\$5,882	565,377	56,538	5
	Tank Insulation	7	\$137	11,881	1,188	0
	Pipe Insulation	7	\$137	12,382	825	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	69	\$5,170	167,299	15,209	6
	ENERGY STAR Qualified Dishwasher	34	\$1,111	43,692	3,972	3
	ENERGY STAR Qualified Refrigerator	66	\$2,157	103,653	6,910	1
	ENERGY STAR Qualified Dehumidifier	30	\$980	84,509	7,042	1
	ENERGY STAR Qualified Freezer	27	\$882	29,905	1,994	0
	Appliance Recycling	109	\$8,336	1,169,815	129,979	21
	Refrigerator	109	\$8,336	1,169,815	129,979	21
	Efficient Television	22	\$1,150	43,643	3,637	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$1,961	99,189	3,306	1
	Advanced Lighting Package	4	\$1,046	34,386	1,719	1
Additional Low Income						
	Energy Efficiency Kits	17	\$778	172,331	19,148	2
Building Shell - Existing Home Only						
	Weatherization Rebates	31	\$11,737	701,668	24,003	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	5	\$3,235	226,812	7,560	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	9	\$1,456	42,850	1,428	1
	Wall (Bring Up to R19) - Elect. Heat Only	3	\$2,353	130,136	4,338	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	7	\$1,373	31,707	1,057	1
	Foundation (Bring Up to R-10)	3	\$2,353	192,724	6,424	
	Infiltration Control	3	\$706	67,696	2,708	0
	Duct Insulation (in unconditioned space)	1	\$261	9,743	487	0
Residential Total		15,579	\$214,858	21,659,393	1,862,264	959
Residential Average kWh Sales (3 yr Ave actual and projected)					74,289,016	
Residential kWh Savings as percentage of Residential kWh Sales					2.5%	

		2011				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	106	\$277	57,196	15,888	6
	High Efficiency Interior Lighting	1,190	\$5,407	764,304	241,983	4
	T-8 or 46" T5 - 4 ft	25	\$654	34,562	5,400	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	10	\$1,176	55,924	7,263	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	21	\$1,318	105,322	13,678	0
	CFL lamps - Energy Star- 9W and up	1,132	\$2,220	557,917	214,583	3
	Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	7	\$229	10,299	687	0
	Geothermal Heat Pump					
	Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive					
Agricultural						
	Livestock Ventilation Fans	18	\$2,154	94,983	7,915	2
	36"-47"	18	\$2,154	94,983	7,915	2
	Ventilation Thermostat Controller	1	\$33	2,711	226	0
	Circulating Fans --- BESS Lab Ratings	12	\$575	47,452	3,954	1
	36"-47"	12	\$575	47,452	3,954	1
	Efficient Livestock Waterers	5	\$327	47,346	3,946	
	Hog Farrowing - Heat Lamps (<= 175W)	24	\$94	15,976	3,994	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	2	\$65	3,990	399	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
	Ag, Commercial and Industrial Total	1,366	\$9,225	1,051,994	279,463	14
	C & I Average kWh Sales (3 yr Ave actual and projected)**				61,217,844	
	C & I kWh Savings as percentage of C & I kWh Sales				0.5%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$24,202			250
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	4	\$1,500			
IV. Educational & Research Programs						
	Member Information and Education	6,200	\$26,600			
	Peak Alert	6,200				
	Living with Energy in Iowa	5,100	\$22,950			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	6,200	\$14,337			
	TOTAL	40,650	\$313,672	22,711,387	2,141,726	1,222
	Total Average kWh Sales (3 yr Ave actual and projected)**				135,506,860	
	Total kWh Savings as percentage of Total kWh Sales				1.58%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	21	\$3,377	100,985	7,213	7
	SEER 14.5 (and EER 12)	11	\$1,429	38,188	2,728	3
	SEER 16 (and EER 13)	10	\$1,948	62,798	4,486	4
	ENERGY STAR Qualified Room Air Conditioner	8	\$260	7,062	785	1
	Geothermal Heat Pump	38	\$77,727	10,020,161	501,008	16
	Air Source Heat Pump	10	\$9,091	1,169,769	77,985	3
	Residential Contractor Rebates	29	\$5,800			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	918	\$2,384	435,751	59,692	55
	Local CFL Rebate Program(s)	13,030	\$33,844	6,185,008	847,261	782
	ENERGY STAR CFL Fixtures	7	\$73	15,275	764	0
	T8 or better Lighting Fixtures	25	\$377	17,605	1,073	0
	2 ft. T8 or better Fixture w/ electronic ballasts	8	\$42	723	44	0
	4 ft. T8 or better Fixture w/ electronic ballasts	9	\$117	6,181	377	0
	8 ft. T8 or better Fixture w/ electronic ballasts	8	\$218	10,700	652	0
	ENERGY STAR LED lighting	1	\$39	1,329	74	0
	ENERGY STAR Ceiling Fan	3	\$58	8,987	499	0
Exterior Lighting						
	High Efficiency Exterior Lighting	22	\$844	22,891	5,121	0
	High Pressure Sodium - 100+ W	20	\$779	19,882	4,519	0
	Metal Halide - 70 - 250 W	1	\$26	601	111	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$39	2,409	492	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	129	\$33,636	447,706	29,847	4
	50-79 gallon	127	\$32,987	436,696	29,113	4
	80 gallon+	2	\$649	11,010	734	0
	Heat Pump Water Heater - (Add-On)	3	\$1,169	57,364	5,736	1
	Heat Pump Water Heater - (Integrated)	10	\$7,792	229,457	19,121	2
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$455	22,284	1,857	0
	Flow Restrictors - Faucet	104	\$4,052	344,543	38,283	2
	Flow Restrictors - Shower	104	\$6,753	653,325	65,332	5
	Tank Insulation	7	\$136	11,881	1,188	0
	Pipe Insulation	7	\$136	12,382	825	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	70	\$5,227	169,723	15,429	6
	ENERGY STAR Qualified Dishwasher	35	\$1,136	44,977	4,089	3
	ENERGY STAR Qualified Refrigerator	68	\$2,208	106,793	7,120	1
	ENERGY STAR Qualified Dehumidifier	31	\$1,006	87,326	7,277	1
	ENERGY STAR Qualified Freezer	28	\$909	31,013	2,068	0
	Appliance Recycling	112	\$8,566	1,202,012	133,557	21
	Refrigerator	112	\$8,566	1,202,012	133,557	21
	Efficient Television	24	\$1,247	47,611	3,968	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$1,948	99,189	3,306	1
	Advanced Lighting Package	5	\$1,299	42,982	2,149	1
Additional Low Income						
	Energy Efficiency Kits	14	\$636	141,920	15,769	2
Building Shell - Existing Home Only						
	Weatherization Rebates	34	\$12,659	756,322	25,824	3
	Ceiling (Bring up to R-38) - Elect. Heat Only	6	\$3,857	272,175	9,072	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	10	\$1,607	47,611	1,587	1
	Wall (Bring Up to R19) - Elect. Heat Only	3	\$2,338	130,136	4,338	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	8	\$1,558	36,237	1,208	1
	Foundation (Bring Up to R-10)	3	\$2,338	192,724	6,424	0
	Infiltration Control	3	\$701	67,696	2,708	0
	Duct Insulation (in unconditioned space)	1	\$260	9,743	487	0
Residential Total		14,901	\$224,846	22,493,634	1,884,222	919
Residential Average kWh Sales (3 yr Ave actual and projected)						74,020,404
Residential kWh Savings as percentage of Residential kWh Sales						2.5%

		2012				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	Change a Light Rebate Program	101	\$262	54,498	15,138	6
	High Efficiency Interior Lighting	1,312	\$6,116	851,758	267,674	4
	T-8 or 46" T5 - 4 ft	29	\$753	40,092	6,264	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	12	\$1,403	67,109	8,715	0
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	24	\$1,496	120,368	15,632	0
	CFL lamps - Energy Star- 9W and up	1,245	\$2,425	613,610	236,004	3
	Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling						
	ENERGY STAR Air Conditioning	7	\$227	10,299	687	0
	Geothermal Heat Pump	8	\$3,636	340,681	17,034	1
	Commercial Contractor Rebate (GS & AS)	8	\$416			
Ag/Commercial & Industrial Motors						
	Variable Speed Drive Motor Incentive	1	\$1,558	370,239	24,683	2
Agricultural						
	Livestock Ventilation Fans	21	\$2,497	110,814	9,234	3
	36"-47"	21	\$2,497	110,814	9,234	3
	Ventilation Thermostat Controller	1	\$32	2,711	226	0
	Circulating Fans --- BESS Lab Ratings	14	\$666	55,361	4,613	1
	36"-47"	14	\$666	55,361	4,613	1
	Efficient Livestock Waterers	6	\$390	56,815	4,735	
	Hog Farrowing - Heat Lamps (<= 175W)	28	\$109	18,639	4,660	
	Hog Farrowing - Single Crate Heating Pads (<=85W)	2	\$65	3,990	399	
	Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
	Ag, Commercial and Industrial Total	1,510	\$16,040	1,883,542	349,554	18
	C & I Average kWh Sales (3 yr Ave actual and projected)**				59,462,963	
	C & I kWh Savings as percentage of C & I kWh Sales				0.6%	

II. Demand Response Programs						
	Industrial Interruptible Price	1	\$24,907			250
III. Energy Audit & Technical Support Programs						
	Energy Audit Services - Residential *	4	\$1,500			
IV. Educational & Research Programs						
	Member Information and Education	6,200	\$26,600			
	Peak Alert	6,200				
	Living with Energy in Iowa	5,100	\$22,950			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	6,200	\$14,337			
	TOTAL	40,116	\$331,080	24,377,176	2,233,776	1,186
	Total Average kWh Sales (3 yr Ave actual and projected)**				133,483,368	
	Total kWh Savings as percentage of Total kWh Sales				1.67%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	21	\$3,355	100,985	7,213	7
	SEER 14.5 (and EER 12)	11	\$1,419	38,188	2,728	3
	SEER 16 (and EER 13)	10	\$1,935	62,798	4,486	4
	ENERGY STAR Qualified Room Air Conditioner	8	\$258	7,062	785	1
	Geothermal Heat Pump	40	\$81,290	10,547,538	527,377	17
	Air Source Heat Pump	11	\$9,935	1,286,746	85,783	3
	Residential Contractor Rebates	30	\$6,000			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	845	\$2,181	401,100	54,945	51
	Local CFL Rebate Program(s)	9,144	\$23,750	4,340,423	594,579	549
	ENERGY STAR CFL Fixtures	8	\$83	17,457	873	0
	T8 or better Lighting Fixtures	28	\$419	19,719	1,202	0
	2 ft. T8 or better Fixture w/ electronic ballasts	9	\$46	813	50	0
	4 ft. T8 or better Fixture w/ electronic ballasts	10	\$129	6,868	419	0
	8 ft. T8 or better Fixture w/ electronic ballasts	9	\$244	12,038	734	0
	ENERGY STAR LED lighting	1	\$39	1,329	74	0
	ENERGY STAR Ceiling Fan	3	\$58	8,987	499	0
Exterior Lighting						
	High Efficiency Exterior Lighting	23	\$877	23,886	5,347	0
	High Pressure Sodium - 100+ W	21	\$813	20,876	4,745	0
	Metal Halide - 70 - 250 W	1	\$26	601	111	0
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$39	2,409	492	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	132	\$34,194	458,022	30,535	4
	50-79 gallon	130	\$33,548	447,012	29,801	4
	80 gallon+	2	\$645	11,010	734	0
	Heat Pump Water Heater - (Add-On)	3	\$1,161	57,364	5,736	1
	Heat Pump Water Heater - (Integrated)	14	\$10,839	321,240	26,770	3
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$452	22,284	1,857	0
	Flow Restrictors - Faucet	109	\$4,219	361,107	40,123	2
	Flow Restrictors - Shower	109	\$7,032	684,735	68,473	5
	Tank Insulation	7	\$135	11,881	1,188	0
	Pipe Insulation	7	\$135	12,382	825	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	71	\$5,284	172,148	15,650	6
	ENERGY STAR Qualified Dishwasher	36	\$1,161	46,262	4,206	3
	ENERGY STAR Qualified Refrigerator	70	\$2,258	109,934	7,329	1
	ENERGY STAR Qualified Dehumidifier	32	\$1,032	90,143	7,512	1
	ENERGY STAR Qualified Freezer	29	\$935	32,121	2,141	0
	Appliance Recycling	115	\$8,795	1,234,209	137,134	22
	Refrigerator	115	\$8,795	1,234,209	137,134	22
	Efficient Television	25	\$1,290	49,595	4,133	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$1,935	99,189	3,306	1
	Advanced Lighting Package	6	\$1,548	51,578	2,579	1
Additional Low Income						
	Energy Efficiency Kits	7	\$316	70,960	7,884	1
Building Shell - Existing Home Only						
	Weatherization Rebates	35	\$12,737	761,083	25,983	4
	Ceiling (Bring up to R-38) - Elect. Heat Only	6	\$3,832	272,175	9,072	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	11	\$1,756	52,372	1,746	1
	Wall (Bring Up to R19) - Elect. Heat Only	3	\$2,323	130,136	4,338	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	8	\$1,548	36,237	1,208	1
	Foundation (Bring Up to R-10)	3	\$2,323	192,724	6,424	0
	Infiltration Control	3	\$697	67,696	2,708	0
	Duct Insulation (in unconditioned space)	1	\$258	9,743	487	0
Residential Total		10,973	\$223,707	21,401,469	1,672,043	684
Residential Average kWh Sales (3 yr Ave actual and projected)					73,864,986	
Residential kWh Savings as percentage of Residential kWh Sales					2.3%	

2013					
Estimated Achievable Potential Goals					
T.I.P. Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	93	\$240	50,182	13,939	6
High Efficiency Interior Lighting	940	\$5,555	678,926	198,182	3
T-8 or 46" T5 - 4 ft	30	\$774	41,474	6,480	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	13	\$1,510	72,701	9,442	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	25	\$1,548	125,383	16,284	0
CFL lamps - Energy Star- 9W and up	870	\$1,684	428,787	164,918	2
Occupancy Sensors - Must control >150 Watts	2	\$39	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	7	\$226	10,299	687	0
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive					
Agricultural					
Livestock Ventilation Fans	22	\$2,599	116,091	9,674	3
36"-47"	22	\$2,599	116,091	9,674	3
Ventilation Thermostat Controller	1	\$32	2,711	226	0
Circulating Fans --- BESS Lab Ratings	15	\$709	59,315	4,943	2
36"-47"	15	\$709	59,315	4,943	2
Efficient Livestock Waterers	6	\$387	56,815	4,735	
Hog Farrowing - Heat Lamps (<= 175W)	29	\$112	19,304	4,826	
Hog Farrowing - Single Crate Heating Pads (<=85W)	2	\$65	3,990	399	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$65	7,736	472	
Ag, Commercial and Industrial Total	1,116	\$9,989	1,005,369	238,082	13
C & I Average kWh Sales (3 yr Ave actual and projected)**				61,499,173	
C & I kWh Savings as percentage of C & I kWh Sales				0.4%	

II. Demand Response Programs					
Industrial Interruptible Price	1	\$25,427			250
III. Energy Audit & Technical Support Programs					
Energy Audit Services - Residential *	4	\$1,500			
IV. Educational & Research Programs					
Member Information and Education	6,200	\$26,600			
Peak Alert	6,200				
Living with Energy in Iowa	5,100	\$22,950			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	6,200	\$14,337			
TOTAL	35,794	\$324,510	22,406,838	1,910,126	947
Total Average kWh Sales (3 yr Ave actual and projected)**				135,364,159	
Total kWh Savings as percentage of Total kWh Sales				1.41%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
T.I.P. Rural Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	21	\$3,333	100,985	7,213	7
	SEER 14.5 (and EER 12)	11	\$1,410	38,188	2,728	3
	SEER 16 (and EER 13)	10	\$1,923	62,798	4,486	4
	ENERGY STAR Qualified Room Air Conditioner	8	\$256	7,062	785	1
	Geothermal Heat Pump	42	\$84,808	11,074,915	553,746	18
	Air Source Heat Pump	12	\$10,769	1,403,723	93,582	4
	Residential Contractor Rebates	32	\$6,400			
Residential Lighting (low income included)						
Interior Lighting						
	Change a Light Rebate Program (or similar program)	777	\$1,992	368,822	50,524	47
	Local CFL Rebate Program(s)	9,144	\$23,750	4,340,423	594,579	549
	ENERGY STAR CFL Fixtures	8	\$82	17,457	873	0
	T8 or better Lighting Fixtures	28	\$417	19,719	1,202	0
	2 ft. T8 or better Fixture w/ electronic ballasts	9	\$46	813	50	0
	4 ft. T8 or better Fixture w/ electronic ballasts	10	\$128	6,868	419	0
	8 ft. T8 or better Fixture w/ electronic ballasts	9	\$242	12,038	734	0
	ENERGY STAR LED lighting	1	\$38	1,329	74	0
	ENERGY STAR Ceiling Fan	3	\$58	8,987	499	0
Exterior Lighting						
	High Efficiency Exterior Lighting	24	\$910	24,880	5,573	0
	High Pressure Sodium - 100+ W	22	\$846	21,870	4,970	0
	Metal Halide - 70 - 250 W	1	\$26	601	111	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$38	2,409	492	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	135	\$34,744	468,337	31,222	4
	50-79 gallon	133	\$34,103	457,327	30,488	4
	80 gallon+	2	\$641	11,010	734	0
	Heat Pump Water Heater - (Add-On)	3	\$1,154	57,364	5,736	1
	Heat Pump Water Heater - (Integrated)	19	\$14,615	435,969	36,331	4
	Solar Water Heaters (w/ Electric auxiliary tank)	1	\$449	22,284	1,857	0
	Flow Restrictors - Faucet	112	\$4,308	371,046	41,227	2
	Flow Restrictors - Shower	112	\$7,179	703,581	70,358	6
	Tank Insulation	7	\$135	11,881	1,188	0
	Pipe Insulation	7	\$135	12,382	825	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	72	\$5,340	174,573	15,870	6
	ENERGY STAR Qualified Dishwasher	37	\$1,186	47,547	4,322	3
	ENERGY STAR Qualified Refrigerator	72	\$2,308	113,075	7,538	1
	ENERGY STAR Qualified Dehumidifier	33	\$1,058	92,960	7,747	1
	ENERGY STAR Qualified Freezer	30	\$962	33,228	2,215	0
	Appliance Recycling	118	\$9,025	1,266,405	140,712	22
	Refrigerator	118	\$9,025	1,266,405	140,712	22
	Efficient Television	26	\$1,333	51,578	4,298	1
Efficient Home Incentives (low income included)						
	Energy Efficient Home Construction Rebates *	3	\$1,923	99,189	3,306	1
	Advanced Lighting Package	6	\$1,538	51,578	2,579	1
Additional Low Income						
	Energy Efficiency Kits	4	\$179	40,548	4,505	1
Building Shell - Existing Home Only						
	Weatherization Rebates	35	\$12,655	761,083	25,983	4
	Ceiling (Bring up to R-38) - Elect. Heat Only	6	\$3,808	272,175	9,072	1
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	11	\$1,745	52,372	1,746	1
	Wall (Bring Up to R19) - Elect. Heat Only	3	\$2,308	130,136	4,338	0
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	8	\$1,538	36,237	1,208	1
	Foundation (Bring Up to R-10)	3	\$2,308	192,724	6,424	0
	Infiltration Control	3	\$692	67,696	2,708	0
	Duct Insulation (in unconditioned space)	1	\$256	9,743	487	0
Residential Total		10,932	\$233,039	22,182,912	1,716,471	683
Residential Average kWh Sales (3 yr Ave actual and projected)					73,811,426	
Residential kWh Savings as percentage of Residential kWh Sales					2.3%	

2014					
Estimated Achievable Potential Goals					
T.I.P. Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	86	\$221	46,405	12,890	5
High Efficiency Interior Lighting	940	\$5,530	678,926	198,182	3
T-8 or 46" T5 - 4 ft	30	\$769	41,474	6,480	0
High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	13	\$1,500	72,701	9,442	0
High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	25	\$1,538	125,383	16,284	0
CFL lamps - Energy Star- 9W and up	870	\$1,684	428,787	164,918	2
Occupancy Sensors - Must control >150 Watts	2	\$38	10,580	1,058	
Ag/Commercial & Industrial Heating and Cooling					
ENERGY STAR Air Conditioning	7	\$224	10,299	687	0
Geothermal Heat Pump					
Commercial Contractor Rebate (GS & AS)					
Ag/Commercial & Industrial Motors					
Variable Speed Drive Motor Incentive	1	\$1,538	370,239	24,683	2
Agricultural					
Livestock Ventilation Fans	23	\$2,699	121,368	10,114	3
36"-47"	23	\$2,699	121,368	10,114	3
Ventilation Thermostat Controller	1	\$32	2,711	226	0
Circulating Fans --- BESS Lab Ratings	15	\$704	59,315	4,943	2
36"-47"	15	\$704	59,315	4,943	2
Efficient Livestock Waterers	6	\$385	56,815	4,735	
Hog Farrowing - Heat Lamps (<= 175W)	30	\$115	19,970	4,993	
Hog Farrowing - Single Crate Heating Pads (<=85W)	2	\$64	3,990	399	
Hog Farrowing - Heat Lamp or Pad Controller	1	\$64	7,736	472	
Ag, Commercial and Industrial Total	1,112	\$11,578	1,377,774	262,322	15
C & I Average kWh Sales (3 yr Ave actual and projected)**				63,370,509	
C & I kWh Savings as percentage of C & I kWh Sales				0.4%	

II. Demand Response Programs					
Industrial Interruptible Price	1	\$26,063			250
III. Energy Audit & Technical Support Programs					
Energy Audit Services - Residential *	4	\$1,500			
IV. Educational & Research Programs					
Member Information and Education	6,200	\$26,600			
Peak Alert	6,200				
Living with Energy in Iowa	5,100	\$22,950			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network	6,200	\$14,337			
TOTAL	35,749	\$336,067	23,560,686	1,978,793	948
Total Average kWh Sales (3 yr Ave actual and projected)**				137,181,934	
Total kWh Savings as percentage of Total kWh Sales				1.44%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
T.I.P. Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	0.44	1.39	1.29	0.77
	SEER 16 (and EER 13)	0.46	1.20	1.51	0.71
	ENERGY STAR Qualified Room Air Conditioner	0.44	1.33	1.44	0.71
	Geothermal Heat Pump	0.46	2.24	4.86	1.18
	Air Source Heat Pump	0.47	7.61	5.34	3.95
	Residential Contractor Rebates				
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.54	14.00	8.44	6.71
	Local CFL Rebate Program(s)	0.54	13.58	8.44	7.40
	ENERGY STAR CFL Fixtures	0.50	8.87	8.50	5.58
	T8 or better Lighting Fixtures				
	2 ft. T8 or better Fixture w/ electronic ballasts	0.32	2.23	0.74	0.84
	4 ft. T8 or better Fixture w/ electronic ballasts	0.41	6.42	2.09	2.82
	8 ft. T8 or better Fixture w/ electronic ballasts	0.42	5.07	2.01	2.36
	ENERGY STAR LED lighting	0.40	4.51	1.47	2.02
	ENERGY STAR Ceiling Fan	0.46	2.94	6.04	1.81
Exterior Lighting					
	High Efficiency Exterior Lighting				
	High Pressure Sodium - 100+ W	0.25	2.68	0.55	0.55
	Metal Halide - 70 - 250 W	0.29	1.50	0.81	0.49
	Metal Halide - 250+ W (pulse start lamp and ballasts)	0.37	3.31	1.92	1.27
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	0.30	2.38	0.75	0.76
	80 gallon+	0.33	3.75	0.92	1.18
	Heat Pump Water Heater - (Add-On)	0.39	2.26	1.94	1.04
	Heat Pump Water Heater - (Integrated)	0.37	3.14	1.42	1.30
	Solar Water Heaters (w/ Electric auxiliary tank)	0.40	1.32	2.00	0.66
	Flow Restrictors - Faucet	0.41	94.62	3.36	4.16
	Flow Restrictors - Shower	0.43	16.19	3.89	4.88
	Tank Insulation	0.41	20.15	2.87	3.61
	Pipe Insulation	0.45	20.28	3.74	4.98
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.36	0.99	1.39	0.45
	ENERGY STAR Qualified Dishwasher	0.44	2.85	1.87	1.35
	ENERGY STAR Qualified Refrigerator	0.40	3.07	1.95	1.48
	ENERGY STAR Qualified Dehumidifier	0.43	8.70	3.49	3.90
	ENERGY STAR Qualified Freezer	0.37	3.50	1.41	1.50
	Appliance Recycling				
	Refrigerator	0.42	3.19	2.96	1.48
	Efficient Television	0.38	infinite	1.59	8.49
Efficient Home Incentives (low income included)					
	Energy Efficient Home Construction Rebates *	0.40	1.86	1.80	1.10
	Advanced Lighting Package	0.39	2.48	1.39	1.24
Additional Low Income					
	Energy Efficiency Kits	0.46	25.55	9.06	11.23
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.40	4.40	2.35	2.41
	Ceiling (Bring up to R-38) - Central AC Only (LP Heat)	0.43	0.55	1.30	0.38
	Wall (Bring Up to R19) - Elect. Heat Only	0.39	2.93	1.86	1.60
	Wall (Bring Up to R19) - Central AC Only (LP Heat)	0.40	0.38	1.04	0.25
	Foundation (Bring Up to R-10)	0.41	1.68	2.69	1.03
	Infiltration Control	0.43	6.11	3.41	3.34
	Duct Insulation (in unconditioned space)	0.36	1.59	1.40	0.78

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
T.I.P. Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.52	13.05	8.20	6.01
	High Efficiency Interior Lighting				
	T-8 or 46" T5 - 4 ft	0.43	2.90	2.22	1.16
	High Bay T-8/T-5 fixture w/ High Output Ballast - Replacement	0.38	4.18	1.77	1.57
	High Bay T-8/T-5 fixture w/ High Output Ballast - New Construction	0.42	3.49	2.99	1.55
	CFL lamps - Energy Star- 9W and up	0.50	11.37	8.74	4.64
	Occupancy Sensors - Must control >150 Watts	0.48	9.25	11.40	4.79
Ag/Commercial & Industrial Heating and Cooling					
	ENERGY STAR Air Conditioning	0.81	1.31	3.76	0.80
	Geothermal Heat Pump	0.45	3.29	5.61	2.00
	Commercial Contractor Rebate (GS & AS)				
Ag/Commercial & Industrial Motors					
	Variable Speed Drive Motor Incentive	0.45	3.00	9.13	1.78
Agricultural					
	Livestock Ventilation Fans				
	36"-47"	0.38	5.42	1.75	2.24
	Ventilation Thermostat Controller	0.42	3.36	3.33	1.66
	Circulating Fans --- BESS Lab Ratings				
	36"-47"	0.46	7.42	3.64	3.73
	Efficient Livestock Waterers	0.50	5.62	6.38	2.88
	Hog Farrowing - Heat Lamps (<= 175W)	0.52	15.00	8.00	5.97
	Hog Farrowing - Single Crate Heating Pads (<=85W)	0.47	9.69	2.89	3.54
	Hog Farrowing - Heat Lamp or Pad Controller	0.47	3.31	4.82	1.81

Ag, Commercial and Industrial Total
C & I Average kWh Sales (3 yr Ave actual and projected)**
C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Industrial Interruptible Price	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Peak Alert				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL
Total Average kWh Sales (3 yr Ave actual and projected)**
Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Tri-County Electric Cooperative

BACKGROUND

Tri-County Electric Cooperative (TEC), based in Rushford, Minnesota is a not-for-profit, member-owned electric distribution cooperative serving three counties in Minnesota including Winona, Houston and Fillmore and parts of Olmsted and Mower counties. Tri-County / TEC also has a small portion of meters serving portions of Howard, Winneshiek and Allamakee counties in Iowa. Specifically, these 114 meters account for less than 0.9% of TEC's total meters (12,800). Given the small presence in Iowa and desire to fully comply with the legislative statutes, Tri-County has chosen to participate in the filing with the remaining Iowa RECs.

TEC was founded in 1936 when power was not available to rural residents. Local citizens banded together to build lines going out to their homes and farms. Those people created a company that has prospered while providing its members with competitive electric rates and expanded services for 72 years. This sense of community commitment and involvement remains at the heart of TEC's operations, which are defined by the vision and mission statements.

Our Vision:

- That Tri-County Electric Cooperative is the model of efficiency and quality member are.

Our Mission:

- To deliver high-quality energy services at reasonable prices and maximize value to our members consistent with the wise use of resources.

Statement of Commitment:

- We will constantly seek to enhance the quality of life of our members and the economic and social well-being of our communities.

Our Pledge Is To:

- Reliably fulfill the electrical and related service needs of our members.
- Prosper as a financially sound business at lowest reasonable cost and maximum value.
- Encourage the wise use of resources in a socially and environmentally acceptable manner.
- Maintain the highest ethical standards of trust and respect and meet public responsibilities.

- Meet the members' needs through a staff of honest, well-trained, professional, motivated and service oriented employees

Tri-County is governed by a 7 member board of directors all elected by and from the member-consumers served by the electric cooperative. The co-op serves its members with a staff of 53 employees and a shared CEO with Hawkeye REC in Cresco, Iowa. Tri-County has less than 4 members per mile of distribution line.

Tri-County assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates. The Website for Tri-County Electric Cooperative is www.tec.coop, and it serves as one of the mechanisms used to promote energy efficiency programs and renewable energy.

TEC provides energy saving tips and audits for residential and commercial accounts, along with incentive rebates for energy efficiency measures. TEC also believes in helping the local communities in which we serve, providing an economic development program to help attract new businesses and expand others in rural communities. This program is focused on improving the quality of life for its member-owned consumers and the economic and social well being of the region. TEC is here not only to meet member electric needs, but also to provide services to help them live more efficiently.

Tri-County has an all inclusive power purchase contract to purchase all of its power supply from Dairyland Power Cooperative (DPC) located in LaCrosse, Wisconsin. Tri-County utilizes the same energy efficiency programs and rebates that do other Iowa cooperatives that have all requirements contracts with DPC (namely Hawkeye, Allamakee-Clayton and Heartland). Additionally, being Minnesota based, Tri-County, is required to meet Minnesota energy efficient standards and will market the incentives system wide, to both its Minnesota and Iowa members.

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	470	\$1,175	224,696	85,595	30,780
	T8 or better Lighting Fixtures	17	\$213	11,760	1,856	717
	4 ft. T8 or better Fixture w/ electronic ballasts	17	\$213	11,760	1,856	717
	ENERGY STAR LED lighting	7	\$18	9,371	1,339	521
Exterior Lighting						
	High Efficiency Exterior Lighting	10	\$188	17,135	10,839	3,613
	High Pressure Sodium - 50 - 100 W	5	\$94	5,006	3,413	1,138
	Metal Halide - 250+ W (pulse start lamp and ballasts)	5	\$94	12,129	7,426	2,475
	LED Holiday Lighting	29	\$290	27,040	6,371	2,253
Residential Water Heating (low income included)						
High Efficiency Water Heater						
	80 gallon+	6	\$1,500	33,267	7,393	2,218
	Heat Pump Water Heater - (Integrated)	6	\$1,500	33,267	7,393	2,218
	Flow Restrictors - Faucet	3	\$1,125	69,331	11,555	5,778
	Flow Restrictors - Faucet	10	\$13	33,367	11,122	3,707
	Flow Restrictors - Shower	10	\$63	63,270	18,981	6,327
Residential Appliances (low income included)						
	ENERGY STAR Qualified Dishwasher	8	\$250	10,354	2,471	941
	ENERGY STAR Qualified Refrigerator	6	\$188	9,491	1,687	633
	ENERGY STAR Qualified Dehumidifier	11	\$206	31,209	7,329	2,601
	ENERGY STAR Qualified Freezer	11	\$344	12,271	2,305	818
	Appliance Recycling	10	\$500	89,361	29,787	9,929
	Refrigerator	5	\$250	54,046	18,015	6,005
	Freezer	5	\$250	35,315	11,772	3,924
	Smart Strip	5	\$31	5,550	1,665	555
Residential Total		613	\$6,101	647,470	200,296	71,391
Residential Average kWh Sales (3 yr Ave actual and projected)						8,279,529
Residential kWh Savings as percentage of Residential kWh Sales						0.9%
II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
TOTAL		613	\$6,101	647,470	200,296	71,391
Total Average kWh Sales (3 yr Ave actual and projected)**						8,872,190
Total kWh Savings as percentage of Total kWh Sales						0.8%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	74	\$185	35,378	4,846	4
	T8 or better Lighting Fixtures	2	\$25	1,384	84	0
	4 ft. T8 or better Fixture w/ electronic ballasts	2	\$25	1,384	84	0
	ENERGY STAR LED lighting	1	\$3	1,339	74	0
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$38	3,427	723	0
	High Pressure Sodium - 50 - 100 W	1	\$19	1,001	228	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$19	2,426	495	0
	LED Holiday Lighting	5	\$50	4,662	389	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	2	\$500	11,089	739	0
	80 gallon+	2	\$500	11,089	739	0
	Heat Pump Water Heater - (Integrated)					
	Flow Restrictors - Faucet	2	\$3	6,673	741	0
	Flow Restrictors - Shower	2	\$13	12,654	1,265	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Dishwasher	1	\$31	1,294	118	0
	ENERGY STAR Qualified Refrigerator	1	\$31	1,582	105	0
	ENERGY STAR Qualified Dehumidifier	2	\$38	5,674	473	0
	ENERGY STAR Qualified Freezer	2	\$63	2,231	149	0
	Appliance Recycling	2	\$100	17,872	1,986	0
	Refrigerator	1	\$50	10,809	1,201	0
	Freezer	1	\$50	7,063	785	0
	Smart Strip	1	\$6	1,110	111	
	Residential Total	99	\$1,084	106,369	11,804	7
	Residential Average kWh Sales (3 yr Ave actual and projected)				1,541,853	
	Residential kWh Savings as percentage of Residential kWh Sales				0.8%	
II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
	TOTAL	99	\$1,084	106,369	11,804	7
	Total Average kWh Sales (3 yr Ave actual and projected)**				1,661,078	
	Total kWh Savings as percentage of Total kWh Sales				0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2011				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	83	\$208	39,680	5,436	5
	T8 or better Lighting Fixtures	3	\$38	2,075	127	0
	4 ft. T8 or better Fixture w/ electronic ballasts	3	\$38	2,075	127	0
	ENERGY STAR LED lighting	1	\$3	1,339	74	0
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$38	3,427	723	0
	High Pressure Sodium - 50 - 100 W	1	\$19	1,001	228	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$19	2,426	495	0
	LED Holiday Lighting	5	\$50	4,662	389	1
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1	\$250	5,544	370	0
	80 gallon+	1	\$250	5,544	370	0
	Heat Pump Water Heater - (Integrated)					
	Flow Restrictors - Faucet	2	\$3	6,673	741	0
	Flow Restrictors - Shower	2	\$13	12,654	1,265	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Dishwasher	1	\$31	1,294	118	0
	ENERGY STAR Qualified Refrigerator	1	\$31	1,582	105	0
	ENERGY STAR Qualified Dehumidifier	2	\$38	5,674	473	0
	ENERGY STAR Qualified Freezer	2	\$63	2,231	149	0
	Appliance Recycling	2	\$100	17,872	1,986	0
	Refrigerator	1	\$50	10,809	1,201	0
	Freezer	1	\$50	7,063	785	0
	Smart Strip	1	\$6	1,110	111	
	Residential Total	108	\$869	105,819	12,066	7
	Residential Average kWh Sales (3 yr Ave actual and projected)				1,606,887	
	Residential kWh Savings as percentage of Residential kWh Sales				0.8%	
II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
	TOTAL	108	\$869	105,819	12,066	7
	Total Average kWh Sales (3 yr Ave actual and projected)**				1,723,485	
	Total kWh Savings as percentage of Total kWh Sales				0.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2012				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	94	\$235	44,939	6,156	6
	T8 or better Lighting Fixtures	3	\$38	2,075	127	0
	4 ft. T8 or better Fixture w/ electronic ballasts	3	\$38	2,075	127	0
	ENERGY STAR LED lighting	1	\$3	1,339	74	0
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$38	3,427	723	0
	High Pressure Sodium - 50 - 100 W	1	\$19	1,001	228	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$19	2,426	495	0
	LED Holiday Lighting	6	\$60	5,594	466	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1	\$250	5,544	370	0
	80 gallon+	1	\$250	5,544	370	0
	Heat Pump Water Heater - (Integrated)	1	\$375	23,110	1,926	0
	Flow Restrictors - Faucet	2	\$3	6,673	741	0
	Flow Restrictors - Shower	2	\$13	12,654	1,265	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Dishwasher	2	\$63	2,589	235	0
	ENERGY STAR Qualified Refrigerator	1	\$31	1,582	105	0
	ENERGY STAR Qualified Dehumidifier	2	\$38	5,674	473	0
	ENERGY STAR Qualified Freezer	2	\$63	2,231	149	0
	Appliance Recycling	2	\$100	17,872	1,986	0
	Refrigerator	1	\$50	10,809	1,201	0
	Freezer	1	\$50	7,063	785	0
	Smart Strip	1	\$6	1,110	111	
	Residential Total	122	\$1,313	136,414	14,907	8
	Residential Average kWh Sales (3 yr Ave actual and projected)				1,657,503	
	Residential kWh Savings as percentage of Residential kWh Sales				0.9%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
	TOTAL	122	\$1,313	136,414	14,907	8
	Total Average kWh Sales (3 yr Ave actual and projected)**				1,775,268	
	Total kWh Savings as percentage of Total kWh Sales				0.8%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
Local CFL Rebate Program(s)		104	\$260	49,720	6,811	6
T8 or better Lighting Fixtures		4	\$50	2,767	169	0
4 ft. T8 or better Fixture w/ electronic ballasts		4	\$50	2,767	169	0
ENERGY STAR LED lighting		2	\$5	2,677	149	0
Exterior Lighting						
High Efficiency Exterior Lighting		2	\$38	3,427	723	0
High Pressure Sodium - 50 - 100 W		1	\$19	1,001	228	
Metal Halide - 250+ W (pulse start lamp and ballasts)		1	\$19	2,426	495	0
LED Holiday Lighting		6	\$60	5,594	466	2
Residential Water Heating (low income included)						
High Efficiency Water Heater						
80 gallon+		1	\$250	5,544	370	0
Heat Pump Water Heater - (Integrated)		1	\$375	23,110	1,926	0
Flow Restrictors - Faucet		2	\$3	6,673	741	0
Flow Restrictors - Shower		2	\$13	12,654	1,265	0
Residential Appliances (low income included)						
ENERGY STAR Qualified Dishwasher		2	\$63	2,589	235	0
ENERGY STAR Qualified Refrigerator		1	\$31	1,582	105	0
ENERGY STAR Qualified Dehumidifier		2	\$38	5,674	473	0
ENERGY STAR Qualified Freezer		2	\$63	2,231	149	0
Appliance Recycling		2	\$100	17,872	1,986	0
Refrigerator		1	\$50	10,809	1,201	0
Freezer		1	\$50	7,063	785	0
Smart Strip		1	\$6	1,110	111	
Residential Total		134	\$1,353	143,226	15,679	9
Residential Average kWh Sales (3 yr Ave actual and projected)					1,709,715	
Residential kWh Savings as percentage of Residential kWh Sales					0.9%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
TOTAL		134	\$1,353	143,226	15,679	9
Total Average kWh Sales (3 yr Ave actual and projected)**					1,828,657	
Total kWh Savings as percentage of Total kWh Sales					0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2014				
		Estimated Achievable Potential Goals				
Tri-County Electric Cooperative		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	115	\$288	54,979	7,531	7
	T8 or better Lighting Fixtures	5	\$63	3,459	211	0
	4 ft. T8 or better Fixture w/ electronic ballasts	5	\$63	3,459	211	0
	ENERGY STAR LED lighting	2	\$5	2,677	149	0
Exterior Lighting						
	High Efficiency Exterior Lighting	2	\$38	3,427	723	0
	High Pressure Sodium - 50 - 100 W	1	\$19	1,001	228	
	Metal Halide - 250+ W (pulse start lamp and ballasts)	1	\$19	2,426	495	0
	LED Holiday Lighting	7	\$70	6,527	544	2
Residential Water Heating (low income included)						
	High Efficiency Water Heater	1	\$250	5,544	370	0
	80 gallon+	1	\$250	5,544	370	0
	Heat Pump Water Heater - (Integrated)	1	\$375	23,110	1,926	0
	Flow Restrictors - Faucet	2	\$3	6,673	741	0
	Flow Restrictors - Shower	2	\$13	12,654	1,265	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Dishwasher	2	\$63	2,589	235	0
	ENERGY STAR Qualified Refrigerator	2	\$63	3,164	211	0
	ENERGY STAR Qualified Dehumidifier	3	\$56	8,511	709	0
	ENERGY STAR Qualified Freezer	3	\$94	3,347	223	0
	Appliance Recycling	2	\$100	17,872	1,986	0
	Refrigerator	1	\$50	10,809	1,201	0
	Freezer	1	\$50	7,063	785	0
	Smart Strip	1	\$6	1,110	111	
	Residential Total	150	\$1,484	155,643	16,935	10
	Residential Average kWh Sales (3 yr Ave actual and projected)				1,763,571	
	Residential kWh Savings as percentage of Residential kWh Sales				1.0%	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
IV. Educational & Research Programs						
	TOTAL	150	\$1,484	155,643	16,935	10
	Total Average kWh Sales (3 yr Ave actual and projected)**				1,883,702	
	Total kWh Savings as percentage of Total kWh Sales				0.9%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Tri-County Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Lighting (low income included)					
Interior Lighting					
Local CFL Rebate Program(s)		0.85	12.60	12.54	11.21
T8 or better Lighting Fixtures		0.55	4.27	4.83	2.99
4 ft. T8 or better Fixture w/ electronic ballasts					
ENERGY STAR LED lighting		0.75	2.87	25.99	2.91
Exterior Lighting					
High Efficiency Exterior Lighting					
High Pressure Sodium - 50 - 100 W		0.36	2.81	1.69	1.09
Metal Halide - 250+ W (pulse start lamp and ballasts)		0.40	1.03	3.65	0.48
LED Holiday Lighting		0.63	2.55	4.66	1.99
Residential Water Heating (low income included)					
High Efficiency Water Heater					
80 gallon+		1.02	1.03	2.49	1.38
Heat Pump Water Heater - (Integrated)		0.41	2.43	2.15	1.22
Flow Restrictors - Faucet		0.44	53.63	18.89	23.29
Flow Restrictors - Shower		0.43	19.46	6.86	8.55
Residential Appliances (low income included)					
ENERGY STAR Qualified Dishwasher		0.67	2.54	2.58	2.00
ENERGY STAR Qualified Refrigerator		0.41	2.57	1.78	1.30
ENERGY STAR Qualified Dehumidifier		0.40	Infinite	4.55	28.97
ENERGY STAR Qualified Freezer		0.41	2.97	1.38	1.45
Appliance Recycling		0.56	3.91	6.28	2.59
Refrigerator		0.56	4.54	7.48	3.00
Freezer		0.56	3.06	5.09	2.04
Smart Strip		0.49	8.27	6.57	4.55

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

II. Demand Response Programs				
III. Energy Audit & Technical Support Programs				
IV. Educational & Research Programs				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

United Electric Cooperative, Inc.

BACKGROUND

United Electric Cooperative, Inc. (United Electric) was created by a merger of Nodaway-Worth and Northwest Missouri Cooperatives and has offices in Savannah and Maryville, Missouri. United Electric serves parts of the counties of Andrew, Atchison, Buchanan, Clinton, De Kalb, Gentry, Holt, Nodaway, and Worth in Missouri and Page, Taylor, and Ringgold in Iowa. United is a not-for-profit cooperative providing reliable electric service to member-owners. The cooperative assists member-owners in managing their electric needs including offering a menu of energy efficiency options. United is governed by a board of directors all elected by and from the member-consumers served by the electric cooperative. United has 10 employees and serves approximately 2.5 customers per mile of line.

In the Iowa portion of its service territory, the cooperative serves approximately 560 residential customers. According to the most recent survey data, approximately 59 percent of these were identified as farm-related accounts.

United purchases its power through an all-requirements contract with NW Electric Power Cooperative, which in turn receives power from Associated Electric Cooperative Inc. (AECI), a generation and transmission cooperative located in Springfield, Missouri. AECI provides electric power to six member generation and transmission systems, which in turn provide power to 51 electric distribution cooperatives located in Missouri, Iowa and Oklahoma.

As part of its generation resource planning process, AECI regularly evaluates its resource options to continue providing high quality service and reliable, least-cost power to its members. AECI engaged an independent third-party consultant to prepare an economic evaluation of energy efficiency measures that would be appropriate to offer through the 51 distribution members of the AECI system.

The Website for United Electric Cooperative is <http://www.ueci.coop>. The website is one of the mechanisms used to promote energy efficiency programs as well as provide energy education and other helpful safety and community information.

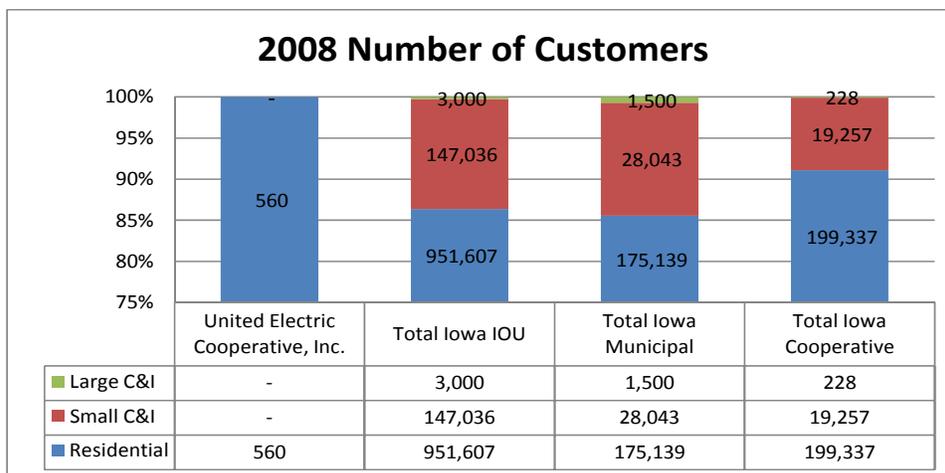
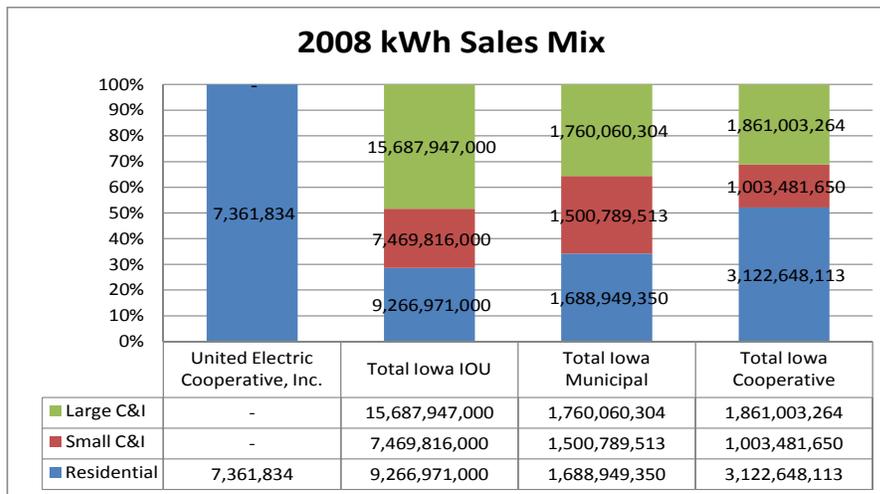
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. Independent qualified third-party consultants were hired to perform the assessments for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined, our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER PROFILE

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and United Electric Cooperative itself. This illustrates that making any comparison of United energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



Source: IUB website raw data for the calendar year 2008.

COMMITMENT TO ENERGY EFFICIENCY

In 2007, Associated Electric Cooperative, Inc. completed a preliminary study of energy efficiency potential with the goal of offering energy efficiency programs that would reduce power supply costs through the 51 member distribution cooperatives. The result of that study was a package of programs that began being offered by AECI member systems (including United) in 2008. These programs include:

1. Compact Fluorescent Light Bulb Giveaway
2. Residential Energy Audit (w/ On-site Measures)
3. Energy Star™ Dishwasher
4. Energy Star™ Clothes Washer
5. Energy Star™ Window Air Conditioner
6. High Efficiency Heat Pump Replacement
7. Commercial and Industrial Energy Grant program

AECI has recently expanded its energy efficiency analysis and studies have recently been completed that focus on the residential-farm and commercial and industrial (C&I) sectors specifically. While no final decision has been the scope and nature of the specific agricultural and C&I program offerings, the proposed program goals will be incorporated into this filing and revised as necessary.

In addition to the programs offered through United by AECI, United also offers the following programs:

1. A load management program that allows the cooperative to control certain electric appliances through a remote control device.

Regardless of the statutory requirements set forth by the state of Iowa, United has been and will continue to be committed to supply side and demand side energy efficiency for its members. United has invested in demand side energy efficiency programs from 1992 through 2007. Going forward, United has a planned demand side investment of \$195,000 (Iowa portion) for 2010 through 2014.

ENERGY EFFICIENCY GOALS

A number of key goals have been established as part of the on-going energy efficiency program development process, in conjunction with the requirements under the Iowa statutes. These goals include:

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				
United Electric Cooperative, Inc.	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Air Source Heat Pump	5	\$12,190	589,077	117,815	39,272
Residential Lighting (low income included)						
	Interior Lighting					
	Local CFL Rebate Program(s)	40	\$1,018	19,123	7,859	2,620
Residential Water Heating (low income included)						
	High Efficiency Water Heater	15	\$1,101	22,478	4,496	1,499
	40-49 gallon	15	\$1,101	22,478	4,496	1,499
	Flow Restrictors - Faucet	15	\$886	50,050	16,683	5,561
	Flow Restrictors - Shower	15	\$2,051	94,905	28,472	9,491
	Tank Insulation	15	\$1,150	25,641	7,692	2,564
	Pipe Insulation	15	\$462	26,723	5,345	1,782
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	50	\$6,905	122,100	33,300	11,100
	ENERGY STAR Qualified Dishwasher	35	\$2,457	45,299	12,354	4,118
Building Shell - Existing Home Only						
	Weatherization Rebates	105	\$90,447	5,308,436	537,662	179,221
	Ceiling (Bring up to R-38) - Elect. Heat Only	45	\$38,283	2,055,942	205,594	68,531
	Foundation (Bring Up to R-10)	45	\$46,546	2,911,586	291,159	97,053
	Infiltration Control	15	\$5,618	340,909	40,909	13,636
Residential Total		310	\$118,665	6,303,832	771,678	257,226
Residential Average kWh Sales (3 yr Ave actual and projected)						37,374,515
Residential kWh Savings as percentage of Residential kWh Sales						0.7%

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	10	\$3,657	9,444	6,127	2,042
	T-8 or 46" T5 - 4 ft	5	\$3,529	6,962	3,263	1,088
	CFL lamps - Energy Star- 9W/ and up	5	\$129	2,482	2,864	955
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	5	\$6,380	360,889	72,178	24,059
	80 gallon+	5	\$6,380	360,889	72,178	24,059
Agricultural						
	Dairy Pre-coolers Incentive	5	\$12,724	735,514	147,103	49,034
	Livestock Ventilation Fans	5	\$1,165	26,573	6,643	2,214
	36"-47"	5	\$1,165	26,573	6,643	2,214
	Circulating Fans --- BESS Lab Ratings	5	\$25,877	1,498,500	299,700	99,900
	High Velocity; Low Speed	5	\$25,877	1,498,500	299,700	99,900
	Scroll compressor (milk cooling)	5	\$5,318	276,806	55,361	18,454
	Variable Speed Drive Motor - Dairy Vacuum Pump	5	\$18,319	1,110,216	195,921	65,307
Ag, Commercial and Industrial Total		40	\$73,440	4,017,942	783,033	261,011
C & I Average kWh Sales (3 yr Ave actual and projected)**						-
C & I kWh Savings as percentage of C & I kWh Sales						#DIV/0!

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	5	\$1,000			
	Energy Audit Services - Residential *	20	\$2,000			
IV. Educational & Research Programs						
TOTAL		375	\$195,105	10,321,775	1,554,710	518,237
Total Average kWh Sales (3 yr Ave actual and projected)**						37,374,515
Total kWh Savings as percentage of Total kWh Sales						1.4%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2010				
		Estimated Achievable Potential Goals				
United Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Air Source Heat Pump	1	\$2,438	117,815	7,854	1
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	8	\$204	3,825	524	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	3	\$220	4,496	300	0
	40-49 gallon	3	\$220	4,496	300	0
	Flow Restrictors - Faucet	3	\$177	10,010	1,112	0
	Flow Restrictors - Shower	3	\$410	18,981	1,898	0
	Tank Insulation	3	\$230	5,128	513	0
	Pipe Insulation	3	\$92	5,345	356	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	10	\$1,381	24,420	2,220	1
	ENERGY STAR Qualified Dishwasher	7	\$491	9,060	824	1
Building Shell - Existing Home Only						
	Weatherization Rebates	21	\$18,089	1,061,687	35,844	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$7,657	411,188	13,706	1
	Foundation (Bring Up to R-10)	9	\$9,309	582,317	19,411	1
	Infiltration Control	3	\$1,124	68,182	2,727	0
Residential Total		62	\$23,733	1,260,766	51,445	5
Residential Average kWh Sales (3 yr Ave actual and projected)					7,358,292	
Residential kWh Savings as percentage of Residential kWh Sales					0.7%	

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	2	\$731	1,889	408	0
	T-8 or 46" T5 - 4 ft	1	\$706	1,392	218	0
	CFL lamps - Energy Star- 9W and up	1	\$26	496	191	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	1	\$5,175	299,700	19,980	4
	High Velocity; Low Speed	1	\$5,175	299,700	19,980	4
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag, Commercial and Industrial Total		8	\$14,688	803,588	52,202	12
C & I Average kWh Sales (3 yr Ave actual and projected)**					0	
C & I kWh Savings as percentage of C & I kWh Sales					#DIV/0!	

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	4	\$400			
IV. Educational & Research Programs						
TOTAL		75	\$39,021	2,064,355	103,647	17
Total Average kWh Sales (3 yr Ave actual and projected)**					7,358,292	
Total kWh Savings as percentage of Total kWh Sales					1.4%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2011					
Estimated Achievable Potential Goals					
United Electric Cooperative, Inc.	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
Air Source Heat Pump	1	\$2,438	117,815	7,854	1
Residential Lighting (low income included)					
Interior Lighting					
Local CFL Rebate Program(s)	8	\$204	3,825	524	0
Residential Water Heating (low income included)					
High Efficiency Water Heater	3	\$220	4,496	300	0
40-49 gallon	3	\$220	4,496	300	0
Flow Restrictors - Faucet	3	\$177	10,010	1,112	0
Flow Restrictors - Shower	3	\$410	18,981	1,898	0
Tank Insulation	3	\$230	5,128	513	0
Pipe Insulation	3	\$92	5,345	356	0
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	10	\$1,381	24,420	2,220	1
ENERGY STAR Qualified Dishwasher	7	\$491	9,060	824	1
Building Shell - Existing Home Only					
Weatherization Rebates	21	\$18,089	1,061,687	35,844	2
Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$7,657	411,188	13,706	1
Foundation (Bring Up to R-10)	9	\$9,309	582,317	19,411	1
Infiltration Control	3	\$1,124	68,182	2,727	0
Residential Total	62	\$23,733	1,260,766	51,445	5
Residential Average kWh Sales (3 yr Ave actual and projected)				7,391,143	
Residential kWh Savings as percentage of Residential kWh Sales					0.7%

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
High Efficiency Interior Lighting	2	\$731	1,889	408	0
T-8 or 46" T5 - 4 ft	1	\$706	1,392	218	0
CFL lamps - Energy Star- 9W and up	1	\$26	496	191	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural					
Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
Livestock Ventilation Fans	1	\$233	5,315	443	0
36"-47"	1	\$233	5,315	443	0
Circulating Fans --- BESS Lab Ratings	1	\$5,175	299,700	19,980	4
High Velocity; Low Speed	1	\$5,175	299,700	19,980	4
Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag, Commercial and Industrial Total	8	\$14,688	803,588	52,202	12
C & I Average kWh Sales (3 yr Ave actual and projected)**				0	
C & I kWh Savings as percentage of C & I kWh Sales					#DIV/0!

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$200			
Energy Audit Services - Residential *	4	\$400			
IV. Educational & Research Programs					
TOTAL	75	\$39,021	2,064,355	103,647	17
Total Average kWh Sales (3 yr Ave actual and projected)**				7,391,143	
Total kWh Savings as percentage of Total kWh Sales					1.4%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2012					
Estimated Achievable Potential Goals					
United Electric Cooperative, Inc.	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
Air Source Heat Pump	1	\$2,438	117,815	7,854	1
Residential Lighting (low income included)					
Interior Lighting					
Local CFL Rebate Program(s)	8	\$204	3,825	524	0
Residential Water Heating (low income included)					
High Efficiency Water Heater	3	\$220	4,496	300	0
40-49 gallon	3	\$220	4,496	300	0
Flow Restrictors - Faucet	3	\$177	10,010	1,112	0
Flow Restrictors - Shower	3	\$410	18,981	1,898	0
Tank Insulation	3	\$230	5,128	513	0
Pipe Insulation	3	\$92	5,345	356	0
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	10	\$1,381	24,420	2,220	1
ENERGY STAR Qualified Dishwasher	7	\$491	9,060	824	1
Building Shell - Existing Home Only					
Weatherization Rebates	21	\$18,089	1,061,687	35,844	2
Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$7,657	411,188	13,706	1
Foundation (Bring Up to R-10)	9	\$9,309	582,317	19,411	1
Infiltration Control	3	\$1,124	68,182	2,727	0
Residential Total	62	\$23,733	1,260,766	51,445	5
Residential Average kWh Sales (3 yr Ave actual and projected)				7,445,593	
Residential kWh Savings as percentage of Residential kWh Sales				0.7%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
High Efficiency Interior Lighting	2	\$731	1,889	408	0
T-8 or 46" T5 - 4 ft	1	\$706	1,392	218	0
CFL lamps - Energy Star- 9W and up	1	\$26	496	191	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural					
Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
Livestock Ventilation Fans	1	\$233	5,315	443	0
36"-47"	1	\$233	5,315	443	0
Circulating Fans --- BESS Lab Ratings	1	\$5,175	299,700	19,980	4
High Velocity; Low Speed	1	\$5,175	299,700	19,980	4
Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag, Commercial and Industrial Total	8	\$14,688	803,588	52,202	12
C & I Average kWh Sales (3 yr Ave actual and projected)**				0	
C & I kWh Savings as percentage of C & I kWh Sales				#DIV/0!	

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$200			
Energy Audit Services - Residential *	4	\$400			
IV. Educational & Research Programs					
TOTAL	75	\$39,021	2,064,355	103,647	17
Total Average kWh Sales (3 yr Ave actual and projected)**				7,445,593	
Total kWh Savings as percentage of Total kWh Sales				1.4%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		2013				
		Estimated Achievable Potential Goals				
United Electric Cooperative, Inc.		Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	Air Source Heat Pump	1	\$2,438	117,815	7,854	1
Residential Lighting (low income included)						
Interior Lighting						
	Local CFL Rebate Program(s)	8	\$204	3,825	524	0
Residential Water Heating (low income included)						
	High Efficiency Water Heater	3	\$220	4,496	300	0
	40-49 gallon	3	\$220	4,496	300	0
	Flow Restrictors - Faucet	3	\$177	10,010	1,112	0
	Flow Restrictors - Shower	3	\$410	18,981	1,898	0
	Tank Insulation	3	\$230	5,128	513	0
	Pipe Insulation	3	\$92	5,345	356	0
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	10	\$1,381	24,420	2,220	1
	ENERGY STAR Qualified Dishwasher	7	\$491	9,060	824	1
Building Shell - Existing Home Only						
	Weatherization Rebates	21	\$18,089	1,061,687	35,844	2
	Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$7,657	411,188	13,706	1
	Foundation (Bring Up to R-10)	9	\$9,309	582,317	19,411	1
	Infiltration Control	3	\$1,124	68,182	2,727	0
Residential Total		62	\$23,733	1,260,766	51,445	5
Residential Average kWh Sales (3 yr Ave actual and projected)					7,533,513	
Residential kWh Savings as percentage of Residential kWh Sales						0.7%

Agriculture/Commercial & Industrial Lighting						
Interior Lighting						
	High Efficiency Interior Lighting	2	\$731	1,889	408	0
	T-8 or 46" T5 - 4 ft	1	\$706	1,392	218	0
	CFL lamps - Energy Star- 9W and up	1	\$26	496	191	0
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
	80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural						
	Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
	Livestock Ventilation Fans	1	\$233	5,315	443	0
	36"-47"	1	\$233	5,315	443	0
	Circulating Fans --- BESS Lab Ratings	1	\$5,175	299,700	19,980	4
	High Velocity; Low Speed	1	\$5,175	299,700	19,980	4
	Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
	Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag, Commercial and Industrial Total		8	\$14,688	803,588	52,202	12
C & I Average kWh Sales (3 yr Ave actual and projected)**					0	
C & I kWh Savings as percentage of C & I kWh Sales						#DIV/0!

II. Demand Response Programs						
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	1	\$200			
	Energy Audit Services - Residential *	4	\$400			
IV. Educational & Research Programs						
TOTAL		75	\$39,021	2,064,355	103,647	17
Total Average kWh Sales (3 yr Ave actual and projected)**					7,533,513	
Total kWh Savings as percentage of Total kWh Sales						1.4%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
United Electric Cooperative, Inc.	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
Air Source Heat Pump	1	\$2,438	117,815	7,854	1
Residential Lighting (low income included)					
Interior Lighting					
Local CFL Rebate Program(s)	8	\$204	3,825	524	0
Residential Water Heating (low income included)					
High Efficiency Water Heater	3	\$220	4,496	300	0
40-49 gallon	3	\$220	4,496	300	0
Flow Restrictors - Faucet	3	\$177	10,010	1,112	0
Flow Restrictors - Shower	3	\$410	18,981	1,898	0
Tank Insulation	3	\$230	5,128	513	0
Pipe Insulation	3	\$92	5,345	356	0
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	10	\$1,381	24,420	2,220	1
ENERGY STAR Qualified Dishwasher	7	\$491	9,060	824	1
Building Shell - Existing Home Only					
Weatherization Rebates	21	\$18,089	1,061,687	35,844	2
Ceiling (Bring up to R-38) - Elect. Heat Only	9	\$7,657	411,188	13,706	1
Foundation (Bring Up to R-10)	9	\$9,309	582,317	19,411	1
Infiltration Control	3	\$1,124	68,182	2,727	0
Residential Total	62	\$23,733	1,260,766	51,445	5
Residential Average kWh Sales (3 yr Ave actual and projected)				7,645,974	
Residential kWh Savings as percentage of Residential kWh Sales				0.7%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
High Efficiency Interior Lighting	2	\$731	1,889	408	0
T-8 or 46" T5 - 4 ft	1	\$706	1,392	218	0
CFL lamps - Energy Star- 9W and up	1	\$26	496	191	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	1	\$1,276	72,178	4,812	1
80 gallon+	1	\$1,276	72,178	4,812	1
Agricultural					
Dairy Pre-coolers Incentive	1	\$2,545	147,103	9,807	5
Livestock Ventilation Fans	1	\$233	5,315	443	0
36"-47"	1	\$233	5,315	443	0
Circulating Fans --- BESS Lab Ratings	1	\$5,175	299,700	19,980	4
High Velocity; Low Speed	1	\$5,175	299,700	19,980	4
Scroll compressor (milk cooling)	1	\$1,064	55,361	3,691	0
Variable Speed Drive Motor - Dairy Vacuum Pump	1	\$3,664	222,043	13,061	1
Ag, Commercial and Industrial Total	8	\$14,688	803,588	52,202	12
C & I Average kWh Sales (3 yr Ave actual and projected)**				0	
C & I kWh Savings as percentage of C & I kWh Sales				#DIV/0!	

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	1	\$200			
Energy Audit Services - Residential *	4	\$400			
IV. Educational & Research Programs					
TOTAL	75	\$39,021	2,064,355	103,647	17
Total Average kWh Sales (3 yr Ave actual and projected)**				7,645,974	
Total kWh Savings as percentage of Total kWh Sales				1.4%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
United Electric Cooperative, Inc.		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	Air Source Heat Pump	0.80	2.40	4.80	3.50
Residential Lighting (low income included)					
Interior Lighting					
	Local CFL Rebate Program(s)	1.20	3.00	2.90	7.10
Residential Water Heating (low income included)					
	High Efficiency Water Heater	0.80	1.60	2.20	3.30
	40-49 gallon	0.80	1.60	2.20	3.30
	Flow Restrictors - Faucet	0.80	1.60	2.20	3.30
	Flow Restrictors - Shower	0.80	1.60	2.20	3.30
	Tank Insulation	0.80	1.60	2.20	3.30
	Pipe Insulation	0.80	1.60	2.20	3.30
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.80	1.80	3.60	2.70
	ENERGY STAR Qualified Dishwasher	0.80	1.80	3.60	2.70
Building Shell - Existing Home Only					
	Weatherization Rebates	0.90	1.60	2.30	2.50
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.90	1.60	2.30	2.50
	Foundation (Bring Up to R-10)	0.90	1.60	2.30	2.50
	Infiltration Control	0.90	1.60	2.30	2.50

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	High Efficiency Interior Lighting	0.90	6.60	3.80	4.50
	T-8 or 46" T5 - 4 ft	0.90	6.60	3.80	4.50
	CFL lamps - Energy Star- 9W and up	1.20	3.00	2.90	7.10
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater	0.80	1.60	2.20	3.30
	80 gallon+	0.80	1.60	2.20	3.30
Agricultural					
	Dairy Pre-coolers Incentive	0.40	6.70	3.20	2.00
	Livestock Ventilation Fans				
	36"-47"	0.40	7.60	2.30	1.90
	Circulating Fans --- BESS Lab Ratings				
	High Velocity; Low Speed	0.40	7.60	2.30	1.90
	Scroll compressor (milk cooling)	0.40	6.70	3.20	2.00
	Variable Speed Drive Motor - Dairy Vacuum Pump	0.40	6.70	3.20	2.00

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Western Iowa Power Cooperative

BACKGROUND

Western Iowa Power Cooperative (WIPCO) provides reliable electric service to a rural region in west-central Iowa.

Monona County Rural Electric Cooperative and South Crawford Rural Electric Cooperative both began providing electric service to rural areas in 1936. Due to a decline in the number of farms and farm population and a downward turn in the ag-economy in the 1980's, the two Cooperatives began studying ways to continue to provide reliable service and keep rates stable. In 1993, the two Cooperatives began sharing personnel and equipment and jointly purchasing materials and supplies. On May 1, 1996, members of the two Cooperatives voted to consolidate. Western Iowa Power Cooperative (WIPCO), was incorporated on April 1, 1997.

WIPCO is a small town not-for-profit cooperative, with office and warehouse facilities located in Denison, Iowa and Onawa, Iowa to effectively serve our member-consumers. The co-op assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency and renewable-energy rebates.

WIPCO is governed by a 10 member board of directors all elected by and from the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Audubon, Crawford, Carroll, Harrison, Monona, Sac, Ida, Shelby, and Woodbury counties. The cooperative provides electric service to 5,612 meters. One hundred and seventy eight of these are small commercial members and three hundred and forty seven large commercial and the remaining 5,087 are residential and/or farm members.

WIPCO serves the members with a staff of 30 employees. WIPCO has 2.64 members per mile of distribution line.

WIPCO purchases its power supply from Northwest Iowa Power Cooperative, which serves its members with hydropower from Western Area Power Administration – about 25 percent of NIPCO's needs – with the remaining power purchased from Basin Electric Power Cooperative. The 2010 power mix for Basin Electric includes coal, natural gas, oil/diesel, nuclear and renewable, the latter of which is made up of an increasing number of wind turbine installations as well as waste heat recovery from an oil pipeline.

The members of NIPCO and other rural electric cooperatives in the state of Iowa, joined together in 2007 to perform an assessment of potential for energy efficiency through the Iowa Association of Electric Cooperatives.

Websites--www.wipco.com and www.uselectricwisely.com.

Renewable energy is large portion of the wholesale power portfolio. Western Area Power Administration is a government agency which administers the hydro electric dams on the Missouri river. Those renewable hydro electric facilities provide 20% of the power WIPCO member-consumers use. Basin Electric Power Cooperative provides the remaining 80% of wholesale power and has renewable wind energy and renewable waste heat capture generated energy in their energy mix. WIPCO member-consumers may purchase renewable energy thru the "Prairie Winds" program,

DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. This progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

COMMITMENT TO ENERGY EFFICIENCY

Western Iowa Power Cooperative has been committed to supply side and demand side energy efficiency for many years. WIPCO has a planned demand side investment of \$1.68 million for 2010 through 2014. Some of the new energy efficiency measures offered to members include:

Incentives for "Energy Star" rated:

1. Earth Energy Heat Pumps
2. Air to air heat pumps
3. Central air conditioners

4. Window air conditioners
5. Clothes washers
6. Refrigerators
7. Freezers
8. Dishwashers

These are also incentives for high efficient electric water heaters and building insulation. An appliance recycling program is also offered when a new “Energy Star” appliance is purchased as a replacement. Energy audits have been available for WIPCO member-consumers since 1983 and that program will be continued and enhanced. Those energy audits have been and will continue to be offered at no cost to consumer-member.

Electricity is the most economical when the demand for power is predictable and even. To help keep the electric demand stable, WIPCO works in coordination with our wholesale power provider, Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generation and transmission electric cooperative with the primary purpose to purchase and transmit reliable, economical and safe power to its member electric cooperatives, and provide other services its members require.

One of the services NIPCO provides for its electric cooperatives is operating a load management program for its electric cooperative members. In 1984, a program known as “Switch Makes Cents”, was developed to promote energy efficient applications and voluntary load management. This allowed us to maximize the available power supply while keeping electric rates affordable for our member-consumers. Our management and staff worked closely with NIPCO to establish the goals of the program. The goals were, and continue to be, achieving efficient electric use, stabilize customer rates, and improve load factors and to reduce purchased power costs.

The load management system uses a centrally controlled and operated load management system. In its 25 year history, this load management system has proven to be a very popular and effective tool to help maximize power supply and control costs. The electric cooperatives in the NIPCO system currently provide load control for 35,900 qualifying customer loads and have saved the electric cooperative member-consumers over \$35 million in power supply costs.

The primary loads eligible to participate in this program are space heating and cooling, water heating, irrigation and several large commercial load applications. In addition to equipment incentives, the energy efficiency and load management program options and services used to educate the member-consumer on their program include information

provided by our energy advisor staff, newspaper, web site development to provide easy access to program information, utilizing online services, direct mail, media, information meetings and open houses.

WIPCO and NIPCO work hard to operate our electric systems efficiently by evaluating and making cost effective assessments when replacing or installing new electric and electronic supply side equipment. Several specific areas include electrical conductor installation, transformers, heat pumps used to provide heating and cooling in equipment buildings, replacing incandescent beacon lights with strobe lights, replace the tower incandescent obstruction lights with LED lights, CFL lighting applications in buildings and the installation, implementing an advanced metering infrastructure system and the use of our fiber optics system to better communicate and transport data that helps us to operate the electrical system more efficiently and effectively.

ENERGY EFFICIENCY PORTFOLIO GOALS:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonably possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies
2. Participate in educational energy efficiency programs
3. Participate in research programs related to energy efficiency
4. Offer member-consumers demand response programs
5. Offer member-consumers energy audit & technical support programs

Energy Efficiency Measure Goals:

The following tables show the goal for participants by measure and the resulting savings expected by measure as well as the cost-effectiveness and projected costs for a five year period 2010-2014.

		2010-2014				
		Estimated Achievable Potential Goals				Sum of
Western Iowa Power Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning					
	SEER 14.5 (and EER 12)	50	\$9,468	206,589	38,709	14,756
	SEER 15 +	18	\$2,361	55,944	10,434	3,996
	SEER 16 (and EER 13)	18	\$3,613	71,888	13,408	5,135
	ENERGY STAR Qualified Room Air Conditioner	14	\$3,494	78,757	14,867	5,625
	Geothermal Heat Pump	60	\$1,839	47,353	14,030	5,261
	Air Source Heat Pump	64	\$157,879	16,997,030	2,350,371	849,852
Residential Lighting (low income included)						
	Interior Lighting					
	Change a Light Rebate Program (or similar program)	17,364	\$39,069	8,301,329	3,023,084	1,137,168
Residential Water Heating (low income included)						
	High Efficiency Water Heater					
	50-79 gallon	508	\$126,954	2,471,093	491,169	164,740
	80 gallon+	166	\$41,414	574,891	114,516	38,326
	Flow Restrictors - Faucet	342	\$85,540	1,896,202	376,653	126,413
	Flow Restrictors - Shower	410	\$4,345	1,368,031	456,010	152,003
	Tank Insulation	205	\$2,170	1,297,035	389,111	129,704
	Pipe Insulation	205	\$2,170	350,427	105,128	35,043
	Pipe Insulation	205	\$2,170	365,218	73,044	24,348
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	55	\$3,479	134,310	32,190	12,210
	ENERGY STAR Qualified Dishwasher	341	\$10,671	441,343	106,482	40,122
	ENERGY STAR Qualified Refrigerator	276	\$8,616	436,563	76,979	29,104
	ENERGY STAR Qualified Freezer	410	\$12,794	457,376	80,840	30,492
	Appliance Recycling	587	\$35,191	5,184,367	1,721,805	576,722
	Refrigerator	294	\$17,642	3,177,899	1,053,295	353,100
	Freezer	283	\$17,111	1,998,809	663,915	222,090
	Window AC Unit	10	\$438	7,659	4,595	1,532
Additional Low Income						
	Energy Efficiency Kits	142	\$6,054	1,444,114	464,422	160,457
Building Shell - Existing Home Only						
	Weatherization Rebates	167	\$104,105	7,629,829	636,581	254,328
	Ceiling (Bring up to R-38) - Elect. Heat Only	167	\$104,105	7,629,829	636,581	254,328
Residential Total		21,422	\$806,518	91,077,150	18,794,003	6,545,985
Residential Average kWh Sales (3 yr Ave actual and projected)						424,061,939
Residential kWh Savings as percentage of Residential kWh Sales						1.5%
Agriculture/Commercial & Industrial Lighting						
	Interior Lighting					
	Change a Light Rebate Program	2,072	\$4,141	1,126,041	831,639	312,789
	High Efficiency Interior Lighting	4,214	\$9,137	3,960,164	2,279,454	856,083
	T-8 or 46" T5 - 4 ft	2,072	\$4,141	2,885,020	1,198,538	450,784
	CFL lamps - Energy Star- 9W and up	2,072	\$4,141	1,028,524	1,051,778	395,586
	Metal Halide Lamps	70	\$855	46,620	29,138	9,713
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$11,870	86,802	13,020	4,340
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	15	\$10,575	392,607	78,521	26,174
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	35	\$6,955	194,056	38,811	12,937
	80 gallon+	35	\$6,955	194,056	38,811	12,937
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	490	\$195,080	5,237,757	1,047,551	349,184
	Variable Speed Drive Motor Incentive	155	\$9,240	57,798,477	11,559,695	3,853,232
Ag, Commercial and Industrial Total		6,986	\$246,998	68,795,903	15,848,692	5,414,739
C & I Average kWh Sales (3 yr Ave actual and projected)**						196,195,367
C & I kWh Savings as percentage of C & I kWh Sales						2.8%
II. Demand Response Programs						
	Water Heater Load Control	10,450	\$135,563			
	Air Conditioning Load Control	7,620	\$122,165			
	Space Heating Load Control (Interruptible)	7,374	\$111,366			
	Dual-Fuel Space Heating	615	\$2,000			
Irrigation						
	Load Control	1,710	\$10,558			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	50	\$10,000			
	Expert Energy Services - C&I	25	\$7,500			
	Energy Audit Services - Residential *	125	\$35,000			
IV. Educational & Research Programs						
	Member Information and Education	17,950	\$24,000			
	Living with Energy in Iowa	17,600	\$115,896			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$55,500			
TOTAL		91,927	\$1,683,064	159,873,054	34,642,695	11,960,724
Total Average kWh Sales (3 yr Ave actual and projected)**						620,257,307
Total kWh Savings as percentage of Total kWh Sales						1.9%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2010					
Estimated Achievable Potential Goals					
Western Iowa Power Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	6	\$1,234	25,455	1,818	2
SEER 14.5 (and EER 12)	2	\$308	6,216	444	0
SEER 15 +	2	\$471	7,988	571	1
SEER 16 (and EER 13)	2	\$455	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	8	\$242	6,314	702	1
Geothermal Heat Pump	10	\$24,689	2,655,786	132,789	15
Air Source Heat Pump	73	\$54,748	8,600,524	573,368	74
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,293	\$5,160	1,096,231	150,169	138
Residential Water Heating (low income included)					
High Efficiency Water Heater	100	\$24,928	485,764	32,384	4
50-79 gallon	33	\$8,132	114,286	7,619	1
80 gallon+	67	\$16,796	371,478	24,765	3
Flow Restrictors - Faucet	82	\$869	273,606	30,401	2
Flow Restrictors - Shower	41	\$434	259,407	25,941	2
Tank Insulation	41	\$434	70,085	7,009	0
Pipe Insulation	41	\$434	73,044	4,870	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	7	\$455	17,094	1,554	1
ENERGY STAR Qualified Dishwasher	45	\$1,394	58,242	5,295	4
ENERGY STAR Qualified Refrigerator	36	\$1,126	56,943	3,796	0
ENERGY STAR Qualified Freezer	54	\$1,674	60,240	4,016	1
Appliance Recycling	116	\$6,949	1,023,988	113,913	19
Refrigerator	58	\$3,484	626,932	69,659	11
Freezer	56	\$3,379	395,524	43,947	8
Window AC Unit	2	\$86	1,532	306	0
Additional Low Income					
Energy Efficiency Kits	25	\$1,066	254,246	28,250	3
Building Shell - Existing Home Only					
Weatherization Rebates	17	\$10,601	776,689	25,890	2
Ceiling (Bring up to R-38) - Elect. Heat Only	17	\$10,601	776,689	25,890	2
Residential Total	2,995	\$136,437	15,793,656	1,142,162	270
Residential Average kWh Sales (3 yr Ave actual and projected)				84,644,214	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	274	\$547	148,907	41,363	16
High Efficiency Interior Lighting	562	\$1,265	526,849	113,866	2
T-8 or 46" T5 - 4 ft	274	\$547	381,513	59,611	1
CFL lamps - Energy Star- 9W and up	274	\$547	136,011	52,312	1
Metal Halide Lamps	14	\$171	9,324	1,943	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$2,374	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,115	78,521	5,235	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	7	\$1,391	38,811	2,587	0
80 gallon+	7	\$1,391	38,811	2,587	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	98	\$39,016	1,047,551	69,837	9
Variable Speed Drive Motor Incentive	31	\$1,848	11,559,695	770,646	67
Ag, Commercial and Industrial Total	976	\$48,556	13,417,695	1,004,402	94
C & I Average kWh Sales (3 yr Ave actual and projected)**				39,902,297	
C & I kWh Savings as percentage of C & I kWh Sales					2.5%

II. Demand Response Programs					
Water Heater Load Control	1,887	\$26,133			944
Air Conditioning Load Control	1,329	\$22,119			930
Space Heating Load Control (Interruptible)	1,300	\$20,825			5,850
Dual-Fuel Space Heating	123	\$400			738
Irrigation					
Load Control	332	\$2,079			2,191
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$2,000			
Expert Energy Services - C&I	5	\$1,500			
Energy Audit Services - Residential *	25	\$2,500			
IV. Educational & Research Programs					
Member Information and Education	3,580	\$4,200			
Living with Energy in Iowa	3,500	\$22,596			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$10,900			
TOTAL	16,062	\$300,245	29,211,352	2,146,565	11,017
Total Average kWh Sales (3 yr Ave actual and projected)**				124,546,511	
Total kWh Savings as percentage of Total kWh Sales					1.7%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2011					
Estimated Achievable Potential Goals					
Western Iowa Power Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,560	32,556	2,325	3
SEER 14.5 (and EER 12)	3	\$389	9,324	666	1
SEER 15 +	3	\$595	11,981	856	1
SEER 16 (and EER 13)	2	\$576	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	10	\$304	7,892	877	1
Geothermal Heat Pump	11	\$28,122	2,921,365	146,068	17
Air Source Heat Pump	74	\$55,432	8,718,340	581,223	75
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,877	\$6,473	1,375,428	188,415	173
Residential Water Heating (low income included)					
High Efficiency Water Heater	101	\$25,191	491,308	32,754	4
50-79 gallon	33	\$8,218	114,286	7,619	1
80 gallon+	68	\$16,973	377,023	25,135	3
Flow Restrictors - Faucet	82	\$869	273,606	30,401	2
Flow Restrictors - Shower	41	\$434	259,407	25,941	2
Tank Insulation	41	\$434	70,085	7,009	0
Pipe Insulation	41	\$434	73,044	4,870	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	9	\$574	21,978	1,998	1
ENERGY STAR Qualified Dishwasher	56	\$1,760	72,479	6,589	5
ENERGY STAR Qualified Refrigerator	45	\$1,421	71,179	4,745	0
ENERGY STAR Qualified Freezer	67	\$2,111	74,742	4,983	1
Appliance Recycling	116	\$6,993	1,023,988	113,913	19
Refrigerator	58	\$3,506	626,932	69,659	11
Freezer	56	\$3,400	395,524	43,947	8
Window AC Unit	2	\$87	1,532	306	0
Additional Low Income					
Energy Efficiency Kits	27	\$1,151	274,585	30,509	4
Building Shell - Existing Home Only					
Weatherization Rebates	25	\$15,648	1,142,190	38,073	3
Ceiling (Bring up to R-38) - Elect. Heat Only	25	\$15,648	1,142,190	38,073	3
Residential Total	3,631	\$148,911	16,904,171	1,220,691	310
Residential Average kWh Sales (3 yr Ave actual and projected)				85,724,725	
Residential kWh Savings as percentage of Residential kWh Sales					1.4%
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	343	\$686	186,405	51,779	21
High Efficiency Interior Lighting	700	\$1,543	657,174	142,051	2
T-8 or 46" T5 - 4 ft	343	\$686	477,588	74,623	1
CFL lamps - Energy Star- 9W and up	343	\$686	170,262	65,486	1
Metal Halide Lamps	14	\$171	9,324	1,943	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$2,374	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,115	78,521	5,235	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	7	\$1,391	38,811	2,587	0
80 gallon+	7	\$1,391	38,811	2,587	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	98	\$39,016	1,047,551	69,837	9
Variable Speed Drive Motor Incentive	31	\$1,848	11,559,695	770,646	67
Ag, Commercial and Industrial Total	1,183	\$48,973	13,585,519	1,043,004	99
C & I Average kWh Sales (3 yr Ave actual and projected)**				39,353,403	
C & I kWh Savings as percentage of C & I kWh Sales					2.7%
II. Demand Response Programs					
Water Heater Load Control	1,988	\$26,661			994
Air Conditioning Load Control	1,422	\$23,222			995
Space Heating Load Control (Interruptible)	1,385	\$21,501			6,233
Dual-Fuel Space Heating	123	\$400			738
Irrigation					
Load Control	337	\$2,095			2,224
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$2,000			
Expert Energy Services - C&I	5	\$1,500			
Energy Audit Services - Residential *	25	\$25,000			
IV. Educational & Research Programs					
Member Information and Education	3,585	\$4,500			
Living with Energy in Iowa	3,510	\$22,800			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$11,000			
TOTAL	17,204	\$338,563	30,489,690	2,263,695	11,593
Total Average kWh Sales (3 yr Ave actual and projected)**				125,078,129	
Total kWh Savings as percentage of Total kWh Sales					1.8%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2012					
Estimated Achievable Potential Goals					
Western Iowa Power Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	11	\$1,892	45,284	3,235	3
SEER 14.5 (and EER 12)	4	\$472	12,432	888	1
SEER 15 +	4	\$722	15,975	1,141	1
SEER 16 (and EER 13)	3	\$698	16,876	1,205	1
ENERGY STAR Qualified Room Air Conditioner	12	\$367	9,471	1,052	1
Geothermal Heat Pump	13	\$31,592	3,452,522	172,626	20
Air Source Heat Pump	75	\$56,046	8,836,155	589,077	77
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	3,469	\$7,805	1,658,449	227,185	208
Residential Water Heating (low income included)					
High Efficiency Water Heater	101	\$25,432	491,308	32,754	4
50-79 gallon	33	\$8,296	114,286	7,619	1
80 gallon+	68	\$17,136	377,023	25,135	3
Flow Restrictors - Faucet	82	\$869	273,606	30,401	2
Flow Restrictors - Shower	41	\$434	259,407	25,941	2
Tank Insulation	41	\$434	70,085	7,009	0
Pipe Insulation	41	\$434	73,044	4,870	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	11	\$695	26,862	2,442	1
ENERGY STAR Qualified Dishwasher	68	\$2,131	88,010	8,001	6
ENERGY STAR Qualified Refrigerator	55	\$1,721	86,996	5,800	1
ENERGY STAR Qualified Freezer	82	\$2,555	91,475	6,098	1
Appliance Recycling	118	\$7,038	1,041,860	115,898	20
Refrigerator	59	\$3,528	637,742	70,860	11
Freezer	57	\$3,422	402,587	44,732	8
Window AC Unit	2	\$88	1,532	306	0
Additional Low Income					
Energy Efficiency Kits	29	\$1,236	294,925	32,769	4
Building Shell - Existing Home Only					
Weatherization Rebates	33	\$20,753	1,507,691	50,256	4
Ceiling (Bring up to R-38) - Elect. Heat Only	33	\$20,753	1,507,691	50,256	4
Residential Total	4,282	\$161,434	18,307,149	1,315,413	354
Residential Average kWh Sales (3 yr Ave actual and projected)				84,783,667	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	414	\$827	224,991	62,497	25
High Efficiency Interior Lighting	842	\$1,825	791,277	171,053	2
T-8 or 46" T5 - 4 ft	414	\$827	576,447	90,070	1
CFL lamps - Energy Star- 9W and up	414	\$827	205,506	79,041	1
Metal Halide Lamps	14	\$171	9,324	1,943	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$2,374	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,115	78,521	5,235	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	7	\$1,391	38,811	2,587	0
80 gallon+	7	\$1,391	38,811	2,587	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	98	\$39,016	1,047,551	69,837	9
Variable Speed Drive Motor Incentive	31	\$1,848	11,559,695	770,646	67
Ag, Commercial and Industrial Total	1,396	\$49,396	13,758,208	1,082,724	103
C & I Average kWh Sales (3 yr Ave actual and projected)**				38,759,333	
C & I kWh Savings as percentage of C & I kWh Sales					2.8%
II. Demand Response Programs					
Water Heater Load Control	2,089	\$26,989			1,045
Air Conditioning Load Control	1,521	\$24,743			1,065
Space Heating Load Control (Interruptible)	1,473	\$22,387			6,629
Dual-Fuel Space Heating	123	\$400			738
Irrigation					
Load Control	342	\$2,112			2,257
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$2,000			
Expert Energy Services - C&I	5	\$1,500			
Energy Audit Services - Residential *	25	\$2,500			
IV. Educational & Research Programs					
Member Information and Education	3,590	\$4,800			
Living with Energy in Iowa	3,520	\$23,100			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$11,100			
TOTAL	18,376	\$332,461	32,065,357	2,398,137	12,191
Total Average kWh Sales (3 yr Ave actual and projected)**				123,543,000	
Total kWh Savings as percentage of Total kWh Sales					1.9%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2013					
Estimated Achievable Potential Goals					
Western Iowa Power Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	11	\$2,219	45,284	3,235	3
SEER 14.5 (and EER 12)	4	\$553	12,432	888	1
SEER 15 +	4	\$847	15,975	1,141	1
SEER 16 (and EER 13)	3	\$819	16,876	1,205	1
ENERGY STAR Qualified Room Air Conditioner	14	\$431	11,049	1,228	1
Geothermal Heat Pump	14	\$34,936	3,718,100	185,905	22
Air Source Heat Pump	75	\$56,342	8,836,155	589,077	77
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	4,056	\$9,125	1,939,080	265,627	243
Residential Water Heating (low income included)					
High Efficiency Water Heater	102	\$25,576	496,853	33,124	4
50-79 gallon	33	\$8,343	114,286	7,619	1
80 gallon+	69	\$17,233	382,567	25,504	3
Flow Restrictors - Faucet	82	\$869	273,606	30,401	2
Flow Restrictors - Shower	41	\$434	259,407	25,941	2
Tank Insulation	41	\$434	70,085	7,009	0
Pipe Insulation	41	\$434	73,044	4,870	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	13	\$815	31,746	2,886	1
ENERGY STAR Qualified Dishwasher	80	\$2,501	103,541	9,413	7
ENERGY STAR Qualified Refrigerator	65	\$2,019	102,814	6,854	1
ENERGY STAR Qualified Freezer	96	\$2,998	107,093	7,140	1
Appliance Recycling	118	\$7,082	1,041,860	115,898	20
Refrigerator	59	\$3,550	637,742	70,860	11
Freezer	57	\$3,444	402,587	44,732	8
Window AC Unit	2	\$88	1,532	306	0
Additional Low Income					
Energy Efficiency Kits	30	\$1,279	305,095	33,899	4
Building Shell - Existing Home Only					
Weatherization Rebates	42	\$25,929	1,918,879	63,963	5
Ceiling (Bring up to R-38) - Elect. Heat Only	42	\$25,929	1,918,879	63,963	5
Residential Total	4,921	\$173,423	19,333,691	1,386,468	394
Residential Average kWh Sales (3 yr Ave actual and projected)				84,558,667	
Residential kWh Savings as percentage of Residential kWh Sales					1.6%

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	484	\$967	263,033	73,065	29
High Efficiency Interior Lighting	982	\$2,105	923,492	199,647	3
T-8 or 46" T5 - 4 ft	484	\$967	673,914	105,299	1
CFL lamps - Energy Star- 9W and up	484	\$967	240,254	92,405	1
Metal Halide Lamps	14	\$171	9,324	1,943	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$2,374	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,115	78,521	5,235	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	7	\$1,391	38,811	2,587	0
80 gallon+	7	\$1,391	38,811	2,587	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	98	\$39,016	1,047,551	69,837	9
Variable Speed Drive Motor Incentive	31	\$1,848	11,559,695	770,646	67
Ag, Commercial and Industrial Total	1,606	\$49,816	13,928,464	1,121,885	108
C & I Average kWh Sales (3 yr Ave actual and projected)**				38,981,000	
C & I kWh Savings as percentage of C & I kWh Sales					2.9%

II. Demand Response Programs					
Water Heater Load Control	2,191	\$27,521			1,096
Air Conditioning Load Control	1,621	\$25,268			1,135
Space Heating Load Control (Interruptible)	1,562	\$22,877			7,029
Dual-Fuel Space Heating	123	\$400			738
Irrigation					
Load Control	347	\$2,128			2,290
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$2,000			
Expert Energy Services - C&I	5	\$1,500			
Energy Audit Services - Residential *	25	\$2,500			
IV. Educational & Research Programs					
Member Information and Education	3,595	\$5,100			
Living with Energy in Iowa	3,530	\$23,400			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$11,200			
TOTAL	19,536	\$347,133	33,262,155	2,508,352	12,789
Total Average kWh Sales (3 yr Ave actual and projected)**				123,539,667	
Total kWh Savings as percentage of Total kWh Sales					2.0%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
Western Iowa Power Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	14	\$2,563	58,011	4,144	4
SEER 14.5 (and EER 12)	5	\$639	15,540	1,110	1
SEER 15 +	5	\$978	19,969	1,426	2
SEER 16 (and EER 13)	4	\$946	22,502	1,607	2
ENERGY STAR Qualified Room Air Conditioner	16	\$495	12,627	1,403	1
Geothermal Heat Pump	16	\$38,540	4,249,258	212,463	25
Air Source Heat Pump	76	\$56,976	8,953,970	596,931	78
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	4,669	\$10,506	2,232,142	305,773	280
Residential Water Heating (low income included)					
High Efficiency Water Heater	104	\$25,827	505,860	33,724	5
50-79 gallon	34	\$8,425	117,749	7,850	1
80 gallon+	70	\$17,402	388,112	25,874	4
Flow Restrictors - Faucet	82	\$869	273,606	30,401	2
Flow Restrictors - Shower	41	\$434	259,407	25,941	2
Tank Insulation	41	\$434	70,085	7,009	0
Pipe Insulation	41	\$434	73,044	4,870	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	15	\$940	36,630	3,330	1
ENERGY STAR Qualified Dishwasher	92	\$2,885	119,072	10,825	8
ENERGY STAR Qualified Refrigerator	75	\$2,329	118,631	7,909	1
ENERGY STAR Qualified Freezer	111	\$3,456	123,826	8,255	1
Appliance Recycling	119	\$7,129	1,052,670	117,099	20
Refrigerator	60	\$3,574	648,551	72,061	11
Freezer	57	\$3,466	402,587	44,732	8
Window AC Unit	2	\$89	1,532	306	0
Additional Low Income					
Energy Efficiency Kits	31	\$1,322	315,264	35,029	4
Building Shell - Existing Home Only					
Weatherization Rebates	50	\$31,174	2,284,380	76,146	6
Ceiling (Bring up to R-38) - Elect. Heat Only	50	\$31,174	2,284,380	76,146	6
Residential Total	5,593	\$186,313	20,738,483	1,481,251	439
Residential Average kWh Sales (3 yr Ave actual and projected)				84,350,667	
Residential kWh Savings as percentage of Residential kWh Sales					1.8%
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	557	\$1,114	302,705	84,085	33
High Efficiency Interior Lighting	1,128	\$2,399	1,061,372	229,466	3
T-8 or 46" T5 - 4 ft	557	\$1,114	775,558	121,181	2
CFL lamps - Energy Star- 9W and up	557	\$1,114	276,490	106,342	2
Metal Halide Lamps	14	\$171	9,324	1,943	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$2,374	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	3	\$2,115	78,521	5,235	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	7	\$1,391	38,811	2,587	0
80 gallon+	7	\$1,391	38,811	2,587	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	98	\$39,016	1,047,551	69,837	9
Variable Speed Drive Motor Incentive	31	\$1,848	11,559,695	770,646	67
Ag, Commercial and Industrial Total	1,825	\$50,257	14,106,017	1,162,724	113
C & I Average kWh Sales (3 yr Ave actual and projected)**				39,199,333	
C & I kWh Savings as percentage of C & I kWh Sales					3.0%
II. Demand Response Programs					
Water Heater Load Control	2,295	\$28,259			1,148
Air Conditioning Load Control	1,727	\$26,813			1,209
Space Heating Load Control (Interruptible)	1,654	\$23,776			7,443
Dual-Fuel Space Heating	123	\$400			738
Irrigation					
Load Control	352	\$2,144			2,323
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	10	\$2,000			
Expert Energy Services - C&I	5	\$1,500			
Energy Audit Services - Residential *	25	\$2,500			
IV. Educational & Research Programs					
Member Information and Education	3,600	\$5,400			
Living with Energy in Iowa	3,540	\$24,000			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$11,300			
TOTAL	20,749	\$364,662	34,844,500	2,643,974	13,412
Total Average kWh Sales (3 yr Ave actual and projected)**				123,550,000	
Total kWh Savings as percentage of Total kWh Sales					2.1%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Western Iowa Power Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	1.14	1.16	3.13	1.69
	SEER 15 +	0.93	1.19	2.30	1.41
	SEER 16 (and EER 13)	0.82	1.08	2.13	1.14
	ENERGY STAR Qualified Room Air Conditioner	0.50	1.13	1.47	0.69
	Geothermal Heat Pump	0.39	2.01	3.18	0.87
	Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.95	17.96	16.84	17.30
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	1.06	1.16	2.09	1.59
	80 gallon+	1.24	1.71	3.15	2.62
	Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.29	20.76	4.95	6.16
	Tank Insulation	0.33	8.71	14.04	3.50
	Pipe Insulation	0.38	38.59	11.82	15.52
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.72	0.62
	ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.32	2.72	1.47	1.07
	ENERGY STAR Qualified Freezer	0.35	3.13	1.22	1.27
	Appliance Recycling				
	Refrigerator	0.50	4.87	7.35	2.93
	Freezer	0.52	3.29	5.12	2.05
	Window AC Unit	0.55	0.43	1.20	0.29
Additional Low Income					
	Energy Efficiency Kits	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.24	3.81	1.23	1.24

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.67	10.95	10.63	7.47
	High Efficiency Interior Lighting				
	T-8 or 46" T5 - 4 ft	0.66	3.90	5.31	2.78
	CFL lamps - Energy Star- 9W and up	0.67	10.95	10.63	7.47
	Metal Halide Lamps	0.71	2.25	3.97	1.80
Ag/Commercial & Industrial Heating and Cooling					
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater				
	80 gallon+	1.24	1.71	3.16	2.63
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.33	7.24	4.84	2.89
	Variable Speed Drive Motor Incentive	0.33	7.24	4.84	2.89

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
	Air Conditioning Load Control	#	#	#	#
	Space Heating Load Control (Interruptible)	#	#	#	#
	Dual-Fuel Space Heating	#	#	#	#
Irrigation					
	Load Control	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Living with Energy in Iowa				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

Woodbury County Rural Electric Cooperative

BACKGROUND

Woodbury County Rural Electric Cooperative, formed in 1938, provides reliable electric service to a portion of Northwest Iowa.

Woodbury County REC is a small town not-for-profit cooperative, based in Merville, Iowa. The cooperative assists member-consumers in managing their electric needs and working to lower their carbon footprint by offering a menu of energy efficiency rebates and programs. Renewable energy programs are also offered.

Woodbury County REC is governed by a seven member board of directors all elected by, and from, the member-consumers served by the electric cooperative. The cooperative serves member-consumers in Woodbury, Cherokee, Monona, Ida and Plymouth counties. The cooperative provides electric service to 3,134 member-consumers. Of those member-consumers, 3,034 are residential/small farm accounts, 20 are irrigation and 8 are public street lighting. The remaining 72 member-consumers are small (less than 1,000 KVA) commercial members. Those 72 small commercial members range from a casino, restaurants, a golf course, small equipment manufacturing, 5 churches, a farm equipment dealer and various other retail establishments.

Woodbury County REC serves the members with a staff of 18 employees. Woodbury County REC has 2.8 members per mile of distribution line.

Woodbury County REC procures power supply through an all requirement power contract with the Northwest Iowa Power Cooperative (NIPCO) headquartered in LeMars, Iowa. NIPCO receives its wholesale power from two sources, the Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (Basin).

Renewable energy is a large portion of the wholesale power portfolio. WAPA is a government agency which administers the hydro electric dams on the Missouri river. Those renewable hydro electric facilities provide 20% of the power Woodbury County REC member/consumers use. Basin provides the remaining 80% of wholesale power and has renewable wind energy and renewable waste heat capture generated energy in their energy mix. Woodbury County REC member/consumers may purchase renewable energy through the "Prairie Winds" program.

The website for Woodbury County REC is <http://www.woodburyrec.com>. The website is one of the mechanisms used to promote energy efficiency programs to the member/consumers.

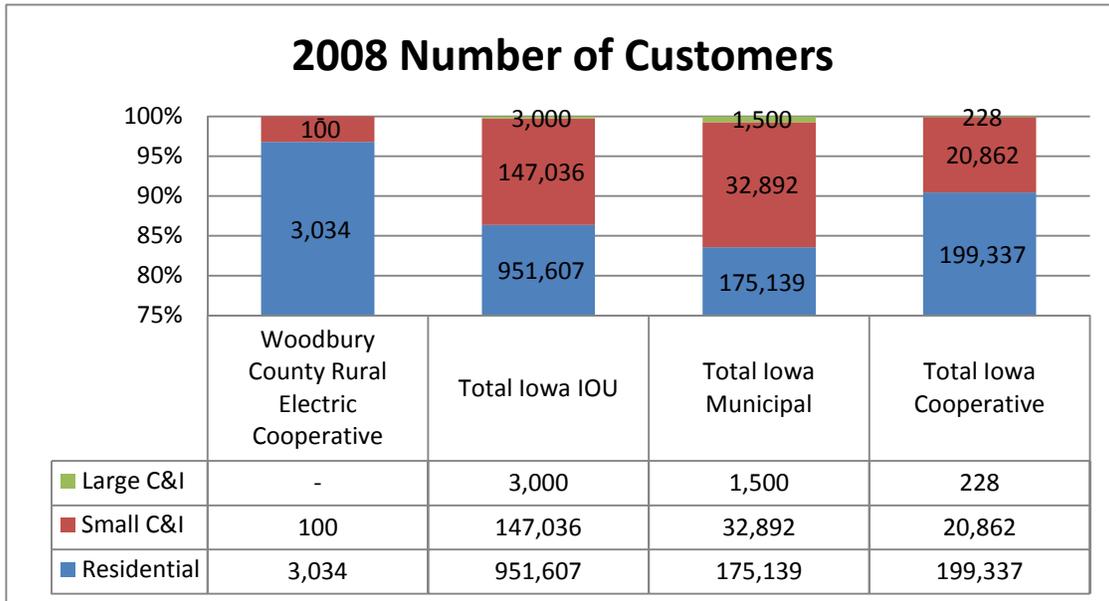
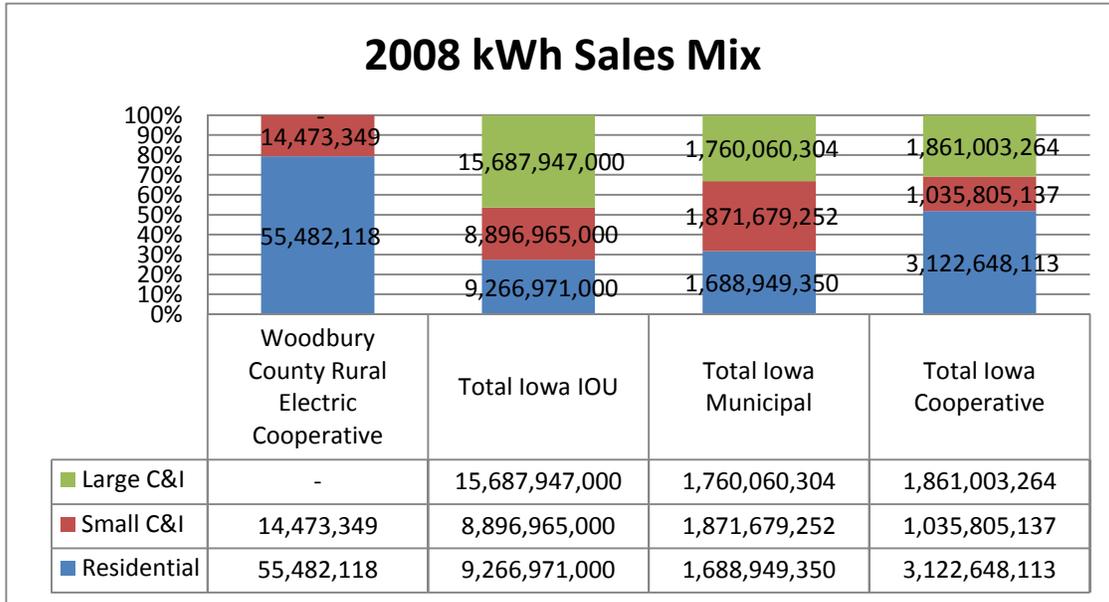
DESCRIPTION OF ASSESSMENT OF POTENTIAL PROCESS

The assessment of potential process commenced prior to July 1, 2008 as required in Senate file 2386. An independent qualified third-party consultant was hired to perform the assessment for our member cooperatives. Per SF 2386 the IAEC filed a progress report on December 31, 2008. The progress report has been attached to this filing and is shown as Appendix A.

Following the progress report filing, our member cooperatives continued to work with the hired consultant in order to determine their achievable potential. Once the potential was determined our members then worked together to develop their goals for energy efficiency. The IAEC completed the process by compiling the goals for each of our members for purposes of this filing.

CUSTOMER MIX

The following column charts illustrate the kWh sales mix and customer mix of the investor-owned utilities (IOUs), the municipal utilities, the RECs as a group and Woodbury County REC itself. This illustrates that making any comparison of Woodbury County RECs energy efficiency goals against the IOUs, municipals or RECs as a group without taking into account customers mix and sales mix renders an apples and oranges comparison.



COMMITMENT TO ENERGY EFFICIENCY

Woodbury County REC has been committed to supply side and demand side energy efficiency for many years. Woodbury County REC has invested \$3,210,477 in demand side energy efficiency programs for 1992 through 2006. Going forward, Woodbury County REC has a planned demand side investment of \$1.1 million for 2010 through 2014. Some of the new energy efficiency measures offered to members include:

Rebates for “Energy Star” rated:

1. Ground source heat pumps
2. Air-to-air heat pumps
3. Central Air Conditioners
4. Window/Portable Air Conditioners
5. Clothes Washers
6. Refrigerators
7. Freezers
8. Dishwashers

There are also rebates available for high efficient electric water heaters and building insulation. An appliance recycling program is also offered when a new “Energy Star” appliance is purchased as a replacement. Energy audits have been available for Woodbury County RECs member/consumers since 1980 and that program will be continued and enhanced. Those energy audits have been, and will continue to be, offered at no cost to the member-consumer.

Electricity is the most economical when the demand for power is predictable and even. To help keep the electric demand stable, Woodbury County Rural Electric Cooperative works in coordination with our wholesale power provider, Northwest Iowa Power Cooperative (NIPCO). NIPCO is a generation and transmission electric cooperative with the primary purpose to purchase and transmit reliable, economical and safe power to its member electric cooperatives, and provide other services its members require.

One of the services NIPCO provides for its electric cooperatives is operating a load management program for its electric cooperative members. In 1984, a program known as “Switch Makes Cents”, was developed to promote energy efficient applications and voluntary load management. This allowed us to maximize the available power supply while keeping electric rates affordable for our member-consumers. Our management and staff worked closely with NIPCO to establish the goals of the program. The goals were, and continue to be, achieving efficient electric use, stabilize customer rates, and improve load factors and to reduce purchased power costs.

The load management system uses a centrally controlled and operated load management system. In its 25 year history, this load management system has proven to be a very popular and effective tool to help maximize power supply and control costs. The electric cooperatives in the NIPCO system currently provide load control for 35,900 qualifying

customer loads and have saved the electric cooperative member-consumers over \$35 million in power supply costs.

The primary loads eligible to participate in this program are space heating and cooling, water heating, irrigation and several large commercial load applications. In addition to equipment incentives, the energy efficiency and load management program options and services used to educate the member-consumer on their program include information provided by our energy advisor staff, newspaper, web site development to provide easy access to program information, utilizing online services, direct mail, media, information meetings and open houses.

Woodbury and NIPCO work hard to operate our electric systems efficiently by evaluating and making cost effective assessments when replacing or installing new electric and electronic supply side equipment. Several specific areas include electrical conductor installation, transformers, heat pumps used to provide heating and cooling in equipment buildings, replacing incandescent beacon lights with strobe lights, replace the tower incandescent obstruction lights with LED lights, CFL lighting applications in buildings and the installation, implementing an advanced metering infrastructure system and the use of our fiber optics system to better communicate and transport data that helps us to operate the electrical system more efficiently and effectively.

ENERGY EFFICIENCY GOALS

Energy Efficiency Portfolio Goals:

1. Energy efficiency programs available to all retail revenue classes of member-consumers.
2. Member acceptance and satisfaction of portfolio.
3. Cost effective plan and programs.
4. Stable funding over the plan life.
5. Flexibility in portfolio to take into account certain unique circumstances of members.
6. Leveraging local jobs within the community for the delivery of programs to the maximum extent reasonable possible.
7. Adherence to the Cooperatives principles and in particular the education and training principle, concern for community and cooperation among cooperative principles.

Energy Efficiency Program Goals:

1. Offer members rebate or incentive programs for efficient technologies.
2. Participate in educational energy efficiency programs.
3. Participate in research programs related to energy efficiency.
4. Offer member-consumers demand response programs.
5. Offer member-consumers energy audit and technical support programs.

		2010-2014				
		Estimated Achievable Potential Goals				
Woodbury County Rural Electric Cooperative	Measure Description	Projected Participants	Projected Cost	Cumulative Measure Lifetime kWh Savings	Cumulative 5 Year Plan kWh Savings	Sum of Incremental Annual kWh Savings 2010-2014
I. Incentive Programs for Energy Efficient Technologies						
Residential Cooling & Heating (low income included)						
	ENERGY STAR Central Air Conditioning	30	\$5,692	123,123	22,642	8,795
	SEER 14.5 (and EER 12)	11	\$1,419	34,188	6,216	2,442
	SEER 15 +	11	\$2,172	43,932	7,988	3,138
	SEER 16 (and EER 13)	8	\$2,101	45,004	8,438	3,215
	ENERGY STAR Qualified Room Air Conditioner	36	\$1,105	28,412	8,418	3,157
	Geothermal Heat Pump	39	\$94,878	10,357,565	1,447,403	517,878
	Air Source Heat Pump	224	\$167,993	26,390,650	5,238,858	1,759,377
Residential Lighting (low income included)						
	Interior Lighting					
	Change a Light Rebate Program (or similar program)	10,435	\$23,479	4,988,733	1,816,758	683,388
Residential Water Heating (low income included)						
	High Efficiency Water Heater	305	\$76,293	1,482,932	295,108	98,862
	50-79 gallon	100	\$24,888	346,320	69,264	23,088
	80 gallon+	205	\$51,405	1,136,612	225,844	75,774
	Flow Restrictors - Faucet	245	\$2,610	817,482	272,494	90,831
	Flow Restrictors - Shower	125	\$1,305	790,875	237,263	79,088
	Tank Insulation	125	\$1,305	213,675	64,103	21,368
	Pipe Insulation	125	\$1,305	222,694	44,539	14,846
Residential Appliances (low income included)						
	ENERGY STAR Qualified Clothes Washer	34	\$2,092	83,028	19,980	7,548
	ENERGY STAR Qualified Dishwasher	205	\$6,414	265,323	64,125	24,120
	ENERGY STAR Qualified Refrigerator	166	\$5,179	262,571	46,398	17,505
	ENERGY STAR Qualified Freezer	247	\$7,689	275,541	48,638	18,369
	Appliance Recycling	353	\$21,149	3,124,815	1,037,454	347,542
	Refrigerator	177	\$10,603	1,913,225	634,139	212,581
	Freezer	171	\$10,283	1,207,761	401,017	134,196
	Window AC Unit	5	\$263	3,830	2,298	766
Additional Low Income						
	Energy Efficiency Kits	120	\$5,116	1,220,378	384,193	135,598
Building Shell - Existing Home Only						
	Weatherization Rebates	100	\$62,561	4,568,760	380,730	152,292
	Ceiling (Bring up to R-38) - Elect. Heat Only	100	\$62,561	4,568,760	380,730	152,292
Residential Total		12,914	\$486,165	55,216,558	11,429,103	3,980,563
Residential Average kWh Sales (3 yr Ave actual and projected)						288,467,479
Residential kWh Savings as percentage of Residential kWh Sales						1.4%
Agriculture/Commercial & Industrial Lighting						
	Interior Lighting					
	Change a Light Rebate Program	1,152	\$2,307	626,061	462,240	173,906
	High Efficiency Interior Lighting	2,344	\$5,089	2,202,510	1,267,416	476,119
	T-8 or 46" T5 - 4 ft	1,152	\$2,307	1,604,026	666,169	250,629
	CFL lamps - Energy Star- 9W and up	1,152	\$2,307	571,844	584,597	219,940
	Metal Halide Lamps	40	\$475	26,640	16,650	5,550
Ag/Commercial & Industrial Heating and Cooling						
	Geothermal Heat Pump	5	\$6,660	86,802	13,020	4,340
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	10	\$6,000	261,738	52,348	17,449
Ag/Commercial & Industrial Water Heating						
	High-Efficiency Water Heater	20	\$3,875	110,889	22,178	7,393
	80 gallon+	20	\$3,875	110,889	22,178	7,393
Ag/Commercial & Industrial Motors						
	Premium Motors Rebate Program - NEMA	270	\$108,650	2,886,111	577,222	192,407
	Variable Speed Drive Motor Incentive	85	\$5,145	31,695,939	6,339,188	2,113,063
Ag, Commercial and Industrial Total		3,886	\$137,726	37,870,050	8,733,611	2,984,677
C & I Average kWh Sales (3 yr Ave actual and projected)**						174,085,541
C & I kWh Savings as percentage of C & I kWh Sales						1.7%
II. Demand Response Programs						
	Water Heater Load Control	6,346	\$81,625			
	Air Conditioning Load Control	5,543	\$76,616			
	Space Heating Load Control (Interruptible)	6,161	\$72,624			
	Dual-Fuel Space Heating	800	\$2,600			
Irrigation						
	Load Control	158	\$514			
	Industrial Interruptible Price	9	\$428			
III. Energy Audit & Technical Support Programs						
	Expert Energy Services - Agricultural	14	\$2,800			
	Expert Energy Services - C&I	2	\$600			
	Energy Audit Services - Residential *	120	\$12,000			
IV. Educational & Research Programs						
	Member Information and Education	14,480	\$192,800			
	Peak Alert	11,700	\$325			
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$35,500			
TOTAL		62,133	\$1,102,323	93,086,608	20,162,714	6,965,240
Total Average kWh Sales (3 yr Ave actual and projected)**						462,553,020
Total kWh Savings as percentage of Total kWh Sales						1.5%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2010					
Estimated Achievable Potential Goals					
Woodbury County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	3	\$742	12,727	909	1
SEER 14.5 (and EER 12)	1	\$185	3,108	222	0
SEER 15 +	1	\$283	3,994	285	0
SEER 16 (and EER 13)	1	\$274	5,625	402	0
ENERGY STAR Qualified Room Air Conditioner	5	\$145	3,946	438	0
Geothermal Heat Pump	6	\$14,837	1,593,472	79,674	9
Air Source Heat Pump	44	\$32,901	5,183,878	345,592	45
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	1,378	\$3,101	658,790	90,245	83
Residential Water Heating (low income included)					
High Efficiency Water Heater	60	\$14,980	291,042	19,403	3
50-79 gallon	20	\$4,887	69,264	4,618	1
80 gallon+	40	\$10,093	221,778	14,785	2
Flow Restrictors - Faucet	49	\$522	163,496	18,166	1
Flow Restrictors - Shower	25	\$261	158,175	15,818	1
Tank Insulation	25	\$261	42,735	4,274	0
Pipe Insulation	25	\$261	44,539	2,969	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	4	\$274	9,768	888	0
ENERGY STAR Qualified Dishwasher	27	\$838	34,945	3,177	2
ENERGY STAR Qualified Refrigerator	22	\$677	34,799	2,320	0
ENERGY STAR Qualified Freezer	32	\$1,006	35,698	2,380	0
Appliance Recycling	70	\$4,177	619,227	68,871	12
Refrigerator	35	\$2,094	378,321	42,036	7
Freezer	34	\$2,031	240,140	26,682	5
Window AC Unit	1	\$52	766	153	0
Additional Low Income					
Energy Efficiency Kits	20	\$853	203,396	22,600	3
Building Shell - Existing Home Only					
Weatherization Rebates	10	\$6,371	456,876	15,229	1
Ceiling (Bring up to R-38) - Elect. Heat Only	10	\$6,371	456,876	15,229	1
Residential Total	1,805	\$82,207	9,547,508	692,952	163
Residential Average kWh Sales (3 yr Ave actual and projected)				55,605,106	
Residential kWh Savings as percentage of Residential kWh Sales				1.2%	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	152	\$305	82,605	22,946	9
High Efficiency Interior Lighting	312	\$705	292,422	63,199	1
T-8 or 46" T5 - 4 ft	152	\$305	211,642	33,069	0
CFL lamps - Energy Star- 9W and up	152	\$305	75,452	29,020	0
Metal Halide Lamps	8	\$95	5,328	1,110	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,332	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,200	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	4	\$775	22,178	1,479	0
80 gallon+	4	\$775	22,178	1,479	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	54	\$21,730	577,222	38,481	5
Variable Speed Drive Motor Incentive	17	\$1,029	6,339,188	422,613	37
Ag, Commercial and Industrial Total	542	\$27,076	7,383,323	553,075	52
C & I Average kWh Sales (3 yr Ave actual and projected)**				16,165,758	
C & I kWh Savings as percentage of C & I kWh Sales				3.4%	
II. Demand Response Programs					
Water Heater Load Control	1,147	\$15,728			574
Air Conditioning Load Control	991	\$13,821			694
Space Heating Load Control (Interruptible)	1,127	\$13,663			5,072
Dual-Fuel Space Heating	160	\$520			960
Irrigation					
Load Control	31	\$101			205
Industrial Interruptible Price					
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	3	\$600			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	20	\$2,000			
IV. Educational & Research Programs					
Member Information and Education	2,850	\$37,800			
Peak Alert	2,300	\$55			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$6,900			
TOTAL	10,977	\$200,771	16,930,831	1,246,027	7,718
Total Average kWh Sales (3 yr Ave actual and projected)**				71,770,864	
Total kWh Savings as percentage of Total kWh Sales				1.7%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2011					
Estimated Achievable Potential Goals					
Woodbury County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	5	\$938	19,829	1,416	2
SEER 14.5 (and EER 12)	2	\$234	6,216	444	0
SEER 15 +	2	\$358	7,988	571	1
SEER 16 (and EER 13)	1	\$346	5,625	402	0
ENERGY STAR Qualified Room Air Conditioner	6	\$183	4,735	526	1
Geothermal Heat Pump	7	\$16,900	1,859,050	92,953	11
Air Source Heat Pump	44	\$33,312	5,183,878	345,592	45
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	1,729	\$3,890	826,595	113,232	104
Residential Water Heating (low income included)					
High Efficiency Water Heater	61	\$15,138	296,586	19,772	3
50-79 gallon	20	\$4,938	69,264	4,618	1
80 gallon+	41	\$10,200	227,322	15,155	2
Flow Restrictors - Faucet	49	\$522	163,496	18,166	1
Flow Restrictors - Shower	25	\$261	158,175	15,818	1
Tank Insulation	25	\$261	42,735	4,274	0
Pipe Insulation	25	\$261	44,539	2,969	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	6	\$345	14,652	1,332	0
ENERGY STAR Qualified Dishwasher	34	\$1,058	44,005	4,000	3
ENERGY STAR Qualified Refrigerator	27	\$854	42,707	2,847	0
ENERGY STAR Qualified Freezer	41	\$1,269	45,738	3,049	0
Appliance Recycling	70	\$4,202	619,227	68,871	12
Refrigerator	35	\$2,107	378,321	42,036	7
Freezer	34	\$2,043	240,140	26,682	5
Window AC Unit	1	\$52	766	153	0
Additional Low Income					
Energy Efficiency Kits	22	\$938	223,736	24,860	3
Building Shell - Existing Home Only					
Weatherization Rebates	15	\$9,403	685,314	22,844	2
Ceiling (Bring up to R-38) - Elect. Heat Only	15	\$9,403	685,314	22,844	2
Residential Total	2,191	\$89,735	10,274,997	742,521	188
Residential Average kWh Sales (3 yr Ave actual and projected)				57,542,039	
Residential kWh Savings as percentage of Residential kWh Sales					1.3%

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	191	\$382	103,800	28,833	11
High Efficiency Interior Lighting	390	\$859	366,084	79,130	1
T-8 or 46" T5 - 4 ft	191	\$382	265,945	41,554	1
CFL lamps - Energy Star- 9W and up	191	\$382	94,811	36,466	1
Metal Halide Lamps	8	\$95	5,328	1,110	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,332	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,200	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	4	\$775	22,178	1,479	0
80 gallon+	4	\$775	22,178	1,479	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	54	\$21,730	577,222	38,481	5
Variable Speed Drive Motor Incentive	17	\$1,029	6,339,188	422,613	37
Ag, Commercial and Industrial Total	659	\$27,307	7,478,180	574,893	55
C & I Average kWh Sales (3 yr Ave actual and projected)**				26,776,450	
C & I kWh Savings as percentage of C & I kWh Sales					2.1%

II. Demand Response Programs					
Water Heater Load Control	1,208	\$16,126			604
Air Conditioning Load Control	1,047	\$14,603			733
Space Heating Load Control (Interruptible)	1,178	\$14,029			5,301
Dual-Fuel Space Heating	160	\$520			960
Irrigation					
Load Control	31	\$101			205
Industrial Interruptible Price	1	\$203			7
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	4	\$800			
Expert Energy Services - C&I	1	\$300			
Energy Audit Services - Residential *	22	\$2,200			
IV. Educational & Research Programs					
Member Information and Education	2,870	\$38,000			
Peak Alert	2,320	\$60			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$7,000			
TOTAL	11,692	\$210,984	17,753,177	1,317,415	8,051
Total Average kWh Sales (3 yr Ave actual and projected)**				84,318,489	
Total kWh Savings as percentage of Total kWh Sales					1.6%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2012					
Estimated Achievable Potential Goals					
Woodbury County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	6	\$1,137	25,455	1,818	2
SEER 14.5 (and EER 12)	2	\$283	6,216	444	0
SEER 15 +	2	\$434	7,988	571	1
SEER 16 (and EER 13)	2	\$420	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	7	\$220	5,524	614	1
Geothermal Heat Pump	8	\$18,985	2,124,629	106,231	12
Air Source Heat Pump	45	\$33,681	5,301,693	353,446	46
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,085	\$4,691	996,791	136,547	125
Residential Water Heating (low income included)					
High Efficiency Water Heater	61	\$15,284	296,586	19,772	3
50-79 gallon	20	\$4,986	69,264	4,618	1
80 gallon+	41	\$10,298	227,322	15,155	2
Flow Restrictors - Faucet	49	\$522	163,496	18,166	1
Flow Restrictors - Shower	25	\$261	158,175	15,818	1
Tank Insulation	25	\$261	42,735	4,274	0
Pipe Insulation	25	\$261	44,539	2,969	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	7	\$418	17,094	1,554	1
ENERGY STAR Qualified Dishwasher	41	\$1,281	53,065	4,824	4
ENERGY STAR Qualified Refrigerator	33	\$1,034	52,198	3,480	0
ENERGY STAR Qualified Freezer	49	\$1,535	54,662	3,644	0
Appliance Recycling	70	\$4,229	619,227	68,871	12
Refrigerator	35	\$2,120	378,321	42,036	7
Freezer	34	\$2,056	240,140	26,682	5
Window AC Unit	1	\$53	766	153	0
Additional Low Income					
Energy Efficiency Kits	24	\$1,023	244,076	27,120	3
Building Shell - Existing Home Only					
Weatherization Rebates	20	\$12,471	913,752	30,458	2
Ceiling (Bring up to R-38) - Elect. Heat Only	20	\$12,471	913,752	30,458	2
Residential Total	2,580	\$97,294	11,113,696	799,606	214
Residential Average kWh Sales (3 yr Ave actual and projected)				58,479,333	
Residential kWh Savings as percentage of Residential kWh Sales				1.4%	

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	230	\$461	124,995	34,721	14
High Efficiency Interior Lighting	468	\$1,017	439,746	95,060	1
T-8 or 46" T5 - 4 ft	230	\$461	320,248	50,039	1
CFL lamps - Energy Star- 9W and up	230	\$461	114,170	43,912	1
Metal Halide Lamps	8	\$95	5,328	1,110	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,332	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,200	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	4	\$775	22,178	1,479	0
80 gallon+	4	\$775	22,178	1,479	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	54	\$21,730	577,222	38,481	5
Variable Speed Drive Motor Incentive	17	\$1,029	6,339,188	422,613	37
Ag, Commercial and Industrial Total	776	\$27,544	7,573,037	596,712	57
C & I Average kWh Sales (3 yr Ave actual and projected)**				37,748,667	
C & I kWh Savings as percentage of C & I kWh Sales				1.6%	

II. Demand Response Programs					
Water Heater Load Control	1,269	\$16,324			635
Air Conditioning Load Control	1,106	\$15,395			774
Space Heating Load Control (Interruptible)	1,231	\$14,601			5,540
Dual-Fuel Space Heating	160	\$520			960
Irrigation					
Load Control	31	\$101			205
Industrial Interruptible Price	2	\$7			13
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	2	\$400			
Expert Energy Services - C&I					
Energy Audit Services - Residential *	24	\$2,400			
IV. Educational & Research Programs					
Member Information and Education	2,890	\$38,500			
Peak Alert	2,340	\$65			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$7,100			
TOTAL	12,411	\$220,251	18,686,733	1,396,318	8,397
Total Average kWh Sales (3 yr Ave actual and projected)**				96,228,000	
Total kWh Savings as percentage of Total kWh Sales				1.5%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2013					
Estimated Achievable Potential Goals					
Woodbury County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,334	32,556	2,325	3
SEER 14.5 (and EER 12)	3	\$333	9,324	666	1
SEER 15 +	3	\$509	11,981	856	1
SEER 16 (and EER 13)	2	\$492	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	8	\$259	6,314	702	1
Geothermal Heat Pump	9	\$20,995	2,390,207	119,510	14
Air Source Heat Pump	45	\$33,859	5,301,693	353,446	46
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,437	\$5,484	1,165,074	159,599	146
Residential Water Heating (low income included)					
High Efficiency Water Heater	61	\$15,370	296,586	19,772	3
50-79 gallon	20	\$5,014	69,264	4,618	1
80 gallon+	41	\$10,356	227,322	15,155	2
Flow Restrictors - Faucet	49	\$522	163,496	18,166	1
Flow Restrictors - Shower	25	\$261	158,175	15,818	1
Tank Insulation	25	\$261	42,735	4,274	0
Pipe Insulation	25	\$261	44,539	2,969	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	8	\$490	19,536	1,776	1
ENERGY STAR Qualified Dishwasher	48	\$1,503	62,124	5,648	4
ENERGY STAR Qualified Refrigerator	39	\$1,214	61,688	4,113	0
ENERGY STAR Qualified Freezer	58	\$1,802	64,702	4,313	1
Appliance Recycling	71	\$4,257	630,036	70,072	12
Refrigerator	36	\$2,134	389,130	43,237	7
Freezer	34	\$2,070	240,140	26,682	5
Window AC Unit	1	\$53	766	153	0
Additional Low Income					
Energy Efficiency Kits	26	\$1,108	264,415	29,379	3
Building Shell - Existing Home Only					
Weatherization Rebates	25	\$15,582	1,142,190	38,073	3
Ceiling (Bring up to R-38) - Elect. Heat Only	25	\$15,582	1,142,190	38,073	3
Residential Total	2,967	\$104,562	11,846,068	849,956	239
Residential Average kWh Sales (3 yr Ave actual and projected)				58,433,000	
Residential kWh Savings as percentage of Residential kWh Sales					1.5%
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	269	\$539	146,190	40,608	16
High Efficiency Interior Lighting	546	\$1,173	513,409	110,991	2
T-8 or 46" T5 - 4 ft	269	\$539	374,551	58,524	1
CFL lamps - Energy Star- 9W and up	269	\$539	133,529	51,357	1
Metal Halide Lamps	8	\$95	5,328	1,110	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,332	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,200	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	4	\$775	22,178	1,479	0
80 gallon+	4	\$775	22,178	1,479	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	54	\$21,730	577,222	38,481	5
Variable Speed Drive Motor Incentive	17	\$1,029	6,339,188	422,613	37
Ag, Commercial and Industrial Total	893	\$27,778	7,667,894	618,530	60
C & I Average kWh Sales (3 yr Ave actual and projected)**				45,942,667	
C & I kWh Savings as percentage of C & I kWh Sales					1.3%
II. Demand Response Programs					
Water Heater Load Control	1,330	\$16,523			665
Air Conditioning Load Control	1,168	\$16,196			818
Space Heating Load Control (Interruptible)	1,285	\$14,976			5,783
Dual-Fuel Space Heating	160	\$520			960
Irrigation					
Load Control	32	\$104			211
Industrial Interruptible Price	3	\$209			20
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	3	\$600			
Expert Energy Services - C&I					
Energy Audit Services - Residential *	26	\$2,600			
IV. Educational & Research Programs					
Member Information and Education	2,910	\$39,000			
Peak Alert	2,360	\$70			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$7,200			
TOTAL	13,137	\$230,338	19,513,962	1,468,486	8,755
Total Average kWh Sales (3 yr Ave actual and projected)**				104,375,667	
Total kWh Savings as percentage of Total kWh Sales					1.4%

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

2014					
Estimated Achievable Potential Goals					
Woodbury County Rural Electric Cooperative	Projected Participants	Projected Cost	Lifetime kWh Savings	Annual kWh Savings	KW Savings
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
ENERGY STAR Central Air Conditioning	8	\$1,541	32,556	2,325	3
SEER 14.5 (and EER 12)	3	\$384	9,324	666	1
SEER 15 +	3	\$588	11,981	856	1
SEER 16 (and EER 13)	2	\$569	11,251	804	1
ENERGY STAR Qualified Room Air Conditioner	10	\$298	7,892	877	1
Geothermal Heat Pump	9	\$23,161	2,390,207	119,510	14
Air Source Heat Pump	46	\$34,240	5,419,508	361,301	47
Residential Lighting (low income included)					
Interior Lighting					
Change a Light Rebate Program (or similar program)	2,806	\$6,313	1,341,484	183,765	168
Residential Water Heating (low income included)					
High Efficiency Water Heater	62	\$15,521	302,131	20,142	3
50-79 gallon	20	\$5,063	69,264	4,618	1
80 gallon+	42	\$10,458	232,867	15,524	2
Flow Restrictors - Faucet	49	\$522	163,496	18,166	1
Flow Restrictors - Shower	25	\$261	158,175	15,818	1
Tank Insulation	25	\$261	42,735	4,274	0
Pipe Insulation	25	\$261	44,539	2,969	1
Residential Appliances (low income included)					
ENERGY STAR Qualified Clothes Washer	9	\$565	21,978	1,998	1
ENERGY STAR Qualified Dishwasher	55	\$1,734	71,184	6,471	5
ENERGY STAR Qualified Refrigerator	45	\$1,400	71,179	4,745	0
ENERGY STAR Qualified Freezer	67	\$2,077	74,742	4,983	1
Appliance Recycling	72	\$4,284	637,099	70,857	12
Refrigerator	36	\$2,148	389,130	43,237	7
Freezer	35	\$2,083	247,203	27,467	5
Window AC Unit	1	\$53	766	153	0
Additional Low Income					
Energy Efficiency Kits	28	\$1,194	284,755	31,639	4
Building Shell - Existing Home Only					
Weatherization Rebates	30	\$18,734	1,370,628	45,688	4
Ceiling (Bring up to R-38) - Elect. Heat Only	30	\$18,734	1,370,628	45,688	4
Residential Total	3,371	\$112,367	12,434,289	895,528	264
Residential Average kWh Sales (3 yr Ave actual and projected)				58,408,000	
Residential kWh Savings as percentage of Residential kWh Sales				1.5%	
Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
Change a Light Rebate Program	310	\$620	168,471	46,798	19
High Efficiency Interior Lighting	628	\$1,335	590,849	127,739	2
T-8 or 46" T5 - 4 ft	310	\$620	431,639	67,444	1
CFL lamps - Energy Star- 9W and up	310	\$620	153,882	59,185	1
Metal Halide Lamps	8	\$95	5,328	1,110	0
Ag/Commercial & Industrial Heating and Cooling					
Geothermal Heat Pump	1	\$1,332	17,360	868	0
Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	2	\$1,200	52,348	3,490	0
Ag/Commercial & Industrial Water Heating					
High-Efficiency Water Heater	4	\$775	22,178	1,479	0
80 gallon+	4	\$775	22,178	1,479	0
Ag/Commercial & Industrial Motors					
Premium Motors Rebate Program - NEMA	54	\$21,730	577,222	38,481	5
Variable Speed Drive Motor Incentive	17	\$1,029	6,339,188	422,613	37
Ag, Commercial and Industrial Total	1,016	\$28,021	7,767,616	641,467	62
C & I Average kWh Sales (3 yr Ave actual and projected)**				47,452,000	
C & I kWh Savings as percentage of C & I kWh Sales				1.4%	
II. Demand Response Programs					
Water Heater Load Control	1,392	\$16,924			696
Air Conditioning Load Control	1,231	\$16,601			862
Space Heating Load Control (Interruptible)	1,340	\$15,355			6,030
Dual-Fuel Space Heating	160	\$520			960
Irrigation					
Load Control	33	\$107			218
Industrial Interruptible Price	3	\$9			20
III. Energy Audit & Technical Support Programs					
Expert Energy Services - Agricultural	2	\$400			
Expert Energy Services - C&I					
Energy Audit Services - Residential *	28	\$2,800			
IV. Educational & Research Programs					
Member Information and Education	2,960	\$39,500			
Peak Alert	2,380	\$75			
Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network		\$7,300			
TOTAL	13,916	\$239,979	20,201,905	1,536,995	9,112
Total Average kWh Sales (3 yr Ave actual and projected)**				105,860,000	
Total kWh Savings as percentage of Total kWh Sales				1.5%	

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details

		Cost Effectiveness Analysis			
		Benefit/Cost Ratios			
Woodbury County Rural Electric Cooperative		Rate Payer	Participant	Utility	Societal
I. Incentive Programs for Energy Efficient Technologies					
Residential Cooling & Heating (low income included)					
	ENERGY STAR Central Air Conditioning				
	SEER 14.5 (and EER 12)	1.14	1.16	3.13	1.69
	SEER 15 +	0.93	1.19	2.30	1.41
	SEER 16 (and EER 13)	0.82	1.08	2.13	1.14
	ENERGY STAR Qualified Room Air Conditioner	0.50	1.13	1.47	0.69
	Geothermal Heat Pump	0.39	2.01	3.18	0.87
	Air Source Heat Pump	0.44	6.62	5.24	3.27
Residential Lighting (low income included)					
Interior Lighting					
	Change a Light Rebate Program (or similar program)	0.95	17.96	16.84	17.30
Residential Water Heating (low income included)					
	High Efficiency Water Heater				
	50-79 gallon	1.06	1.16	2.09	1.59
	80 gallon+	1.24	1.71	3.15	2.62
	Flow Restrictors - Faucet	0.28	57.34	13.09	16.13
	Flow Restrictors - Shower	0.29	20.76	4.95	6.16
	Tank Insulation	0.33	8.71	14.04	3.50
	Pipe Insulation	0.38	38.59	11.82	15.52
Residential Appliances (low income included)					
	ENERGY STAR Qualified Clothes Washer	0.43	1.15	1.72	0.62
	ENERGY STAR Qualified Dishwasher	0.72	2.68	2.91	2.23
	ENERGY STAR Qualified Refrigerator	0.32	2.72	1.47	1.07
	ENERGY STAR Qualified Freezer	0.35	3.13	1.22	1.27
	Appliance Recycling				
	Refrigerator	0.50	4.87	7.35	2.93
	Freezer	0.52	3.29	5.12	2.05
	Window AC Unit	0.55	0.43	1.20	0.29
Additional Low Income					
	Energy Efficiency Kits	0.33	30.97	8.31	10.24
Building Shell - Existing Home Only					
	Weatherization Rebates				
	Ceiling (Bring up to R-38) - Elect. Heat Only	0.24	3.81	1.23	1.24

Residential Total

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

Residential kWh Savings as percentage of Residential kWh Sales

Agriculture/Commercial & Industrial Lighting					
Interior Lighting					
	Change a Light Rebate Program	0.67	10.95	10.63	7.47
	High Efficiency Interior Lighting				
	T-8 or 46" T5 - 4 ft	0.66	3.90	5.31	2.78
	CFL lamps - Energy Star- 9W and up	0.67	10.95	10.63	7.47
	Metal Halide Lamps	0.71	2.25	3.97	1.80
Ag/Commercial & Industrial Heating and Cooling					
	Geothermal Heat Pump	0.39	2.01	3.19	0.87
	Air Source Heat Pump - (SEER 14.5, EER 12, HSPF 8.2)	0.44	6.62	5.24	3.27
Ag/Commercial & Industrial Water Heating					
	High-Efficiency Water Heater				
	80 gallon+	1.24	1.71	3.16	2.63
Ag/Commercial & Industrial Motors					
	Premium Motors Rebate Program - NEMA	0.33	7.24	4.84	2.89
	Variable Speed Drive Motor Incentive	0.33	7.24	4.84	2.89

Ag, Commercial and Industrial Total

C & I Average kWh Sales (3 yr Ave actual and projected)**

C & I kWh Savings as percentage of C & I kWh Sales

II. Demand Response Programs					
	Water Heater Load Control	#	#	#	#
	Air Conditioning Load Control	#	#	#	#
	Space Heating Load Control (Interruptible)	#	#	#	#
	Dual-Fuel Space Heating	#	#	#	#
Irrigation					
	Load Control	#	#	#	#
	Industrial Interruptible Price	#	#	#	#
III. Energy Audit & Technical Support Programs					
	Expert Energy Services - Agricultural				
	Expert Energy Services - C&I				
	Energy Audit Services - Residential *				
IV. Educational & Research Programs					
	Member Information and Education				
	Peak Alert				
	Iowa Energy Center and Center for Global Regional Environmental Research & Cooperative Research Network				

TOTAL

Total Average kWh Sales (3 yr Ave actual and projected)**

Total kWh Savings as percentage of Total kWh Sales

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

**Excludes kWh sales to biofuel production facilities and natural gas pumping stations.

See Appendix B for details