

An abstract graphic consisting of a grid of colorful squares in various shades including green, orange, blue, red, yellow, and purple. The letters 'DSM' are overlaid on the grid in a large, thin, white font. The 'D' is purple, the 'S' is light blue, the 'M' is yellow, and the 'M' is green.

DSM

HOOSIER ENERGY  
**Demand Side Management**  
2019 Annual Report

# 2019 Demand Side Management (DSM) OVERVIEW

Demand Side Management (DSM) has offered energy-efficiency and demand-response programs by member systems and Hoosier Energy since 2009. These programs equip consumers with tools to manage electric usage and bills, while facilitating distribution cooperatives to reduce wholesale power costs. Programs also provide Hoosier Energy with an economical long-term alternative to manage demand and avoid adding generating capacity.

Program incentives offset the cost of purchasing and installing high-efficiency equipment and encourage member-consumers to voluntarily pursue energy savings and efficiency. Several different programs are available: Residential Lighting, Commercial & Industrial (C&I), Energy Management Savings Switch, Energy Efficiency Kits, Residential HVAC, Appliance Recycling and LED Security Lighting.

## A FEW OF THE HIGHLIGHTS FROM THE DSM PROGRAM IN 2019 INCLUDE:

The Residential Lighting Program accounted for nearly 90% of 2019 applications. Cooperatives secured more than 9,000 LEDs for distribution, and member-consumers purchased an additional 16,000 bulbs through the lighting store. Cooperatives also distributed almost 10,000 energy efficiency kits to member-consumers.

Through the C&I Program, Hoosier Energy assisted member systems in providing incentives for 90 projects. Power reductions resulted in energy savings over 16,000 MWh and a 15.23 MW reduction in winter peak demand.

High-efficiency heat pumps replacing electric resistance heat accounted for approximately 21% of rebated installations. Member cooperatives paid nearly \$1.4 million in incentives in 2019 to help member-consumers utilize more than 1,300 energy-efficient HVAC equipment in their homes.

Three cooperatives installed 173 switches for the Residential Energy Management Savings Switch Program. Seven load control sessions were conducted for 2018-2019 winter months and eight sessions during 2019 summer months. Each air conditioning unit switch is estimated to provide nearly 1kW in summer demand reduction. Each water heater switch is estimated to reduce demand by 0.6 kW in winter months and 0.8 kW in summer months.

As part of the Appliance Recycling Program, member-consumers recycled more than 1,200 freezers and refrigerators and received a \$50 incentive for each appliance recycled.

In an effort to consistently evaluate and ensure that services align with the needs of member systems and their member-consumers, an intensive analysis of the Marketing Department's services and programs will take place in 2020.

## 2019 DSM PROGRAM SUMMARY

Program	Total Units Collected	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Appliance Recycling	1,206	1,234	0.13	0.18
Commercial & Industrial	90	6,046	3.20	3.22
LED Security Lighting	4,633	2,432	0.56	0.19
Residential HVAC	1,656	4,092	3.26	0.96
Residential Lighting	25,341	755	0.72	0.71
Energy Management Switch	173	0	0.06	0.08
Energy Efficiency Kits	9,850	1,615	0.19	0.18
TOTAL	42,949	26,307	20.22	17.62

# Commercial and Industrial Program

Saving energy and reducing costs can make a big difference for businesses of all sizes, from large industrial consumers to small commercial operations. Commercial and Industrial (C&I) Program incentives are designed to assist businesses in reducing electric demand in their facilities by purchasing and installing energy-efficient equipment, including lighting, HVAC systems, motors and compressed air systems. The program offers an annual maximum incentive of \$50,000 per member-consumer to help pay for upgrades that enhance efficiency.



## 2019 COMMERCIAL AND INDUSTRIAL PROGRAMS

Cooperative	Total Applications Paid	Annual MWh Savings	Winter Demand MW	Summer Demand MW
Bartholomew County REMC	6	281	0.05	0.05
Clark County REMC	9	210	0.03	0.04
Daviess-Martin County REMC	3	22	0.01	0.01
Decatur County REMC	5	138	0.07	0.07
Dubois REC	8	396	0.11	0.11
Harrison REMC	11	48	0.01	0.01
Henry County REMC	1	21	0.01	0.01
Jackson County REMC	7	129	0.03	0.03
Johnson County REMC	7	732	0.24	0.24
Orange County REMC	1	151	0.12	0.12
RushShelby Energy REMC	3	328	0.06	0.06
South Central Indiana REMC	3	21	0.01	0.01
Southeastern Indiana REMC	3	50	0.02	0.02
Southern Indiana Power	8	2,089	2.06	2.06
Utilities District of Western Indiana REMC	2	-2	0.00	0.00
Wayne-White Counties Electric Cooperative	2	20	0.01	0.01
Whitewater Valley REMC	3	25	0.01	0.01
WIN Energy REMC	8	1,387	0.35	0.36
<b>Total</b>	<b>90</b>	<b>16,179</b>	<b>15.31</b>	<b>15.33</b>



## Lighting Programs

The Residential Lighting Program encourages member-consumers to replace existing lighting with high-efficiency light-emitting diodes (LEDs). Hoosier Energy provides each member cooperative an annual allotment of 500 bulbs to distribute at no cost to member-consumers. The Residential Online Lighting Store includes educational resources to help consumers better understand their lighting needs and an expanded selection of LED bulbs was added to better meet homeowner preferences.

Farmers and small business owners can also benefit from a similar program to reduce demand. The Agricultural and Small Business Online Lighting Store offers discounts on energy-efficient agriculture-specific lighting, as well as other lamps, with additional bulk discounts. Eligible businesses must use less than 200,000 kWh annually and 100 kW demand. In addition, 30% to 50% of their electric cost must be for lighting.

### 2019 RESIDENTIAL LIGHTING PROGRAM

Cooperative	Total Units	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	858	16	0.02	0.02
Clark County REMC	2,821	83	0.09	0.09
Daviess-Martin County REMC	953	25	0.03	0.03
Decatur County REMC	2,144	51	0.06	0.06
Dubois REC	3,738	103	0.11	0.11
Harrison REMC	1,907	52	0.06	0.06
Henry County REMC	480	13	0.01	0.01
Jackson County REMC	1,407	39	0.04	0.04
Johnson County REMC	1,685	138	0.05	0.03
Orange County REMC	1,295	19	0.02	0.02
RushShelby Energy REMC	812	22	0.02	0.02
South Central Indiana REMC	1,612	43	0.05	0.05
Southeastern Indiana REMC	1,387	38	0.04	0.04
Southern Indiana Power	1,254	33	0.04	0.04
Utilities District of Western Indiana REMC	489	13	0.01	0.01
Wayne-White Counties Electric Cooperative	1,482	41	0.04	0.04
Whitewater Valley REMC	560	13	0.01	0.01
WIN Energy REMC	457	12	0.01	0.01
<b>Total</b>	<b>25,341</b>	<b>755</b>	<b>0.72</b>	<b>0.71</b>

# LED Security Lighting Program

Outdoor security lights offer enhanced lighting to improve visibility and safety at member-consumer homes and properties, as well as on public streets and neighborhoods. Traditional mercury vapor and high-pressure sodium lighting consume high amounts of energy and have an expected life of about six to 10 years. By installing high-efficiency, long-lasting LED security lighting with dusk-to-dawn sensors, cooperatives can improve lighting output, reduce maintenance costs, and reduce energy use by as much as 70% per fixture. The LED Security Lighting Program offers member co-ops an incentive of \$50 per light to offset replacement costs.

## 2019 SECURITY LIGHTING PROGRAM

Cooperative	Total Measures Installed	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	122	64	0.01	0.00
Clark County REMC	421	221	0.05	0.02
Daviess-Martin County REMC	15	8	0.00	0.00
Decatur County REMC	112	59	0.01	0.00
Dubois REC	404	212	0.05	0.02
Harrison REMC	290	152	0.03	0.01
Henry County REMC	47	25	0.01	0.00
Jackson County REMC	500	263	0.06	0.02
Johnson County REMC	241	127	0.03	0.01
Orange County REMC	153	80	0.02	0.01
RushShelby Energy REMC	136	71	0.02	0.01
South Central Indiana REMC	308	162	0.04	0.01
Southeastern Indiana REMC	501	263	0.06	0.02
Southern Indiana Power	-	0	-	-
Utilities District of Western Indiana REMC	182	96	0.02	0.01
Wayne-White Counties Electric Cooperative	356	187	0.04	0.01
Whitewater Valley REMC	375	197	0.05	0.02
WIN Energy REMC	470	247	0.06	0.02
<b>Total</b>	<b>4,633</b>	<b>2,432</b>	<b>0.56</b>	<b>0.19</b>

# Energy Efficiency Kits Program

Hoosier Energy provides each member cooperative with an annual allotment of up to 1,000 energy efficiency kits to distribute at no cost to member-consumers. Kits contain LED bulbs, foam outlet and wall plate gaskets, an LED nightlight and other self-install energy saving items. Printed materials are included in the kit to help member-consumers navigate the online lighting store to order additional items.

## 2019 ENERGY EFFICIENCY KITS

Cooperative	Total Kits	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	500	82	0.01	0.01
Clark County REMC	1,000	164	0.02	0.02
Daviess-Martin County REMC	500	82	0.01	0.01
Decatur County REMC	500	82	0.01	0.01
Dubois REC	0	0	0.00	0.00
Harrison REMC	1,000	164	0.02	0.02
Henry County REMC	500	82	0.01	0.01
Jackson County REMC	1,000	164	0.02	0.02
Johnson County REMC	1,000	164	0.02	0.02
Orange County REMC	500	82	0.01	0.01
RushShelby Energy REMC	500	82	0.01	0.01
South Central Indiana REMC	1,000	164	0.02	0.02
Southeastern Indiana REMC	1,000	164	0.02	0.02
Southern Indiana Power	0	0	0.00	0.00
Utilities District of Western Indiana REMC	50	8	0.00	0.00
Wayne-White Counties Electric Cooperative	500	82	0.01	0.01
Whitewater Valley REMC	300	49	0.01	0.01
WIN Energy REMC	0	0	0.00	0.00
<b>Total</b>	<b>9,850</b>	<b>1,615</b>	<b>0.19</b>	<b>0.18</b>

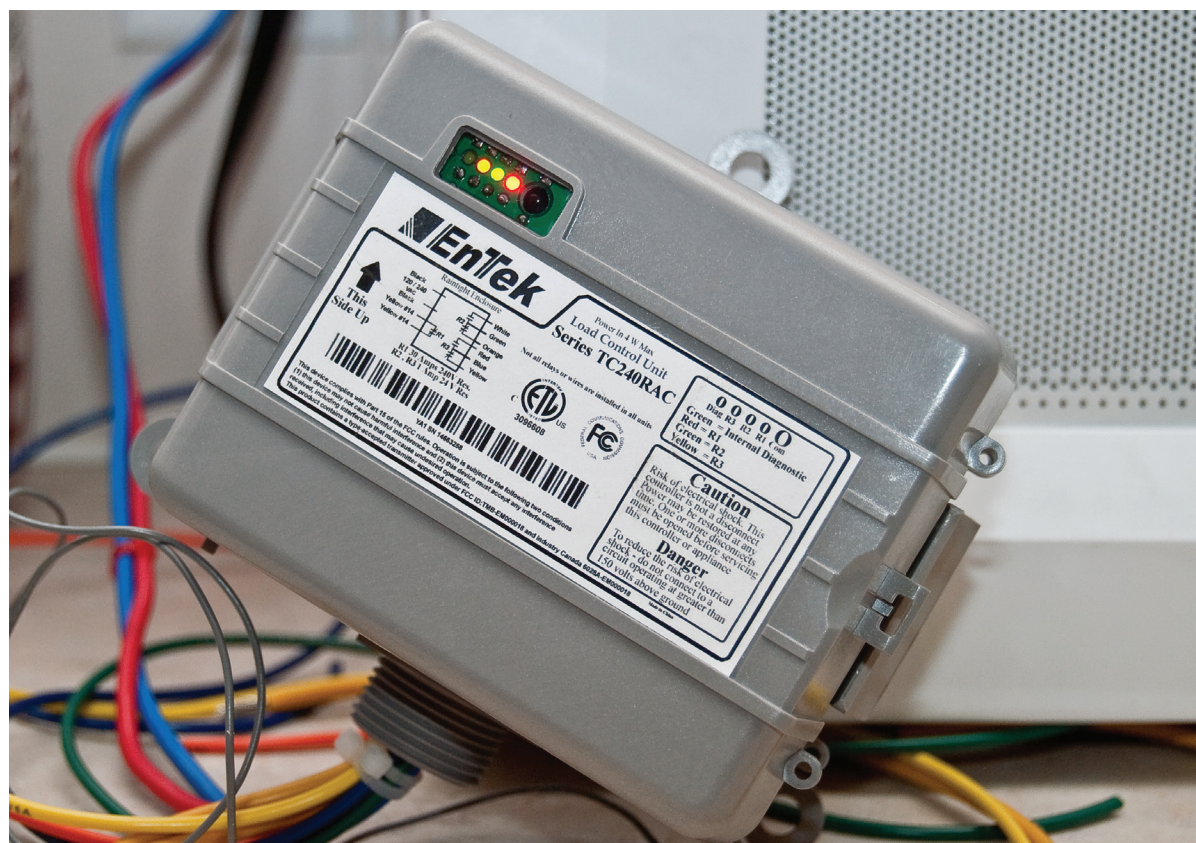


# Energy Management Savings Switch Program

The Energy Management Savings Switch Program provides an opportunity for residential member-consumers to contribute to stable rates through voluntary energy conservation. Reducing consumption during high-use times helps manage short-term costs by reducing power purchases in wholesale markets and long-term costs by reducing the need for new generating capacity. Participants receive incentives or bill credits for installing energy management switches on heating, cooling and water heating units. As part of this program, member-consumers allow the cooperative to control units during periods of high system-wide demand in response to load control signals from Hoosier Energy. Control sessions are conducted during peak hours in three summer months (June through August) and three winter months (December through February).

## 2019 ENERGY MANAGEMENT SAVINGS SWITCH PROGRAM

Cooperative	Total Devices Controlled	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	-	-	0.00	0.00
Clark County REMC	-	-	0.00	0.00
Daviess-Martin County REMC	-	-	0.00	0.00
Decatur County REMC	-	-	0.00	0.00
Dubois REC	36	0	0.02	0.04
Harrison REMC	-	-	0.00	0.00
Henry County REMC	-	-	0.00	0.00
Jackson County REMC	-	-	0.00	0.00
Johnson County REMC	-	-	0.00	0.00
Orange County REMC	-	-	0.00	0.00
RushShelby Energy REMC	-	-	0.00	0.00
South Central Indiana REMC	-	-	0.00	0.00
Southeastern Indiana REMC	112	0	0.04	0.02
Southern Indiana Power	25	0	0.00	0.02
Utilities District of Western Indiana REMC	-	-	0.00	0.00
Wayne-White Counties Electric Cooperative	-	-	0.00	0.00
Whitewater Valley REMC	-	-	0.00	0.00
WIN Energy REMC	-	-	0.00	0.00
<b>Total</b>	<b>173</b>	<b>0.00</b>	<b>0.06</b>	<b>0.08</b>



# Residential HVAC Rebates

Residential heating and cooling expenses account for 55 to 60 percent of member-consumer energy costs. To address these costs, the Residential Heating, Ventilation and Air Conditioning (HVAC) program offers incentives for homeowners to upgrade to more efficient electric systems. This program encourages selection of units that increase the efficiency of electric heating, cooling and water heating, such as heat-pump systems. Heat pumps work by transferring heat, rather than creating heat, and are highly efficient replacements for standard central air conditioners and whole-house HVAC systems. Member cooperatives pay incentives to homeowners once equipment is installed.

## 2019 RESIDENTIAL HVAC PROGRAM

Cooperative	Total Measures Installed	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	77	195	0.13	0.03
Clark County REMC	193	306	0.13	0.31
Daviess-Martin County REMC	37	142	0.11	0.02
Decatur County REMC	67	209	0.24	0.03
Dubois REC	54	134	0.16	0.03
Harrison REMC	199	242	0.19	0.08
Henry County REMC	37	117	0.09	0.02
Jackson County REMC	191	522	0.39	0.07
Johnson County REMC	55	113	0.09	0.02
Orange County REMC	31	90	0.06	0.01
RushShelby Energy REMC	59	151	0.15	0.03
South Central Indiana REMC	223	616	0.55	0.11
Southeastern Indiana REMC	157	402	0.39	0.07
Southern Indiana Power	40	98	0.07	0.02
Utilities District of Western Indiana REMC	71	192	0.15	0.03
Wayne-White Counties Electric Cooperative	66	74	0.09	0.02
Whitewater Valley REMC	32	56	0.04	0.01
WIN Energy REMC	67	432	0.23	0.05
<b>Total</b>	<b>1,656</b>	<b>4,092</b>	<b>3.26</b>	<b>0.96</b>

# Appliance Recycling Program

When member-consumers replace or retire old inefficient refrigerators and freezers, they end up with big savings on their energy bills and substantial reductions in energy consumption. As part of the Appliance Recycling Program, member-consumers receive a \$50 incentive for each appliance they recycle. Habitat for Humanity chapters providing collection services receive a stipend for each appliance collected, which is then funneled into home building programs for local families. Appliances are then salvaged and recyclable materials, such as glass, plastic and bulk iron are kept out of landfills.

## 2019 APPLIANCE RECYCLING PROGRAM

Cooperative	Total Units Collected	Annual MWh Savings	Winter Demand Savings	Summer Demand Savings
Bartholomew County REMC	38	40	0.00	0.01
Clark County REMC	146	149	0.02	0.02
Daviess-Martin County REMC	43	43	0.00	0.01
Decatur County REMC	21	21	0.00	0.00
Dubois REC	143	145	0.02	0.02
Harrison REMC	167	171	0.02	0.02
Henry County REMC	57	58	0.01	0.01
Jackson County REMC	95	97	0.01	0.01
Johnson County REMC	-	0	-	-
Orange County REMC	8	8	0.00	0.00
RushShelby Energy REMC	53	54	0.01	0.01
South Central Indiana REMC	105	106	0.01	0.02
Southeastern Indiana REMC	135	138	0.01	0.02
Southern Indiana Power	70	72	0.01	0.01
Utilities District of Western Indiana REMC	56	57	0.01	0.01
Wayne-White Counties Electric Cooperative	-	0	-	-
Whitewater Valley REMC	45	49	0.01	0.01
WIN Energy REMC	24	25	0.00	0.00
<b>Total</b>	<b>1,206</b>	<b>1,234</b>	<b>0.13</b>	<b>0.18</b>

## Analysis of Measures Installed: 2009-2019

The average lifetime cost of energy conserved to date through DSM measures is just over \$0.02 per kWh, well below the cost to provide power from traditional resources.\*

DSM programs are evaluated using a Total Resource Cost (TRC) test that compares avoided energy and capacity savings to the costs of the efficiency measure or program including cost borne by consumers.

Benefits detailed in the TRC test include avoided supply costs such as reductions in capital and O&M costs for generation, transmission and distribution facilities and operations.

A TRC ratio higher than 1.0 indicates program benefits exceed program costs. For all programs to date, lifetime economic benefits outweighed costs by a ratio of 1.94 to 1.\*\*

This ratio suggests that \$1.94 in long-term benefits were obtained for each \$1 invested in efficiency programs.

\* Formula for cost per kWh is (Hoosier Energy Cost + Participant Cost) / (Estimated Lifetime MWh Savings \* 1000)  
Example: (\$40,601,319 + \$49,936,909) / (4,238,895 x 1000) = \$0.0214

\*\* Formula for TRC is Lifetime Economic Benefit / Hoosier Energy Cost + Participant Cost  
Example: \$190,763,021 / (\$40,601,319 + \$49,936,909) = \$2.11 or TRC ratio 2.11 to 1

### ESTIMATED BENEFITS AND COSTS FOR ALL MEASURES INSTALLED: 2009–2019<sup>1</sup>

Program	Total Measures Installed to Date	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Appliance Recycling	11,797	11,818	90,708	4.07	4.80
Commercial & Industrial	1,143	132,878	1,882,586	22.48	21.68
LED Security Lighting	30,601	19,401	350,335	1.50	0.44
Residential HVAC	36,234	57,434	843,259	47.72	14.02
Residential Lighting	1,897,314	57,378	593,783	14.65	6.41
Energy Management Switch	16,858	0	0	7.65	12.17
Other Savings <sup>2</sup>	65,058	17,998	174,153	4.21	2.19
Weatherization <sup>3</sup>	4,061	19,285	479,329	3.28	4.81
Touchstone Energy Home*	576	2,824	65,472	0.57	0.55
<b>Total</b>	<b>2,063,642</b>	<b>329,149</b>	<b>4,631,621.19</b>	<b>118.24</b>	<b>73.81</b>

\*Homes registered prior to program close, completed in 2018

Program	Hoosier Energy Costs	Participant Costs	Lifetime Economic Benefits	Cost/kWh	Total Resource Cost (TRC)
Appliance Recycling	\$1,310,926.00	\$0.00	\$2,600,443.00	0.01	1.98
Commercial & Industrial	\$5,326,664.04	\$27,101,822.00	\$98,609,248.00	0.02	3.04
LED Security Lighting	\$2,355,853.00	\$3,489,974.00	\$15,358,601.00	0.02	2.63
Residential HVAC	\$11,936,559.00	\$22,590,888.00	\$30,885,666.00	0.04	0.89
Residential Lighting	\$6,817,239.13	\$7,139,156.50	\$28,381,569.00	0.02	2.03
Energy Management Switch	\$2,960,790.00	\$0.00	\$5,961,239.00	0.00	2.01
Other Savings (Energy Efficiency Kits)	\$2,809,370.91	\$315,183.00	\$4,021,414.00	0.02	1.29
Weatherization	\$9,078,275.00	\$0.00	\$15,084,780.00	0.02	1.66
Touchstone Energy Home	\$599,356.00	\$940,782.00	\$1,972,585.00	0.02	1.28
<b>Total</b>	<b>\$43,195,033.08</b>	<b>\$61,577,805.50</b>	<b>\$202,875,545.00</b>	<b>0.17</b>	<b>1.94</b>

<sup>1</sup>Appendix B measures are shown at generation levels. A 9% transmission and distribution loss is factored into estimates.

<sup>2</sup>Other Savings include Deferred Weatherization Program benefits and Energy Efficiency Kits.

<sup>3</sup>Weatherization program includes 1,393 homes on member systems weatherized through the American Recovery and Reinvestment Act Program 2009-2011.



## COMMERCIAL & INDUSTRIAL ENERGY EFFICIENCY PROGRAM: 2009–2019

Cooperative	Total Applications Paid	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	79	18,419	324,568	3.36	3.28
Clark County REMC	75	5,373	78,565	1.03	0.96
Daviess–Martin County REMC	45	3,293	35,726	0.66	0.66
Decatur County REMC	49	4,514	61,971	0.75	0.73
Dubois REC	103	7,644	83,270	1.10	1.01
Harrison REMC	69	6,224	90,561	0.99	0.95
Henry County REMC	28	1,470	19,867	0.35	0.30
Jackson County REMC	119	2,653	37,120	0.51	0.56
Johnson County REMC	88	9,541	132,892	1.74	1.64
Orange County REMC	20	1,306	18,642	0.31	0.32
RushShelby Energy REMC	40	9,585	134,556	1.12	1.08
South Central Indiana REMC	86	3,599	50,338	0.54	0.50
Southeastern Indiana REMC	45	5,756	54,679	0.87	0.83
Southern Indiana Power	76	13,130	189,162	3.48	3.44
Utilities District of Western Indiana REMC	70	22,585	333,489	2.96	2.74
Wayne–White Counties Electric Cooperative	25	2,510	24,012	0.56	0.54
Whitewater Valley REMC	35	2,062	31,285	0.29	0.29
WIN Energy REMC	92	13,214	181,884	1.86	1.85
<b>Total</b>	<b>1,144</b>	<b>143,011</b>	<b>2,034,582</b>	<b>34.59</b>	<b>33.79</b>

Measures for the C&I Energy Efficiency Program are listed in terms of rebate applications paid.

## RESIDENTIAL LIGHTING PROGRAM: 2009–2019

Cooperative	Total Units	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	118,578	3,904	35,591	0.93	0.42
Clark County REMC	342,909	10,154	105,051	2.69	1.11
Daviess–Martin County REMC	110,346	1,813	33,588	0.52	0.22
Decatur County REMC	47,715	1,116	14,154	0.34	0.17
Dubois REC	139,884	4,349	47,295	1.13	0.55
Harrison REMC	135,371	5,262	44,498	1.15	0.50
Henry County REMC	64,898	1,729	19,140	0.43	0.18
Jackson County REMC	113,657	3,514	34,934	0.97	0.39
Johnson County REMC	95,233	3,096	30,152	0.75	0.33
Orange County REMC	72,217	2,360	21,941	0.62	0.26
RushShelby Energy REMC	64,482	1,660	20,455	0.46	0.04
South Central Indiana REMC	66,864	1,899	22,089	0.09	0.07
Southeastern Indiana REMC	110,243	3,170	33,881	0.85	0.35
Southern Indiana Power	13,083	3,446	37,289	0.84	0.40
Utilities District of Western Indiana REMC	14,812	4,012	34,841	0.99	0.42
Wayne–White Counties Electric Cooperative	75,189	2,670	25,575	0.67	0.28
Whitewater Valley REMC	77,578	2,103	23,120	0.51	0.22
WIN Energy REMC	31,602	1,120	10,463	0.25	0.13
<b>Total</b>	<b>1,694,661</b>	<b>57,378</b>	<b>594,056</b>	<b>14.21</b>	<b>6.05</b>

## LED SECURITY LIGHTING PROGRAM: 2009–2019

Cooperative	Total Measures Installed	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	629	395	8,513	0.03	0.01
Clark County REMC	1,204	782	18,644	0.08	0.03
Daviess–Martin County REMC	55	29	899	0.00	0.00
Decatur County REMC	997	696	10,767	0.04	0.01
Dubois REC	1,425	931	17,335	0.09	0.03
Harrison REMC	2,495	1,573	27,623	0.12	0.03
Henry County REMC	2,087	1,360	24,771	0.08	0.02
Jackson County REMC	2,935	1,805	32,377	0.15	0.04
Johnson County REMC	2,473	1,562	28,992	0.11	0.03
Orange County REMC	779	470	8,783	0.04	0.01
RushShelby Energy REMC	875	553	9,936	0.05	0.02
South Central Indiana REMC	1,356	766	15,405	0.06	0.02
Southeastern Indiana REMC	3,569	2,188	36,508	0.16	0.04
Southern Indiana Power	1,464	1,031	15,715	0.07	0.02
Utilities District of Western Indiana REMC	1,429	905	15,225	0.06	0.02
Wayne–White Counties Electric Cooperative	2,190	1,399	24,015	0.10	0.03
Whitewater Valley REMC	2,116	1,374	22,404	0.11	0.04
WIN Energy REMC	2,523	1,584	32,423	0.15	0.04
<b>Total</b>	<b>30,601</b>	<b>19,401</b>	<b>350,335</b>	<b>1.50</b>	<b>0.44</b>

## OTHER SAVINGS: 2009–2019

Cooperative	Total Kits	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	2,921	939	8,670	0.19	0.09
Clark County REMC	4,986	1,131	12,115	0.21	0.09
Daviess–Martin County REMC	2,637	620	6,939	0.11	0.05
Decatur County REMC	1,939	539	4,627	0.11	0.05
Dubois REC	1,447	462	4,010	0.10	0.04
Harrison REMC	5,511	1,821	14,452	0.47	0.26
Henry County REMC	3,011	1,003	9,115	0.21	0.09
Jackson County REMC	4,800	1,133	13,363	0.19	0.08
Johnson County REMC	5,800	1,731	16,315	0.35	0.16
Orange County REMC	2,931	952	8,759	0.19	0.09
RushShelby Energy REMC	2,718	755	7,253	0.15	0.07
South Central Indiana REMC	7,563	1,625	15,573	0.90	0.69
Southeastern Indiana REMC	6,242	1,948	17,834	0.40	0.18
Southern Indiana Power	1,510	436	3,827	0.10	0.04
Utilities District of Western Indiana REMC	4,505	1,095	12,474	0.20	0.08
Wayne–White Counties Electric Cooperative	1,537	286	4,098	0.03	0.01
Whitewater Valley REMC	2,900	962	8,799	0.20	0.09
WIN Energy REMC	2,100	560	5,931	0.11	0.05
<b>Total</b>	<b>65,058</b>	<b>17,998</b>	<b>174,153</b>	<b>4.21</b>	<b>2.19</b>

## ENERGY MANAGEMENT SAVINGS SWITCH PROGRAM: 2009–2019

Cooperative	Total Devices Controlled	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	195	0.00	0.00	0.10	0.15
Clark County REMC	0	0.00	0.00	0.00	0.00
Daviess–Martin County REMC	1,191	0.00	0.00	0.44	0.99
Decatur County REMC	200	0.00	0.00	0.18	0.09
Dubois REC	850	0.00	0.00	0.16	0.40
Harrison REMC	1,885	0.00	0.00	0.80	1.50
Henry County REMC	958	0.00	0.00	0.38	0.78
Jackson County REMC	1,205	0.00	0.00	0.39	0.89
Johnson County REMC	0	0.00	0.00	0.00	0.00
Orange County REMC	1,870	0.00	0.00	0.98	1.14
RushShelby Energy REMC	1,182	0.00	0.00	0.47	0.95
South Central Indiana REMC	2,018	0.00	0.00	1.43	1.17
Southeastern Indiana REMC	2,376	0.00	0.00	1.04	1.70
Southern Indiana Power	1,908	0.00	0.00	0.74	1.48
Utilities District of Western Indiana REMC	1,321	0.00	0.00	0.66	0.94
Wayne–White Counties Electric Cooperative	0	0.00	0.00	0.00	0.00
Whitewater Valley REMC	8	0.00	0.00	0.01	0.00
WIN Energy REMC	1	0.00	0.00	0.00	0.00
<b>Total</b>	<b>17,168</b>	<b>0.00</b>	<b>0.00</b>	<b>7.78</b>	<b>12.18</b>

## RESIDENTIAL HVAC PROGRAM: 2009–2019

Cooperative	Total Measures Installed	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	1,663	2,389	36,495	1.42	0.60
Clark County REMC	4,426	5,548	70,773	3.43	2.37
Daviess–Martin County REMC	997	1,516	22,393	1.66	0.36
Decatur County REMC	640	1,748	29,083	2.18	0.27
Dubois REC	2,105	2,887	41,767	3.73	0.78
Harrison REMC	4,099	6,564	83,649	3.64	2.36
Henry County REMC	645	1,297	19,847	1.52	0.28
Jackson County REMC	2,735	5,701	84,123	3.17	1.17
Johnson County REMC	1,704	2,732	37,057	1.76	0.62
Orange County REMC	1,009	1,546	22,426	0.66	0.30
RushShelby Energy REMC	943	1,594	25,426	1.89	0.32
South Central Indiana REMC	4,645	7,167	118,816	5.04	1.11
Southeastern Indiana REMC	3,107	4,771	75,392	5.26	0.84
Southern Indiana Power	1,364	2,878	33,347	2.27	0.73
Utilities District of Western Indiana REMC	2,104	3,638	57,246	3.13	0.73
Wayne–White Counties Electric Cooperative	1,124	1,182	16,327	2.23	0.39
Whitewater Valley REMC	892	1,354	21,549	2.23	0.28
WIN Energy REMC	2,025	2,921	47,541	2.50	0.51
<b>Total</b>	<b>36,227</b>	<b>57,434</b>	<b>843,259</b>	<b>47.72</b>	<b>14.02</b>

## APPLIANCE RECYCLING PROGRAM: 2009-2019

Cooperative	Total Units Collected	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	346	365	2,433	0.20	0.25
Clark County REMC	1,265	1,239	10,253	0.27	0.31
Daviess-Martin County REMC	278	299	1,801	0.20	0.24
Decatur County REMC	282	301	2,048	0.20	0.24
Dubois REC	1,273	1,265	9,378	0.27	0.32
Harrison REMC	1,160	1,396	10,361	0.27	0.31
Henry County REMC	531	492	4,193	0.22	0.26
Jackson County REMC	928	988	7,213	0.25	0.29
Johnson County REMC	174	180	899	0.20	0.23
Orange County REMC	23	43	333	0.19	0.22
RushShelby Energy REMC	634	608	4,339	0.23	0.27
South Central Indiana REMC	1,074	996	7,985	0.25	0.30
Southeastern Indiana REMC	1,655	1,548	13,714	0.27	0.33
Southern Indiana Power	564	449	4,099	0.21	0.25
Utilities District of Western Indiana REMC	623	621	4,856	0.23	0.26
Wayne-White Counties Electric Cooperative	247	254	1,271	0.20	0.24
Whitewater Valley REMC	448	462	3,461	0.22	0.25
WIN Energy REMC	292	311	2,072	0.20	0.23
<b>Total</b>	<b>11,797</b>	<b>11,818</b>	<b>90,708</b>	<b>4.07</b>	<b>4.80</b>

TOUCHSTONE ENERGY® HOME<sup>SM</sup> PROGRAM: 2009-2019

Cooperative	Homes Registered	Cumulative MWh Savings	Estimated Lifetime MWh Savings	Cumulative Winter Peak MW Savings	Cumulative Summer Peak MW Savings
Bartholomew County REMC	6	28	568	0.00	0.01
Clark County REMC	52	251	5,606	0.05	0.05
Daviess-Martin County REMC	6	34	738	0.01	0.01
Decatur County REMC	24	112	2,786	0.02	0.02
Dubois REC	96	466	9,935	0.08	0.10
Harrison REMC	161	825	19,510	0.18	0.16
Henry County REMC	4	19	379	0.00	0.00
Jackson County REMC	72	360	8,359	0.07	0.07
Johnson County REMC	2	16	360	0.00	0.00
Orange County REMC	2	9	189	0.00	0.00
RushShelby Energy REMC	48	234	5,748	0.05	0.05
South Central Indiana REMC	32	166	3,708	0.03	0.03
Southeastern Indiana REMC	15	43	1,420	0.01	0.01
Southern Indiana Power	35	163	3,658	0.03	0.04
Utilities District of Western Indiana REMC	19	88	2,318	0.02	0.02
Wayne-White Counties Electric Cooperative	-	-	0	0.00	0.00
Whitewater Valley REMC	1	5	95	0.00	0.00
WIN Energy REMC	1	5	95	0.00	0.00
<b>Total</b>	<b>576</b>	<b>2,824</b>	<b>65,472</b>	<b>0.55</b>	<b>0.57</b>

Program was retired in 2017 and remaining registered homes completed in 2018.

## BASIC PROGRAM ASSUMPTIONS

Measure Name	Annual kWh Savings	Winter kW Demand Savings	Summer kW Demand Savings	Installation Rate	Effective Useful Life (Years)
RESIDENTIAL LIGHTING PROGRAM					
LED Lighting (Standard)	26.5	0.029	0.029	70%	13
LED Lighting (Specialty)	34.1	0.037	0.037	70%	13
LED Security Lights	525.6	0.120	0.120	100%	18

APPLIANCE RECYCLING PROGRAM					
Refrigerator Recycling	1,002.0	0.140	0.140	100%	8
Freezer Recycling	932.5	0.134	0.134	100%	8

RESIDENTIAL HVAC PROGRAM					
Heat Pump Water Heaters	1,702.5	0.672	0.672	100%	13
Heat Pump (14 SEER) [Manufactured Home = MH]	436.0	0.170	0.160	100%	18
Heat Pump (15 SEER) [MH]	533.0	0.070	-0.020	100%	18
Heat Pump (16 SEER)	1,103.0	0.350	0.100	100%	18
Heat Pump (17 SEER)	1,281.0	0.820	0.170	100%	18
Heat Pump (18 SEER)	1,286.0	0.830	0.310	100%	18
Heat Pump (14 SEER) Dual Fuel [MH]	-2,769.0	0.000	0.160	100%	18
Heat Pump (15 SEER) Dual Fuel [MH]	-4,150.0	0.000	0.260	100%	18
Heat Pump (16 SEER) Dual Fuel	-6,263.0	0.000	0.300	100%	18
Heat Pump (17 SEER) Dual Fuel	-7,163.0	0.000	0.360	100%	18
Heat Pump (18 SEER) Dual Fuel	-6,768.0	0.000	0.380	100%	18
Heat Pump (14 SEER) Electric Resistance Replacement [MH]	4,765.0	3.700	0.160	100%	18
Heat Pump (15 SEER) Electric Resistance Replacement [MH]	23,692.0	4.120	0.200	100%	18
Heat Pump (16 SEER) Electric Resistance Replacement	23,964.0	4.400	0.320	100%	18
Heat Pump (17 SEER) Electric Resistance Replacement	23,551.0	4.870	0.390	100%	18
Heat Pump (18 SEER) Electric Resistance Replacement	23,839.0	4.880	0.530	100%	18
Geothermal Heat Pumps	4,480.0	3.240	0.680	100%	18
Mini Split Heat Pump (16 SEER)	825.3	3.110	0.830	100%	18
Mini Split Heat Pump (17 SEER)	1,408.0	3.240	0.880	100%	18
Mini Split Heat Pump (18 SEER)	2,015.6	3.390	0.920	100%	18
Mini Split Heat Pump (19 SEER)	2,397.7	3.470	0.950	100%	18
Mini Split Heat Pump (20 SEER)	2,749.2	3.550	0.970	100%	18

ENERGY EFFICIENCY KIT					
Energy Efficiency Kit A	118.5	0.028	0.012	50%	14
Energy Efficiency Kit B	164.0	0.019	0.018	50%	8

CONTINUED ON NEXT PAGE



## APPENDIX B

CONTINUED FROM PREVIOUS PAGE

Measure Name	Annual kWh Savings	Winter kW Demand Savings	Summer kW Demand Savings	Installation Rate	Effective Useful Life (Years)
<b>C&amp;I ENERGY EFFICIENCY PROGRAM</b>					
All commercial & industrial savings are calculated for each individual rebate claim based on the estimated existing and replacement wattages and time used.					
Agricultural Lighting	179.9	0.000	0.019	100%	2
Occupancy Sensors	393.1	0.122	0.087	100%	8
NEMA Premium Eff. Motor >10 HP	35.0	0.010	0.010	100%	15
NEMA Premium Eff. Motor < 10 HP	75.0	0.020	0.020	100%	15
VSD on Motors	679.7	0.000	0.105	100%	15
Programmable Thermostat	61.0	0.000	0.000	100%	9
Heat Pump (11.3 EER, COP 3.4)	54.1	0.020	0.015	100%	15
Air Conditioner (12 EER)	67.3	0.094	0.073	100%	15

<b>DEMAND RESPONSE</b>					
<80 gallon water heater control	0.0	0.800	0.450	100%	13
>80 gallon water heater control	0.0	0.800	0.450	100%	13
AC control	0.0	0.000	0.990	100%	13
ASHP control	0.0	0.000	0.880	100%	13
Geothermal HP control	0.0	0.000	0.930	100%	13

<b>RETIRED MEASURES</b>					
Measures that were incentivized in previous program years continue to contribute to overall program savings for the duration of the measure life., on a per unit basis. The measures below are for historical reference when reviewing cumulative savings totals."					
Touchstone Energy Homes	5,397.0	4.520	0.740	100%	25
Weatherized Homes (HE & ARRA) <sup>1</sup>	4,274.0	0.720	1.060	100%	13
Deferred Homes	795.0	0.720	0.720	100%	13
LED Holiday Lights 2009-13	17.1	0.048	0.048	90%	20
80 Gal Water Heater	115.0	0.050	0.050	100%	13
50 Gal Water Heater	162.0	0.060	0.060	100%	13
Compact Fluorescent Lighting (CFL)	28.6	0.031	0.031	70%	5
Attic Insulation	1,049.0	0.152	0.727	100%	20
Duct Sealing	718.0	0.491	0.357	100%	20
Central AC (14 SEER)	142.0	0.220	0.000	100%	18
Central AC (15 SEER)	147.0	0.200	0.000	100%	18
Central AC (16 SEER)	221.0	0.320	0.000	100%	18
Central AC (17 SEER)	257.0	0.390	0.000	100%	18
Central AC (17 SEER)	325.0	0.530	0.000	100%	18

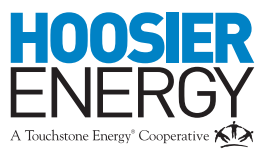
Basic program assumptions were updated in 2016.

<sup>1</sup>Hoosier Energy and American Recovery and Reinvestment Act

# The Hoosier Energy Power Network

Hoosier Energy is a generation and transmission cooperative (G&T) with headquarters in Bloomington, Indiana. The G&T provides electric power and services to 18 electric distribution cooperatives in central and southern Indiana and southeastern Illinois. Collectively, those 18 co-ops serve more than 650,000 member-consumers. For more information, visit [www.hoosierenergy.com](http://www.hoosierenergy.com).





P.O. Box 908  
Bloomington, IN 47402  
2501 South Cooperative Way  
Bloomington, IN 47403



[TeamUpToSave.com](http://TeamUpToSave.com)

