EEP-2012-0001

FILED WITH
Executive Secretary

May 06, 2015

IOWA UTILITIES BOARD

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May 6, 2015

Ms. Joan Conrad, Executive Secretary
Iowa Utilities Board
1375 East Court Avenue, Room 69
Des Moines, IA 50319-0069

RE: Interstate Power and Light Company
Docket No. EEP-2012-0001
Annual Report for 2014 Energy Efficiency Plan

Dear Ms. Conrad:

Enclosed please find Interstate Power and Light Company's Annual Report for 2014 Energy Efficiency Plan in the above-referenced docket, as filed today on EFS.

Very truly yours,

/s/ Benjamin M. Clark
Benjamin M. Clark
Attorney - Regulatory

BMC/tab
Enclosure

FILED WITH
Executive Secretary

May 06, 2015

IOWA UTILITIES BOARD

STATE OF IOWA

BEFORE THE IOWA UTILITIES BOARD

IN RE: **INTERSTATE POWER AND LIGHT COMPANY**	**DOCKET NO. EEP-2012-0001**

ENERGY EFFICIENCY PLAN ANNUAL REPORT FOR YEAR 2014

COMES NOW, Interstate Power and Light Company (IPL), and in compliance with the "Final Order" issued by the Iowa Utilities Board in this docket on June 24, 2009, requiring the filing of an annual report of IPL's energy efficiency plan performance on or before May 1 of each year, submits for filing its 2014 annual report.

DATED this 6th day of May, 2015.

Respectfully submitted,

INTERSTATE POWER AND LIGHT COMPANY

By *_/s/ Benjamin M. Clark_____*

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May 06, 2015

IOWA UTILITIES BOARD

ANNUAL REPORT

for

2014 Energy Efficiency Plan

of

Interstate Power and Light Co.

an Alliant Energy Company

Docket No. EEP-2012-0001

May 6, 2015

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1. Plan Highlights

1.1. Introduction

This report presents Interstate Power and Light Company's (IPL's or the Company's) annual report for the first year of its five-year Energy Efficiency Plan (Plan) approved on December 2, 2013, in Docket No. EEP-2012-0001. The Plan includes 15 energy efficiency programs, two demand response programs and eight outreach, education and training initiatives. Three other components: Legislative Assessment, Evaluation, Measurement and Verification and Next Plan, capture the remaining features of the 28-component Plan. The two suspended Renewable Energy Pilots from EEP-08-01 were completed in 2014.

1.2. Goals and Budgets

IPL notes that the first-year electric energy savings for 2014 exceeded the annual goal by 23 percent and expenditures were one percent under the annual Plan budget. IPL achieved savings of over 218 million kilowatt-hours (kWh), which represents 1.5 percent of 2014 electric annual sales.

Peak demand reductions were 37 megawatts (MW) from the energy efficiency and renewable energy portfolios and 282 MW from ongoing load management programs, for a total peak impact of 320 MW from all participants.

IPL reports that natural gas energy savings were nine percent under the annual Plan goal and expenditures were 26 percent under the annual Plan budget. Natural gas energy savings reached 2.1 million therms, representing 0.67 percent of 2014 natural gas annual sales.

1.3. Cost-Effectiveness

IPL's electric and natural gas programs are cost-effective overall for the Plan's 2014 activities. As measured by the societal test, the electric program benefit-cost ratio is 2.35 and

the natural gas program ratio is 1.18. The total Plan (electric and natural gas) benefit-cost ratio is 2.31 and societal net benefits are $767.4 million.

IPL's ongoing electric energy efficiency and demand response programs are cost-effective for the Plan's 2014 activities, with the exception of the Multifamily and Institutional Efficiency Improvements program.

IPL's ongoing natural gas energy efficiency programs are cost-effective for the Plan's 2014 activities, with the same program exception as in the electric programs, plus Residential Prescriptive, Low-income Weatherization and Commercial New Construction.

1.4. Key Customer Successes

Beyond energy impact, spend, and cost-effectiveness results, IPL had tens of thousands of interactions with its customers in 2014 through its key delivery and marketing channels.

Key Customer Successes

- IPL added a net of 828 new residential cycling customers over the 2014 season and added another .97 kW to its kW of demand reduction for the program.
- In the program's first year of offering Comprehensive Home Energy Assessments, 211 customers chose to receive the advanced diagnostic testing option.
- The implementation rate for residential customers installing insulation following a Home Energy Assessment was nearly 40 percent.
- Community Action Agencies distributed 4,500 EnergyWise kits, 1,000 more than expected.
- Introduced statewide in 2014, Home Energy Savers helped 90 customers complete work in their homes. Seven were from Community Action Agencies (CAA) new to the program in 2014.

- Increased participation in Hometown Rewards helped the City of Oelwein increase its estimated kWh savings by 32 percent in the business and commercial & industrial sectors.
- IPL rolled out its newly reformatted Builder Training conferences in Ames, Cedar Rapids, and Cedar Falls, setting an all-time attendance record at each venue.
- IPL's Energy Efficiency Dealer Network paid out over $895,000 in incentives to Dealers for promoting IPL's rebated energy efficiency equipment.
- As a new stand-alone program in 2014, IPL's Multifamily program surpassed its audit goal of 60 with the completion of 119 audits.
- IPL's New Home Construction program rebated 518 homes, generating electric savings of 219 percent of its Demand Savings goal and 514 percent of its annual energy savings goal.

1.5. Settlement, Orders and Collaboration

IPL filed a Non-Unanimous Partial Settlement (Settlement) in Docket No. EEP-2012-0001 that included eight contested issues, three partially resolved issues and 15 issues resolved by settlement. The Settlement contained six reporting tasks among the 26 issues. The Settlement and Plan were both approved in the Board's December 2, 2013 Order. The Order contained six additional reporting tasks. Descriptions of the 12 reporting tasks and the task's completion status are presented in Table 1.5-1.

Table 1.5-1 Reporting Tasks

No.	Document	Status	Reporting Task
1	Order (12/2/13), p. 74	Filed 1/31/2014 and 1/31/2015.	IPL will be required to document any program specific changes in annual savings impacts and update the total impacts by year due to the Settlement Agreement and the Order on or before January 31, 2014. In subsequent years, IPL must file an update of program features on January 31 of each year.
2	Order (12/2/13), p. 74	No activity to date.	IPL shall file its next energy efficiency plan on or before February 1, 2018.
3	Order (12/2/13), p. 74	Filed in 2014 Annual Report, section 2.27.	IPL shall continue to file annual energy efficiency reports on or before May 1 of each year. The report shall include updates on EM&V activities. Final EM&V reports are also to be filed, as they become available.
4	Order (12/2/13), p. 75	Filed preliminary findings 3/16/2015. Additional filings planned for 10/16/2015.	IPL shall file a complete evaluation of its renewable energy program for the years 2010 through 2013 on or before March 16, 2015.
5	Order (12/2/13), p. 75	On target to be filed on or before 9/30/2015.	IPL shall submit a final report on net-to-gross on or before September 30, 2015.
6	Order (12/2/13), p. 75	On target to be completed on or before 9/30/2016.	IPL shall file a completed TRM on or before September 30, 2016.
7	Settlement (7/26/13), Attachment A, p. 5	Reported at Fall Operation meeting 10/1/14.	IPL will report on its efforts to find cost-effective, customer-centered, performance-based incentives to vendors/contractors that motivate customer engagement, energy efficiency market development, and transformation as part of its Fall Operations Report.
8	Settlement (7/26/13), Attachment A, p. 10	Filed in 2014 Annual Report, section 2.4.	IPL will include a breakdown of individual measures (i.e. appliance type) and their calculations in its Annual Report.

Table 1.5-1 Reporting Tasks (continued)

9	Settlement (7/26/13), Attachment A, p. 10	Filed 10/31/13.	IPL will review MidAmerican Energy Company's ground source heat pump and furnace offerings to determine whether these options are viable and cost effective for the IPL service territory and the findings will be reported to the OCA and EEP parties on or before October 31, 2013.
10	Settlement (7/26/13), Attachment A, p. 12	Filed 10/31/13.	IPL will review the possibility for an upstream HVAC program and its research findings will be reported to the OCA and EEP parties on or before October 31, 2013.
11	Settlement (7/26/13), Attachment A, p. 13	Reported at Fall Operation meeting 10/1/14.	IPL will share comprehensive [Outreach, Education and Training] marketing plan at the October/November stakeholder meeting.
12	Settlement (7/26/13), Attachment A, p. 15	Filed in 2015 TF dockets.	IPL will track non-residential energy efficiency expenditures by rate class as well as by programs within its systems and consider that information in developing future EECR factors.

1.6. Report Organization

Chapter 2, "Program Highlights," provides a program-by-program report for each of the 28 programs, including initiatives and other components in IPL's Plan. Each program's report is organized as follows:

- Description;
- Successes;
- Challenges;
- Future Steps; and
- Program Details on the Alliant Energy website.

Program-specific impact summaries are in Appendix A. Program-specific expenditure summaries are in Appendix B. Detailed participation and impact summaries at the measure level for the energy efficiency programs are in Appendix C. Cost-effectiveness results at both

the Plan level and by program are in Appendix D. Detailed data, calculations, and results[1] used in this analysis are organized in the following four workbooks:

a) Appendix D Common Assumptions.xls
b) Appendix D Benefit-Cost Model Electric (except DR).xls
c) Appendix D Benefit-Cost Model Gas.xls
d) Appendix D Benefit-Cost Model Demand Response (DR).xls

The Common Assumptions workbook (a) contains data that are consistent across all programs, such as avoided costs, discount rates, and participant retail rates. Program-specific inputs and outputs can be found in workbooks (b) through (d), depending on fuel and program type (DR vs. non-DR).

Each workbook (b) through (d) begins with an "index" worksheet, which contains active links to the data for each program in the workbook. This index has been created to facilitate navigation in the workbook. Each program has one tab in the workbook with a table of program summary benefit-cost results, followed by annual total energy savings for the program, measure level calculations of costs and benefits, measure-level input data, program budgets, and finally, a table of basic inputs.

Note that due to active links among these worksheets, workbooks (a) through (c) must be transferred to the same file directory on the user's hard drive. These workbooks allow the user to trace the calculation of annual costs and savings, ultimately leading to net present value costs and benefits used to calculated benefit-cost ratios.

Appendix E contains incremental and total savings and expenditures for the Residential Direct Load Control and Interruptible programs.

[1] These workbooks may not replicate the results exactly due to rounding.

Starting with the annual report for 2010, each of the appendices were expanded to include the reporting requirements for the Renewable Energy Portfolio. This annual report includes results for the Renewable Energy Portfolio projects that were paid in 2014 after the Board suspended the program in the December 2, 2013 Order. IPL will present a final report as required by the Board as noted in Table 1.5-1 number 4 above.

2. Program Highlights

2.1. Residential Prescriptive Rebates

2.1.1. Description

The Residential Prescriptive Rebates program provides a range of energy-efficiency equipment options. This program provides rebates to residential customers who purchase high-efficiency electric and natural gas equipment and offers incentives to dealers who sell high-efficiency electric or natural gas equipment. To help mitigate the potential effects of first costs as a barrier to program participation, IPL also offers low-interest financing to eligible customers on qualifying, energy-saving equipment and measures. Customers must choose between receiving the incentive or the low-interest loan.

2.1.2. Successes

The Prescriptive Rebate program achieved 223 percent of the natural gas savings goal and 62 percent of the electric savings goal. These results are due to multiple factors, including the following:

- The HVAC System Tune-Up option continues to boom with 10,658 customers participating in 2014 – an increase of more than 3,000 tune-ups over the previous year.
- Several rebate options had steady or increased participation, including the following equipment types in order of greatest to least participation:
    1. HVAC System Tune-Up
    2. Natural Gas Furnace
    3. Programmable Thermostat
    4. Central Air Conditioner
    5. Water Heater
    6. Heat Pump (Air or Ground-Source)

7. Doors (Glass and Solid)
8. Room Air Conditioner
9. Whole House Fan

- Over 18,000 residential customers participated in the 2014 natural gas prescriptive rebate program, surpassing the goal by over 7,000 participants.
- Implementation of the comprehensive statewide Heating, Ventilation and Air Conditioning (HVAC) System Adjustment for Verification Efficiency (SAVE) training program as a requirement for HVAC prescriptive rebates, gained positive momentum in 2014. The investor owned utilities (IOUs) continued to work together with stakeholders to help implement and promote this program. Additionally, IPL and MidAmerican Energy implemented a Quality Assurance/Quality Control (QA/QC) process in late 2014 to ensure dealers are complying with program requirements. Approximately 4,900 rebate-eligible HVAC units were SAVE-certified in the IPL service territory this year.

2.1.3. Challenges

Technology changes are starting to impact individual equipment purchases. IPL saw a decrease in room air conditioner rebate applications as customers see newer technologies such as ductless “mini-split” heat pumps or whole house fans as alternatives; yet adoption into the market is slow for these technologies.

Balancing the program’s overall goal, while marketing specific measures, continues to be a challenge.

2.1.4. Future Steps

- IPL will seek opportunities to increase the per-participant depth of savings. Once a customer participates in an energy efficiency program, IPL will continue to seek opportunities to reach out to the customer and encourage additional energy-saving improvements.

- IPL will continue to educate customers on the benefits of energy-efficient technologies and how to use those technologies effectively. Examples of these efforts are the Alliant Energy Newsletter and the annual natural gas and electric usage letters distributed to residential customers.
- IPL has designed both measure-specific and general awareness campaigns to promote this program in 2015. Measure-specific campaigns include Wi-Fi thermostats and HVAC system tune-ups. General awareness campaigns will include leveraging long-time PowerHouse TV hosts Pete and Megan and delivering the annual usage reports to all residential customers.

2.1.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/rebates

alliantenergy.com/financing

hvacsave.com

2.2. Home Energy Assessments

2.2.1. Description

This program offers: (1) a free energy assessment; (2) direct installed low-cost energy efficiency measures; and (3) information on energy use and conservation. An energy expert conducts a walk-through energy assessment at the customer's home. As part of the energy assessment, the energy expert analyzes a home's main features and identifies energy efficiency opportunities.

Following the assessment, the energy expert will provide a report outlining the various measures that could deliver energy savings and provide information on rebates and financing options available from IPL.

Customers have the choice of upgrading to a Comprehensive Home Energy Assessment program option, which provides all the same features of a basic energy assessment plus advanced diagnostic testing: blower door, duct blaster, and thermal imaging. This comprehensive assessment option is available for $100, but if the customer makes the recommended improvements, the customer is eligible to receive a bonus rebate of $100 to mitigate this cost.

2.2.2. Successes

Customers requested 211 Comprehensive Home Energy Assessments in the first year IPL has offered the service. The electric-only Home Energy Assessment has also proven popular, with 724 qualified customers taking advantage of the new service.

In total, IPL performed 3,659 Home Energy Assessments (Basic, Comprehensive and electric-only combined) in 2014, and paid 1,461 customers insulation rebates in 2014, a closure rate of nearly 40 percent.

2.2.3. Challenges

New Home Energy Assessment services have also led to new challenges for customers who receive the service. Customers who receive electric-only Home Energy Assessments do not qualify for foundation insulation, which has caused frustration on the part of customers who insulated their foundations. In order to mitigate these customer concerns going forward, IPL has implemented a combination of messaging to the customers at the time of their Home Energy Assessment, in addition to communicating with insulation contractors, and making changes to the Home Energy Assessment report.

In 2014, IPL paid 586 residential air-sealing rebates. Ideally, this number would be almost identical to the number of insulation rebates paid due to the symbiotic relationship between air sealing and insulation in building envelopes. However, customers are not as familiar with the benefits of air sealing as much as they are with insulation. IPL will improve its messaging to Home Energy Assessment participating customers demonstrating the enhanced benefits of both air sealing and insulation.

2.2.4. Future Steps

The closure rate for insulation measures provides a baseline for success into the future. IPL will further instruct its assessors to continue to emphasize the importance of air sealing in conjunction with insulation. The ultimate goal is to have nearly as many air sealing incentives paid as insulation incentives, unless demonstrated unnecessary by a blower door test during a Comprehensive Assessment.

IPL has worked with the program implementer to identify customers who followed through on 73 non-insulation measures recommended in their Home Energy Assessment report. This represents a closure rate of 2 percent for non-insulation measures. IPL will use this metric as a baseline to determine the success of non-insulation closure rates in the future.

2.2.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/homeenergyassessment

2.3. Change-a-Light

2.3.1. Description

Change-a-Light (CAL), branded Be Bright, is an upstream program for which IPL provides incentives directly to lighting manufacturers to reduce the purchase price of ENERGY STAR®, high-efficiency lighting products at participating retailer locations in Iowa. The upstream incentive mechanism helps mitigate first costs for customers as a barrier to program participation, increases simplicity in purchasing high-efficiency lighting for customers, and is offered year-round.

IPL partners with retailers throughout its service territory to offer program-discounted compact fluorescent lamps (CFLs) and light emitting diode lamps (LEDs), and to promote the program to customers. Product discounts are applied at the point of sale. IPL works with an implementation contractor to negotiate and coordinate with manufacturers and retailers, develop and lead promotional efforts, provide training and other on-site support to participating retailers, and report sales data.

2.3.2. Successes

- Be Bright achieved electric energy savings of 37,376,382 kWh, or 413 percent of goal, and sold more than 710,000 bulbs, or 102 percent of goal.
- The program mix consisted of 88 percent CFL bulbs, 8.2 percent LED bulbs, and 3 percent LED fixtures. Approximately 711 retail store locations in Iowa participated in Be Bright promotional activities.
- More than 1,000 retail sales associates received training on the benefits of replacing incandescent light bulbs with CFLs and LEDs, equipping them to convey the benefits to their customers.

- Over 3,500 point of sale signs are displayed in retail stores to educate customers and retail associates about Be Bright and to raise awareness of the benefits of energy efficient lighting.
- A total of 12 community-based events and in-store demonstrations took place in 2014 that provided significant program awareness and customer and retailer engagement.
- The website iowabebright.com was expanded to include educational videos and an event calendar highlighting in-store demonstrations and special events to enhance customers' knowledge of the Be Bright program when visiting a participating retailer.
- To ensure utility customers are provided with up-to-date information on the Be Bright promotion, a toll-free number was included on all promotional materials and advertising. In 2014, the implementation contractor call center staff answered calls from 814 IPL customers.

2.3.3. Challenges

The Be Bright program has gained significant momentum in recent years and has garnered attention from other lighting stakeholders, specifically contractors and distributors. The intent of the Be Bright program is to transform the consumer lighting market from incandescent to more efficient options of CFLs and LEDs via a retail channel-based delivery mechanism. This transformation aims to ensure that consumers are purchasing high quality, energy-efficient products. Providing continued education to customers and retailers while increasing brand awareness of the Be Bright campaign for the utility is key to implementing this transformation. IPL will continue to monitor the participation and interest from distributors to gauge program design considerations.

2.3.4. Future Steps

IPL will conduct additional outreach and education with customers and retailers in 2015 with more special events and in-store demonstrations. Value added promotional events (events in conjunction with media buys at no additional charge to IPL) plus paid media and social media campaigns will be enhanced and expanded in an effort to educate customers on LEDs and efficient lighting technologies.

2.3.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/bebright

iowabebright.com

2.4. Appliance Recycling

2.4.1. Description

This program is a service to help IPL's electric customers remove and safely dispose of their old and inefficient refrigerators, freezers and room air conditioners (collectively referred to as "equipment"). The program prevents existing primary kitchen equipment from becoming secondary equipment in basements and garages when customers purchase new units. Certified agents perform disposal of removed equipment in an environmentally responsible manner. The process involves removing chlorofluorocarbon (CFC)-based refrigerant and preparing it for reclamation or recycling and recycling various material components such as metals, foam and plastic.

2.4.2. Successes

IPL continues to utilize different avenues to promote the program. Cedar Rapids television station KCRG-TV9 featured the Appliance Recycling program, filming the shoot at the Cedar Rapids recycling facility. The story is featured on IPL's website[2] .

This program continues to deliver successful results, totaling 9,070 appliances removed from the customers' premises in 2014 including 5,726 refrigerators, 1,952 freezers and 1,392 room air conditioners.

2.4.3. Challenges

With strong participation year after year, reaching the next level of eligible customers becomes more challenging, as appliances have longer useful lives. Due to the market transformation of appliances through federal standards, IPL discontinued residential refrigerator and freezer rebates in 2013. Eliminating the refrigerator and freezer rebates also eliminated a

[2] https://www.youtube.com/watch?v=NLGg85TueUo&feature=youtu.be.

previously-utilized cross marketing program wherein IPL contacted customers who submitted appliance rebates and promoted the Appliance Recycling program for their old appliances.

2.4.4. Future Steps

IPL will continue to promote the Appliance Recycling program to electric customers through multiple venues, including the Alliant Energy Newsletter, social media, customer usage letters, on-line advertising, newspaper advertising, postcards, cross promotion with other IPL rebate programs and the website.

2.4.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/appliancerecycling

2.5. New Home Construction

2.5.1. Description

The New Home Construction program provides a unique opportunity to achieve long-term energy savings in single-family homes by capturing opportunities for improved energy efficiency during new home design and construction phases—opportunities which might otherwise be lost or become considerably more expensive to realize later. In 2014, IPL modified the performance criteria of this program, replacing the ENERGY STAR program with a Home Energy Rating System (HERS) score.

The program offered two participation options: (1) a prescriptive (measure-based) approach; and (2) a performance-based approach.

1. Option 1 is the IPL Builder Option Package (BOP), in which the builder agrees to implement energy efficiency measures from a pre-specified set of options in three categories: heating, cooling, and water heating. IPL verifies compliance through an on-site inspection before issuing a rebate payment.
2. Option 2 is the performance-based approach in which IPL uses a whole-house efficiency score (HERS) to qualify eligible homes, giving participants the flexibility to implement any of a range of measures to achieve program compliance. Under this program track, homeowners and builders choose the most appropriate energy-saving features for the home to meet the requirements for one of two performance tiers: the Advanced Performance Home and the High Performance Home. To demonstrate compliance, a Residential Energy Services Network (RESNET)-accredited professional energy rater must model the home's performance using the HERS guidelines, procedures, and tools.

2.5.2. Successes

- The program achieved 99 percent of its participation goal.

- The program rebated 518 new home construction applications, resulting in over 1 million kWh and almost 40,000 therm savings. This success is largely due to the increase in the number of homes that started building during the previous 12-24 months that completed in 2014 and finalized their rebate application.

2.5.3. Challenges

- In 2014, the State of Iowa adopted the 2012 International Energy Conservation Code (IECC) further raising the baseline energy savings threshold for the program.
- With cost-effectiveness requirements of IPL's plan, New Home Construction packaged rebates sometimes compete with individual equipment prescriptive rebates.

2.5.4. Future Steps

- IPL will continue to seek ways to maximize marketing efforts for the program in an effort to capture a larger percentage of new home starts. Additionally, IPL will be marketing to gas communities in an effort to improve participation from these communities.
- To encourage customer participation in its programs while maintaining building at high energy efficient standards, IPL introduced two bonus rebates for customers who achieve a HERS score of 50 and 45, at $300 and $600 respectively.
- IPL will continue to market the requirement of pre-registration of homes to assist in implementing its QA/QC plan.
- IPL will continue to seek opportunities to educate builders, raters, code officials, home owners, and other contractors involved with new construction; a key feature of IPL's Builder Training Conference (see 2.20).
- IPL will increase participation in Home Builder Associations in natural gas communities by making presentations on the program.

2.5.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/newhomeconstruction

2.6. Multifamily

2.6.1. Description

IPL offers a comprehensive suite of energy-efficiency services to address the unique needs of multifamily property owners, property managers, and landlords. The program targets existing multifamily buildings[3] as well as new construction of multifamily buildings. The Multifamily Program includes four components:

1. A free energy assessment (Total Property Energy Assessment or "TPEA") with direct installation of low-cost energy-efficiency measures for tenant units and common areas;
2. Prescriptive rebates;
3. A custom rebate component where recommended or warranted; and
4. A new construction rebate with incentives paid per square foot for new multifamily facilities.

2.6.2. Successes

- IPL completed 119 multifamily TPEAs compared to the plan goal of 60.
- IPL has completed an agreement with joint sharing of impacts and costs with MidAmerican Energy to install measures in IPL territory when MidAmerican Energy performs the assessment.
- IPL has been in contact with cities, builders and developers to promote its new construction portion of the program. There are several projects that pre-registered in 2014 and IPL anticipates these projects to close in the future.

[3] IPL defines multifamily as three plus units in one building shell, three stories or less, on a single lot with common space.

2.6.3. Challenges

- The ability to reach renters and owners of multifamily units has always been a challenge.
- Marketing the value of retrofit projects and investing in energy efficient upgrades continues to be difficult.
- There are situations where applying for any prescriptive rebates would allow the customer to attain a higher rebate amount than if the customer went through the Multifamily New Construction program.

2.6.4. Future Steps

- IPL went through an RFP process in the latter part of 2014, which resulted in hiring Franklin Energy to implement the Multifamily Total Property Energy Assessments program starting in 2015.
- IPL signed a performance-based contract with Franklin Energy to promote the completion and tracking of multifamily retrofit projects.
- IPL program managers continue to attend multifamily conferences and meetings to reach this audience.
- IPL will continue to look for opportunities to promote its program and educate the builders, owners and developers in the multifamily community.

2.6.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/multifamily

2.7. Low-Income Weatherization

2.7.1. Description

IPL, Black Hills Energy, and MidAmerican Energy jointly implement the Weatherization Assistance Program through the Iowa Utility Association (IUA).

2.7.2. Successes

In total, IPL provided $3.2 million to the Iowa Department of Human Rights (IDHR) to implement the program, which expended the entire funding in 2014. Weatherization assistance was provided to 1,073 customers (656 electric and 417 natural gas), saving roughly 648 kWh and 236 therms per home, for a total program savings of 424,764 kWh and 99,203 therms.

2.7.3. Challenges

The program continues to see moderate per-capita impacts, particularly on the natural gas side. In order to replace gas appliances, IDHR's energy audit must demonstrate cost effectiveness to comply with federal rules. The low current and projected cost of natural gas has reduced the cost effectiveness of replacing water heaters and furnaces. Thus, the quantity of furnaces and water heaters eligible for replacement is lower.

Low gas prices will also affect the impacts of weatherization, as heating bills will be affordable for more households. Using the heating assistance application to assess and prioritize weatherization eligibility means participation will be lower.

2.7.4. Future Steps

IPL will continue to implement the program as designed while seeking opportunities to increase energy savings attributed to this program.

2.7.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/weatherization

2.8. Low-Income EnergyWise Education

2.8.1. Description

IPL, Black Hills Energy, and MidAmerican Energy jointly implement the EnergyWise Energy Education program through the IUA. The objective of this energy education initiative is to increase energy awareness among low-income customers, thus improving efficiency and reducing their energy expenditures. All participating households receive energy education from their local community action program (CAP) agency along with a kit of energy efficiency measures[4] they can install in their homes.

2.8.2. Successes

Savings attributed to IPL customers are 1,107,248 kWh and 77,883 therms. CAP agencies distributed 4,500 EnergyWise kits statewide in 2014; 1,000 more than expected.

2.8.3. Challenges

CAP agency energy auditors have noted that the market penetration of high efficiency lighting in the homes they audit is very high. This may be the cause of low installation rates (67 percent) of the second 900 lumen CFL from the EnergyWise kits.

2.8.4. Future Steps

In 2015, EnergyWise kits will have the 13 watt CFL replaced with an LED light in an effort to increase installation rates.

2.8.5. Program Details on the Alliant Energy Website

Not applicable.

[4] Kits includes 13, 14 and 18 watt CFLs, low-flow showerhead, kitchen and bathroom faucet aerators, furnace air filter alarm, roll of rope caulk, digital thermometer, water flow measurement bag and window film kit.

2.9. Low-Income Multifamily and Institutional Efficiency Improvements

2.9.1. Description

IPL, in coordination with Black Hills Energy and MidAmerican Energy, participates in the funding of the Multifamily and Institutional Efficiency Improvements program through the IUA. The program identifies and markets energy efficiency improvements to eligible low-income multifamily properties and institutional facilities where low-income customers reside.

2.9.2. Successes

IPL had three eligible properties in its service territory receive energy audits in 2014. One property was eligible for a Multifamily and Institutional Efficiency Improvements formula rebate; however, the audit findings indicated that a prescriptive rebate was more beneficial to the customer due to the level of incentive paid.

Program promotion focused on value generation has proven to resonate with decision-makers at these properties. Lower maintenance costs, lower vacancy rates, and higher property values are examples of the messages to which the critical parties have been receptive.

2.9.3. Challenges

Low participation in the past few years led to a re-launch and improve the Multifamily and Institutional Efficiency Improvements service. Establishing new procedures for preapproval, rebate processing, and calculating impacts led to delays in rebate processing.

Identifying eligible institutional housing remains a challenge. IPL has reached out to transitional housing and other institutions to identify opportunities to reach this customer class, with little to no interest from these institutions.

2.9.4. Future Steps

The Iowa Economic Development Authority built a multifamily working group to identify synergies between public and private stakeholders in this market, including market rate and income qualified properties. IPL is a highly engaged partner and hopes to use this working group to identify, engage, and offer enhanced services to Multifamily and Institutional Efficiency Improvements qualified properties.

2.9.5. Program Details on the Alliant Energy Website

Not applicable

2.10. Home Energy Savers

2.10.1. Description

The Home Energy Savers program offers a comprehensive energy audit and installation of cost-effective energy efficiency upgrades for limited-income customers. Home Energy Savers closely mirrors the Low-Income Weatherization program. The most notable differences are that customers must have both heating fuel and electricity provided by IPL, customers are first-come, first-served, and the premises must be single-family and owner-occupied. Following a successful pilot program, Home Energy Savers expanded statewide in 2014.

2.10.2. Successes

Mid-Iowa Community Action, Inc. (MICA) continued their excellent performance in implementing Home Energy Savers, completing 78 homes in 2014. Hawkeye Area Community Action Program, Inc. (HACAP) added five homes in 2014. In its first year offering Home Energy Savers, Sieda Community Action completed energy efficiency improvements in seven homes. Other agencies took applications, but did not complete any work under the Home Energy Savers program in 2014.

Agency energy auditors relay anecdotes that customers and agency contractors are extremely satisfied with the program and further note that the agencies are thorough and professional in implementing Home Energy Savers.

2.10.3. Challenges

Some customers who receive Home Energy Savers program marketing reach out to their local CAA, however are not ultimately eligible for the program as they are below the minimum income threshold. The agencies then correctly funnel these customers into the Weatherization program, but the customers may receive a low priority number due to the federally prescribed prioritization formula. Some of these customers offer to pay the 10 percent

co-pay to remain in the Home Energy Savers program and to receive services more quickly. IPL does not allow this, as the two programs are separate and have distinctly different requirements.

2.10.4. Future Steps

The continued expansion to all agencies statewide has led to sufficient customer interest to carry agencies through most of 2015. With a few exceptions, program marketing will commence in late September or early October with agency input on the best communities to target as the best time to market is at the start of the heating season and before the state-mandated heating season moratorium begins on November 1.

2.10.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/homeenergysavers

2.11. Nonresidential Prescriptive Rebates

2.11.1. Description

The Nonresidential Prescriptive Rebates program offers a broad range of services, including information, technical audits, appliance recycling, and financial incentives in the form of rebates and financing options to encourage nonresidential customers to adopt more energy-efficient measures and practices. Customers must choose between receiving incentives or a low-interest loan on any given project. Although the program is available to all nonresidential customers, the program's focus is to provide simple solutions for the non-managed, small business customer group.

With the start of a new plan in 2014, IPL added a number of new prescriptive rebates and a few were discontinued. Changes are reflected in the Table 2.11-1.

Table 2.11-1 Prescriptive Rebate Changes

New rebates	Rebate amount
4-foot reduced wattage T8 fixture replacing T8 or T12	$4/lamp
Induction lighting fixture ≤ 75 watts	$30
Induction lighting fixture 76-180 watts	$50
Induction lighting fixture 181-250 watts	$100
Bi-level lighting fixture control	$25
HVAC tune up – AC, ASHP, chiller	$20/ton
HVAC tune up – boiler/furnace	$0.35/kBtu
Boiler vent damper	$150
Chiller pipe insulation	$2/linear foot
Hotel key card system controlling HVAC and lighting	$70/control
Hotel keycard system controlling HVAC only	$50/control
Duct repair and sealing	$0.15/linear foot
Duct insulation	$0.30/linear foot
Drain water heat transfer system	$400/water heater
Outdoor swimming pool cover	$0.50/square foot
Outdoor spa/hot tub cover	$7/square foot
Refrigeration/anti-sweat heater controls	$35
Refrigeration/scroll compressors	$70
Walk-in strip curtains	$5/square foot
Walk-in evaporator fan controller	$65
Display case night covers	$7/linear foot
ECM motors for refrigerated cases and walk-ins	$100

Table 2.11-1 Prescriptive Rebate Changes continued

Discontinued rebates
All 2-foot, U-bend and 8-foot linear fluorescents
Standard T8 and T5 linear fluorescents
Residentially-sized appliances
Windows
Hot food holding cabinets
Commercial ice makers

2.11.2. Successes

In 2014, the Nonresidential Prescriptive Rebate program delivered annual electrical energy savings of 47.1 million kWh, or 226 percent of goal.

As has historically been the case, lighting measures lead the success of electric impacts. Linear fluorescents continue to produce the greatest percentage of lighting impacts with over 25 million kWh saved. The new LED lighting rebates had a successful first-year debut with impacts of over 3 million kWh.

Air conditioning/heat pump/chiller tune-ups also had some good first-year traction, gaining impacts of approximately 70,000 kWh.

On the natural gas side, furnace and boiler tune-ups also had a good first-year showing, landing within the top five impact-producing measures.

2.11.3. Challenges

- IPL came in under expectations for natural gas savings impacts in 2014 at 65 percent of goal at 390,917 therms, even though IPL spent 150 percent of the promotional budget. The low price of natural gas continues to increase the challenge of meeting impact goals.
- IPL's 2014 lighting rebates did not include a category for LED replacement of linear fluorescents, as it was not cost-effective at the time rebates were calculated. This proved to be confusing to customers. However, as the price of LED technology continued to

come down, this rebate category was added for 2015 and should increase customer satisfaction and have a positive effect on kWh impacts.

- Lighting standards are continuously and rapidly moving as new measures become cost-effective and are added to the program while some previously cost-effective measures are eliminated due to market demand or low cost-effectiveness.
- Reaching small business customers continues to be a challenge, as it is traditionally the most difficult nonresidential group to target. Business owners are often not the building/facility owner. In addition, reaching agreement with owners on investment in energy efficiency can be difficult and time-consuming. In 2014, IPL added a turnkey small business direct install lighting program (Small Business Energy Solutions) to its business assessment program to address some of these obstacles. (See section 2.12).

2.11.4. Future Steps

IPL continues to investigate expanding the prescriptive rebate program to include new or improved measures, particularly for natural gas measures.

- Approximately 20 new equipment measures were added to this program in 2014.
- IPL added steam trap rebates to the 2015 suite of rebates with the goal of boosting natural gas impacts.
- IPL plans to continue to build on the 2014 success of the HVAC tune-up program with additional marketing efforts. In addition, measures that have matured will be eliminated from the rebate program, as markets become saturated and/or transformed.

Energy Assessments had a great year in 2014 (see section 2.12), with 32 percent of assessment customers receiving a recommendation to implement insulation and infiltration controls. IPL will be developing marketing activities in 2015 to encourage these customers to complete installation of the recommended measures.

2.11.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/iabusinessrebates

2.12. Business Assessments

2.12.1. Description

The Business Assessments Program offers free energy assessments by professional energy assessors, installation of free energy-efficiency measures (where applicable), and customer education to promote energy efficiency among IPL's nonresidential customers. Customers who participate in the Business Assessments Program may also receive:

- Information on their facility's energy performance and advice to help them prioritize investments in energy-efficiency upgrades;
- One-on-one education on energy use and conservation;
- Free, direct installation of energy-efficiency measures and enhanced incentives for installing lighting measures through the Small Business Direct Install Lighting Program; and
- A customized report that recommends and prioritizes energy-efficiency upgrades, provides a life-cycle cost analysis for recommended measures, and indicates measures that may be eligible for IPL rebates.

Recognizing the varying customer characteristics, building types, and assessment needs among IPL's nonresidential customers, the program provides three on-site assessment tracks. Assessment tracks generally target different sizes of customer facilities, with larger facilities receiving assessments that recognize more complicated energy-using equipment and building interactions. Tracks include:

- Small Business Assessment;
- Mid-Size Business Assessment; and
- Commercial and Industrial Energy Audit.

IPL also added a small business direct-install lighting program in 2014, called Small Business Energy Solutions, which offers turnkey lighting upgrades with enhanced incentives.

2.26.2. Successes

- In 2014, IPL conducted a record number of business energy assessments.
  - 1,197 small business assessments
    - 44 percent of small business energy assessments included a recommendation to pursue the Small Business Energy Solutions program for lighting upgrades
  - 84 mid-sized assessments
  - 197 large customer audits
- IPL and MidAmerican Energy Company have begun collaboration on delivery of a joint assessment report to small business customers served by both companies.
- The Small Business Energy Solutions direct install lighting program began as a pilot in 2013 in the Cedar Rapids metro area and was offered statewide beginning in 2014. The program offers turnkey lighting solutions and pays $0.14 per kWh saved directly to the electrical contractor for approved small business customer projects. This helps small business owners overcome the challenge of coming up with initial project capital.
  - 96 electrical contractors were recruited and trained to deliver the program throughout the service territory; 44 of which completed at least one project in 2015.
  - 246 small business direct-install lighting projects were completed resulting in 4.8 million kWh savings, exceeding the program goal of 4 million kWh.
  - The average incentive to cost ratio was 46 percent.

2.12.3. Challenges

Reaching small business customers—traditionally the most difficult nonresidential group to target—continues to be a challenge. Business owners are often not the building/facility

owner, so reaching agreement between these two customer segments on investments in energy efficiency can be difficult and time-consuming.

2.12.4. Future Steps

- Continue marketing efforts to emphasize the value of investing in energy efficiency.
- Work with industry organizations such as the Iowa Grocery Industry Association, Iowa Lodging Association, and Iowa Petroleum and Convenience Store Association for potential segment marketing efforts.
- Continue collaboration on joint assessments. Examine mix of direct install equipment and determine appropriate additions and changes.
- IPL will research customer segmentation to guide marketing efforts to increase insulation and infiltration measure participation.
- To increase follow through on assessment recommendations, IPL will U.S. mail hard copies of assessment reports to participants and conduct follow up phone calls.

2.12.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/business

2.13. Custom Rebates

2.13.1. Description

The Custom Rebates program promotes energy-efficiency products and practices among commercial and industrial (C&I) customers. The program's custom incentive structure gives energy users the flexibility to install a broad range of high-efficiency equipment that is not included in IPL's Nonresidential Prescriptive Rebates Program. The program also encourages customers to implement equipment optimization and/or operational and process changes that reduce energy consumption and peak demand. The Custom Rebates Program also offers incentives for new on-site combined heat and power (CHP) projects, subject to program rules.

Some noteworthy features of Custom Rebates beyond the typical incentives include:

Feasibility Studies*:*

IPL offers technical assistance and funds the cost of a feasibility study up to $15,000 in order to provide customers investment-grade estimates for energy saving projects. IPL will incent a customer 50 percent of the study cost (up to a maximum study cost of $7,500) upon acceptable completion and delivery of the study. If at least 75 percent of the recommended measures (based on energy dollar savings) are implemented within 18 months of the study date, IPL will reimburse the customer the remaining 50 percent of the study cost (up to a maximum study cost of $7,500). Projects implemented may also be eligible for an additional Custom Rebate incentive, if they meet the qualifications for the program.

Retro-Commissioning (RCx):

RCx evaluates a facility's usage and systems and identifies ways to optimize its direct digital controls (DDC) or process controls. Most improvements will be no- to low-cost operational and maintenance solutions that can significantly reduce the energy consumption of a building and will fall within a two-year payback package. These projects are not eligible for an additional Custom Rebate incentive. While individual project incentives are not paid, IPL

provides for 100 percent reimbursement of an RCx study cost (50 percent at study completion and 50 percent at implementation of the identified two-year payback package).

Building Operator Certification (BOC®):

IPL, along with Black Hills Energy and MidAmerican Energy, offers commercial and industrial customers tuition reimbursement for successful completion of BOC training and certification. The Midwest Energy Efficiency Alliance (MEEA) administers BOC program, which is a nationally recognized training and certification. The training provides building operators with enhanced skills and an industry-recognized professional credentialing. The participants' improved job skills and knowledge transform workplaces to be more energy efficient.

2.13.2. Successes

- Custom Rebate Projects: IPL achieved 117 percent of the electric program goal in 2014, with 80,413,847 in kWh savings and 206 electric projects rebated in the program.

  Natural gas projects increased this year, achieving 80 percent of the goal and generating 200,680 therm savings.
- Feasibility Studies: In 2014, 15 study proposals were pre-approved, 13 studies were completed and the customer reimbursed for the first half of the study costs. In addition, six customers who completed feasibility studies implemented the recommended energy-efficiency improvements and received reimbursement for the second half of their study costs.
- RCx: Milestones for the RCx program in 2014 include:
  - IPL completed five RCx projects resulting in 1,743,001 kWh and 14,671 therms saved.
  - Six ongoing projects are in various stages (from measurement phase to implementation) in K-12 education, hospitals, and manufacturing.
- BOC: IPL had five customers attend BOC training in 2014.

2.13.3. Challenges

Not all IPL C&I customers are able to provide internal staff with knowledge or expertise to build energy efficiency into the process and/or facility upgrades. The same is true regarding implementing energy efficiency projects identified in energy audits.

Considering the time from project inception, from study to implementation and verification, RCx and Feasibility Study projects are more involved and take longer to implement than Custom Rebate projects.

Identifying new CHP projects continues to be a challenge for IPL.

2.13.4. Future Steps

- Key Account Managers will continue to actively promote and pursue customer energy-efficiency opportunities with midsize and large commercial and industrial accounts.
- IPL will research opportunities to increase customer outreach by specific industry segments with the goal to encourage energy efficiency in markets that may currently be underserved.
- IPL will increase marketing to small and mid-size manufacturing facilities which constitute a significant opportunity for energy efficiency savings.
- IPL will continue to enhance Custom Rebate programs through additional promotion of the value of energy audits, Feasibility Studies and RCx projects.
- IPL identified one potential CHP project early in 2014 and continues to work with the customer on the project
- IPL is continuing its efforts to train Key Account Managers and develop marketing materials.
- IPL continues to host its annual Energy Summit Conference and Awards event, promoting its C&I programs through industry speakers, vendor booths, customer testimonials and recognition of top performing projects.

2.13.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/customrebates

2.14. Commercial New Construction

2.14.1. Description

The Commercial New Construction (CNC) program's objective is to capture potentially lost opportunities to reduce electric demand and energy usage in the commercial and industrial sector by providing customers with energy design assistance for the construction of energy-efficient buildings and facilities. The program offers multi-tiered incentives, consisting of Energy Design Assistance (EDA), Design Team Incentive (DTI), and Construction Incentive. This program, administered by The Weidt Group (TWG), is uniquely designed and implemented as a joint utility effort between IPL, MidAmerican Energy and Black Hills Energy.

The program offers multiple tracks to achieve the goals of deeper savings per project and reaching a wider market:

- Track I – This track is an option for targeting construction of commercial buildings with a minimum of 5,000 square feet up to 15,000 square feet in size that are primarily design/build or design/bid/build construction.
- Track II – This track targets buildings larger than 15,000 square feet that are straightforward in design and may be on a faster design schedule. Track II provides evaluation of efficiency options for one type of mechanical system solution.
- Track III – This track is used for projects meeting early design assistance qualification criteria with enough time to integrate new ideas and strategies into the design. Buildings designed in this track are typically modeled to achieve energy savings 30 to 40 percent greater than required by state building code.
- Track IV – This track helps building owners or developers achieve energy savings of 40 to 60 percent better than the state building and includes certification support for LEED, ENERGY STAR, and other related initiatives.

2.14.2. Successes

- Marketing efforts have yielded increases in applications and project starts over the prior year. The CNC program is unique in that projects started in the calendar year generally yield energy impacts in the following two years because of design and construction cycles. Applications in IPL service territory in 2014 increased by 75 percent from the previous year, up from 40 to 70 applications. While not all applications convert into projects, this trend shows more owners and design teams are submitting projects for consideration.
- There were 33 projects started in Tracks II – IV in 2014 compared to 26 in 2013. This is a 27 percent increase over the previous year.
- The CNC program Tracks II - IV reached a record number of retail sector participants in 2014. The retail sector has been a traditionally challenging market and the year 2014 showed a 333 percent increase in participants. Completed retail projects rose to 13 from 3 in the prior year.
- Marketing efforts will continue to support the growth in applications and projects starts as well as targeted marketing to reach sectors.

2.14.3. Challenges

From the start to energy design assistance to construction completion and verification, CNC projects take 15 to 20 months on average. Due to this long timeframe, marketing initiatives often result in impacts lagging one or two program years behind.

2.14.4. Future Steps

- IPL will continue its individual marketing efforts to capture a greater share of construction projects in its territory.
- TWG offers educational seminars for design professionals statewide and year round.

- TWG is working on preparing market-segment fact sheets specific to: primary education (K-12), healthcare, retail and office segments to further marketing efforts.
- IPL continues to collaborate with the other IOUs and TWG by promoting the CNC Excellence in Energy Efficient Design awards at the annual convention of the American Institute of Architects, Iowa Chapter.

2.14.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/cnc

2.15. Agriculture Sector Program

2.15.1. Description

The Agriculture Sector program helps IPL's farm and agribusiness electric customers improve their overall energy efficiency and reduce production costs. The program provides a comprehensive range of energy efficiency incentives to agricultural customers via a suite of products, including agriculture-specific prescriptive rebates, custom rebates, free farm energy audits and online energy savings calculators. The program also provides incentives to trade allies who sell and install energy-efficient farm equipment.

IPL also works with customers completing loan and grant applications for new equipment upgrades through state and federal energy efficiency programs including the USDA Rural Energy for America Program (REAP), the National Resources Conservation Service EQUIP program, and others as they become available. This outreach effort seeks to inform customers about rebates available for the equipment they are considering.

2.15.2. Successes

- In 2014, IPL achieved 260 percent of the demand goal and 243 percent of the kWh savings goal.
- 466 customers participated in the program with increases in lighting and ventilation projects.
- Improvement in livestock business for agricultural customers in 2014 and particular interest in LED lighting contributed to the program's success in exceeding goals.

2.15.3. Challenges

- Manufacturers, equipment suppliers, and builders are the keys to success of the IPL agriculture program. Communication efforts to keep these participants involved and offering the most efficient equipment is an ongoing challenge.

- Marketplace fluctuations are difficult to project in determining how different agriculture segments will be willing or able to participate in the IPL agriculture program.
- Lack of agriculture sector LED bulb and fixture certifications, such as ENERGY STAR or Design Lights Consortium, is a challenge to assure customers of energy savings value.

2.15.4. Future Steps

- IPL will continue to promote its Free Farm Energy Assessment as a way to interest customers in energy efficiency opportunities.
- IPL will continue to promote its programs to agriculture-related Energy Efficiency Dealers.
- IPL will continue its focus on education of agriculture-based energy efficiency and safety.
- IPL will continue to promote the advantages of energy efficiency to the grain and livestock sectors as a cost reduction tool during times of unpredictable profit margins.
- In response to the lack of agriculture-specific LED lighting products currently rated by either ENERGY STAR or Design Lights Consortium, IPL has established an internal approval process working with its technical advisor, Cadmus, to evaluate new LED products for rebate eligibility. Additionally, IPL is working with a statewide collaboration team to address this topic between all investor-owned utilities.

2.15.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/ag

2.16. Non-Targeted Energy Awareness and Information

2.16.1. Description

Now more than ever, customers are engaged in energy efficiency. Concerns about global warming and the effect of increasing energy prices have generated significant interest in tools and methods for saving energy. IPL's non-targeted Energy Awareness and Information initiative includes the following components:

PowerHouse

For 18 years, Alliant Energy has produced PowerHouse, an educational television program that focuses on energy efficiency for the home. Airing once a week on stations across the service territory, the program offers useful tips on improving home energy use through more efficient heating, cooling, lighting and more. In addition to the television program, PowerHouse also has a website that provides supplemental articles, energy-related facts, energy savings calculators and links to other informational websites.

Speakers Bureau

IPL also supports a Speakers Bureau, a collection of knowledgeable IPL staff who are available to give presentations for groups and organizations that are interested in energy efficiency. Topics of interest include renewable energy, energy conservation, the environment, rates and energy generation. The presentations are tailored for all types of audiences and are presented in a manner that is understandable to lay people. Presentations are made to civic organizations such as the Rotary and Kiwanis Clubs, schools and to staff at businesses.

Renewable Information and Technical Assistance

IPL will continue to educate customers on the benefits, site requirement, and the costs of renewable generation systems, thus enabling customers to make informed decisions prior to installing a system.

2.16.2. Successes

- Through the Speakers Bureau program, IPL spoke at seven different events throughout the service territory.
- IPL continues to update and enhance the PowerHouse website to improve usability and searchability on the site. PowerHouse videos are posted on YouTube to provide greater accessibility for customers. Currently, more than 300 PowerHouse videos are available on YouTube.
- IPL has a Facebook fan site and a Twitter account for the PowerHouse TV show to continue to increase the accessibility of energy efficiency information. Approximately 1,000 people follow PowerHouse on Facebook and 223 Twitter subscribers receive our tweets as of April 29, 2015.
- In 2014, IPL worked to leverage and integrate social media with traditional outreach methods through Facebook and Twitter advertising, which encourages users to like/follow the accounts and directs the targeted audience back to the PowerHouse website.
- Social media engagement has consistently been above average through the past year with the use of interactive content and post engagement ads, which reach targeted audiences.
- IPL produced six new PowerHouse TV shows in 2014 that included topics such as ductless mini-splits, smart homes, and the lighting facts label.
- IPL held a quarterly editorial meeting with a cross-section of IPL staff to develop show content, discuss ideas and potential new technologies to feature.
- Along with sponsorship and support of renewable events, IPL continues to maintain the renewables information page and staff from the Distributed Generation Hotline are available to assist customers with questions.

2.16.3. Challenges

IPL continues to work towards understanding how to best boost and integrate social media with traditional outreach methods as effective delivery channels for energy-efficiency information.

IPL finds that the Twitter audience is less likely to respond to ads encouraging more Twitter follows than Facebook users. IPL's Twitter audience has lagged behind the Facebook audience, so it continues to work to engage this audience.

IPL has been incorporating more questions that are open-ended in posts to help raise engagement and interactions with its pages, but responses can be inconsistent.

2.16.4. Future Steps

IPL continues to analyze how effectively incorporate social media into the PowerHouse and renewable outreach to best provide information to customers in a useful and timely manner.

2.16.5. Program Details on the Alliant Energy Website

Detailed information about these programs can be found at:

- powerhousetv.com
- alliantenergy.com/speakersbureau
- alliantenergy.com/sellmypower

2.17. School-Based Energy Education

2.17.1. Description

IPL currently offers two school-based energy education initiatives: Alliant Energy Kids and LivingWise®.

Alliant Energy Kids

Through classroom curriculums, fourth and fifth grade students learn about the science of electricity and natural gas, the importance of conserving energy, and the relationship between energy and the environment. The program includes lesson plans and access to an education-rich publication, “The Energy Zone”, along with online games that enhance energy awareness and education. Teachers can order the 12-page student publication each fall for each student they teach. The lesson plans, online games, and activities to do at home or school can be found online.

LivingWise

LivingWise is a school-based energy education initiative for middle-school aged students. This hands-on approach to energy efficiency education and home energy use was implemented in several IPL communities. Each participating student receives a kit with low-cost measures, such as a low-flow showerhead, CFL and faucet aerator. The curriculum is designed for middle school-aged children with in-class and at-home assignments. Program goals are:

- to increase knowledge and awareness of energy production and use;
- to promote adoption of resource-saving actions; and
- to familiarize students with the contents of the energy-saving kit and encourage the installation of those measures in students’ homes.

The LivingWise program educates young people about energy-efficient behaviors and tools while providing immediate savings for families. During the 2013-2014 program years, IPL saved approximately 2,705,098 kWh and 139,891 therms through the LivingWise program.

2.17.2. Successes

- The LivingWise program continues to be implemented in collaboration with Black Hills Energy in shared communities.
- The Alliant Energy Kids program increased in the number of teachers and students it reached during the 2013-2014 school year; 215 teachers and 11,585 students in Iowa participated in the program.
- IPL developed a virtual field trip that is available to view on the alliantenergykids.com website as another resource to teach kids about energy efficiency.

2.17.3. Challenges

Teachers continue to be limited in their classroom time. It is challenging to provide resources that teachers will use to teach energy education in the classroom.

When IPL filed the savings targets for this program, it used a 2 percent savings estimate on heating and cooling consumption, based upon the Department of Energy's (DOE) calculations. However, in 2014, the DOE lowered its saving estimate to 1 percent, resulting in a reduction of kWh and therms behavioral savings for this program. This adjustment will continue to be a challenge for savings attainment during the five-year EEP.

2.17.4. Future Steps

After four years of successful implementation, IPL is planning to redesign The Energy Zone and update its look and content.

Due to the popularity of smartphones and tablets, IPL is planning to develop an app that students can download, as well as updating current online games that will complement and enhance the other energy efficiency resources that are part of Alliant Energy Kids.

IPL is developing a School Energy Challenge to be a pilot for the 2015-2016 school year. The program will be an enhancement to the existing LivingWise program. The focus will be to create a fun, interactive challenge amongst participating schools by creating competition amongst schools, teachers, students, and their families.

Since some teachers found it challenging to implement the two-week LivingWise program, IPL and its vendor created an optional five-day teaching unit plan based on feedback.

2.17.5. Program Details on the Alliant Energy Website

Detailed information this program can be found at:

- alliantenergy.com/schools
- alliantenergykids.com

2.18. Tree Planting

2.18.1. Description

IPL offers three tree-planting programs in an effort to expand outreach and education on the energy efficiency impacts trees can offer.

1. Branching Out – This community-based planting program offers grants between $1,000 and $10,000 for projects involving parks, nature trails, schools, libraries and other community projects.
2. Operation ReLeaf – This is a residential planting program that gives IPL residential customers the opportunity to purchase landscape trees at a discounted price, offers energy-efficient tree planting tips, and provides education on how to plant a tree correctly.
3. Storm Funds – This is a residential and community planting program aimed to assist in recovery from natural disasters and to offer educational programs on the energy efficiency of trees.

2.18.2. Successes

- There were five new communities receiving Branching Out funds in 2014 that had not applied to the program before: Hazelton, Rudd, Wyoming, Bertram and Rolfe.
- Branching Out awarded 55 grants to communities resulting in 3,028 trees planted.
- One new county and three new partners hosted an Operation ReLeaf event in 2014 that had not hosted an event before. Those locations included Bremer County, City of Hiawatha, City of Storm Lake and SWCD (Soil and Water Conservation District) in Jones County. 2,187 customers participated in Operation ReLeaf with 4,705 trees sold.
- IPL did not have any communities apply for Storm Funds in 2014.

2.18.3. Challenges

It is challenging to ensure customers have the needed resources to plant and properly care for the trees once they leave the educational planting demonstration.

2.18.4. Future Steps

- IPL will continue to update customer-targeted materials showing the benefits of planting and caring for trees.
- IPL will continue to offer Tree Planting and Care Workshops during some Operation ReLeaf events to ensure customers have the knowledge to properly plant and care for the trees they purchased.
- IPL will place both spring- and fall-confirmed Operation ReLeaf locations on the Alliant Energy website in the beginning of the year so customers can make an informed decision on which event they want to attend.

2.18.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

- alliantenergy.com/branchingout
- alliantenergy.com/releaf

2.19. Hometown Rewards

2.19.1. Description

Hometown Rewards encourages participating communities to promote energy efficiency, environmental responsibility, renewable energy optimization and responsible growth on a community-wide basis. Hometown Rewards is a delivery channel for IPL's existing energy efficiency programs. IPL supports community efforts using energy-efficiency incentives for meeting community goals.

The Hometown Rewards program achieves the following goals:

- Maintains a strong educational component;
- Offers the program in multiple communities at a time;
- Assists communities in attainment of energy-efficiency and sustainability goals;
- Provides a delivery channel for energy efficiency programs; and
- Simplifies the program for participants, while ensuring the program is robust enough to have a significant impact on program participants.

Hometown Rewards also attempts to leverage the power of social norms to affect behavior change in the partner communities to generate excitement about the community's energy efficiency and sustainability initiatives.

2.19.2. Successes

- North Liberty completed the Hometown Rewards program in 2014. The community received 100 percent of its potential reward, achieving 101.7 percent of its energy reduction goal
- Oelwein enrolled in Hometown Rewards. At the end of 2014, two thirds of the community's Hometown Rewards goals were tracking at or above expectation.

2.19.3. Challenges

- It is challenging to keep community volunteers engaged in the effort over a period of two years.
- Due to the lack of local community resources needed to implement the program, it is difficult to recruit communities to expand the program.
- While IPL does not require heavy involvement of city government in Hometown Rewards participating towns, there is still a minimum expectation of participation. Overcoming the perception that any participation by city government constitutes a heavy burden remains a challenge to recruiting new communities.

2.19.4. Future Steps

- Newton will be the next community participating in Hometown Rewards beginning in 2015. IPL and Black Hills Energy will collaborate to set energy savings and participation goals for Newton. Both utilities will also be contributing to Newton's funding pool.
- IPL will continue to recruit Hometown Rewards partner communities jointly serviced with other utilities.
- IPL will recruit communities to participate in Hometown Rewards via direct appeal to community leaders in eligible IPL-serviced towns. .

2.19.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/hometownrewards

2.20. Builder Training

2.20.1. Description

IPL trains builders on energy efficient building practices, meeting building energy codes, and IPL's new construction programs. IPL collaborates with a range of building stakeholders and industry groups to conduct training and education sessions.

The primary feature of the Builder Training Program is IPL's Builder Training Conference, which consists of a one-day training offered in various locations around the state. The conference targets residential homebuilders, HERS Raters, realtors, and other contractors (e.g. HVAC, plumbers, electricians, framers, insulators and foundation specialists) to help them understand and comply with energy-efficient building codes. The conference also focuses on the technologies, tools, and strategies associated with a whole-house building approach.

2.20.2. Successes

The 2014 Builder Training Conference introduced a revamped format to maintain past attendee interest and generate new participation. IPL designed breakout sessions and added a keynote speaker to the conferences. IPL continued its partnerships with co-sponsors MidAmerican Energy and Cedar Falls Utility to promote the new format and venues. Additional successes include:

- Record attendance, with each venue breaking the previous venue's attendance record.
- 94 percent of conference survey respondents stated that they are inspired to build more energy efficiently after participating in this year's conference.
- 90 percent of people who replied to the survey said they are "likely" to attend the Builder Training Conference again next year.

- IPL collaborated with co-sponsors MidAmerican Energy and Cedar Falls Utility to offer the program to customers in their respective service territories, furthering the reach of this training effort across the state of Iowa, while sharing some of the costs amongst the three utilities.

2.20.3. Challenges

- IPL will continuously identify the best venue locations around the state, and the ideal number of conferences to appeal to various customer territories and to generate the largest customer turnout.
- IPL seeks ways to keep the materials relevant by soliciting feedback from the professionals, builders and trade allies who participate in the training.

2.20.4. Future Steps

- IPL has reformatted the Builder Training Conference to target larger audiences in less locations across the state, introduce the concept of breakout sessions and a keynote speaker, and promote more hands on and visual demonstrations.
- IPL will continue to collaborate with stakeholders and dissect customer feedback to identify any changes or modify the program materials, and create an atmosphere of energy efficiency and value in its Builder Training Conference.
- IPL will continue to extend the offer to collaborate with other utilities to offer the program in other utility territories to encourage further training on building energy efficiency and energy codes.
- IPL will be researching the benefits and costs of offering continuing education credits for the event.

2.20.5. Program Details on the Alliant Energy Website

Additional information can be found at:

alliantenergy.com/buildertraining

2.21. Energy Efficiency Dealer Network

2.21.1. Description

IPL places a high priority on building strategic relationships with dealers and trade organizations that are in a position to sell or upgrade mutual customers to high-efficiency equipment and/or measures. Additionally, a quality installation is an important factor in the level of savings achieved when energy-efficient equipment is installed in a home or business. Educating contractors on proper installation techniques will help ensure customers receive the maximum benefit for their energy-efficient investment. Participants in IPL's Energy Efficiency Dealer Network fall into the following two categories:

1. **Energy Efficiency Associate:** This includes individuals and organizations that support IPL products and services. Trades targeted for the Energy Efficiency Associate status are bankers, realtors, architects, engineers and wholesale distributors and manufacturers.
2. **Energy Efficiency Dealer:** To become a dealer in the Energy Efficiency Dealer Network, dealers, contractors and builders must:
   - do business in the IPL service territory;
   - be involved in the sale or installation of energy-efficient comfort equipment, lighting, building shell measures, replacement windows, other energy-efficient equipment; or
   - be involved in the building of energy-efficient homes deemed eligible for IPL customer incentives, as well as meet insurance and participation guidelines.

2.21.2. Successes

- In December 2014, IPL posted a webinar on its dealer website which detailed all of the rebate and program changes planned for 2015. IPL included this same information in its

dealer newsletter and a post card mailing directing dealers to the website for more information.

- IPL redesigned the monthly electronic newsletter to communicate with all participants within the Energy Efficiency Dealer Network, putting a focus on the dealer and issues and measures.
- IPL paid $895,721.97 in incentives to dealers for promoting IPL's rebated energy efficiency equipment.
- IPL signed up 72 new dealers in Iowa for the Energy Efficiency Dealer Network in 2014, bringing the total number of active participating dealers to 1,505.

2.21.3. Challenges

- IPL will work to establish effective ways to communicate the benefits of membership in the IPL Dealer Network.
- IPL will continue to find effective ways to communicate and reach trade allies with updated program information in a way that is meaningful to all the different trade specialties.

2.21.4. Future Steps

- Through the 2015 EMV efforts, IPL will be evaluating the effectiveness of its current Dealer Network. IPL will use this information to consider program improvements and changes.
- IPL will continue to research effective ways to communicate program updates to its dealers.

2.21.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, incentives, and other participation criteria can be found at:

alliantenergy.com/dealers

2.22. Bright Ideas

2.22.1. Description

The mission of the Bright Ideas program is to stimulate grass roots enthusiasm for and innovation of energy conservation and efficient use of electricity, natural gas, and renewable resources in Iowa homes, farms, businesses, and government-owned buildings. The Bright Ideas program provides organizations the opportunity to design and implement their own energy efficiency and/or renewable outreach educational programs.

2.22.2. Successes

IPL received two applications in 2014 and funded one project:

- RAGBRAI Solar Powered Mobile Device Charging Stations – As riders participating in RAGBRAI move across Iowa, there are few opportunities to recharge mobile phones or other devices. RAGBRAI sought a solution for these riders by providing a portable, solar-powered charging station that would move across the state with riders. RAGBRAI purchased two Engo Portable Charging Stations, funded by a Bright Ideas grant. The grant funding for this project was $20,000.

2.22.3. Challenges

Some projects are more suitable for exploration under IPL's Research, Development and Demonstration program than in the Bright Ideas program with community or grass roots organizations.

2.22.4. Future Steps

- IPL will expand its target market for Bright Ideas to include high schools, colleges, universities, and other inventor and engineering groups.

- IPL will establish a Bright Ideas presence at Iowa Science, Technology, Engineering and Mathematics (STEM) events to network with teachers and schools.
- IPL will continue to investigate ways to measure, verify and report potential impacts of Bright Ideas projects.

2.22.5. Program Details on the Alliant Energy Website

Detailed information on eligibility and other participation criteria can be found at: alliantenergy.com/brightideas

2.23. Research, Development and Demonstration

2.23.1. Description

As part of its continuous improvement process, IPL looks for opportunities to enhance its programs by offering new technologies, improving its delivery mechanisms, and incorporating new market intelligence into its Plan. This program is a mechanism to test promising new technologies and program approaches on a pilot basis.

IPL agreed to explore the following potential programs that show promise for the delivery of energy savings and/or enhancing its customer service offerings:

- Data centers
- Behavior change – residential and nonresidential
- Efficient vehicles
- Transmission and distribution (T&D) optimization and loss reduction

2.23.2. Successes

Packaged Retrofit RTU Kit Pilot

IPL recruited six customers for the Advanced Rooftop Unit Controls pilot, covering four customer segments. There were 61 total units retrofitted with a packaged control system. These retrofitted controls incorporate the following functions: demand controlled ventilation, variable speed drives, integrated economizing and variable volume operation.

Based on preliminary findings, the estimated installation cost per unit would be about $6,000. This includes the cost to fix deferred maintenance issues with these units, including but not limited to, air filter changes and damper/damper actuator repairs.

Preliminary electrical savings average 60 percent of annual rooftop unit consumption, or approximately 20,000 kWh and 1.2 KW (summer peak) savings per unit. Note that this

represents only two of the six pilot facilities, as data collection is still ongoing for the remaining four.

The pilot indicates that this technology has the potential to be offered as a prescriptive measure. A larger sample may be required to gain confidence in the impacts for typical installations. This technology could be offered as a custom measure initially and converted to a prescriptive one in future Plan years. Energy savings can be averaged by unit for the climate zones in the IPL service territory and an algorithm for impacts claimed may be created. The technology is readily available in the service territory, thereby providing accurate cost estimates for the customer.

Data Center Potential Study

IPL issued an RFP and selected CLEAResult to conduct the potential study. The study was completed in October 2014 with a recommendation that IPL proceed with a short-term pilot program conducted within a specific geographic area.

IPL will offer a data center energy efficiency pilot program primarily focused on the Cedar Rapids metro area beginning in April 2015 and concluding December 31, 2016 with a savings goal of 4 million kWh. As per discussion with Stakeholders, IPL will accept pilot participants beyond the Cedar Rapids metro area.

Behavior Modification Pilot

In 2014, IPL selected CLEAResult to design and implement the behavioral pilot with 40,000 electric, natural gas and/or combo residential customers.

The pilot implementation will begin after IPL's new customer information system is operational, anticipated in early 2016 and will run for 12 months. The pilot will include both paper Home Energy Reports and an online customer portal.

2.23.3. Challenges

Behavior change - nonresidential

IPL experienced participation challenges in the first Sustainability Pilot Program in Marshalltown. Although IPL anticipated starting in March of 2013, the pilot struggled to recruit an acceptable number of participating companies. . IPL expanded the geographical scope of this program to include other communities besides Marshalltown to get the pilot underway, which did not start until October of 2013.

Due to the timing of the launch, the Sustainability Pilot Program was completed in March 2014. Accordingly, project results are not expected for another 6-18 months. IPL will update stakeholders on results in future collaborative meetings and Annual Reports.

2.23.4. Future Steps

- IPL will continue its implementation plans for the Data Center Pilot, the Residential Behavior Modification Pilot and the Nonresidential Sustainability Pilot.
- IPL will continue to explore pilot opportunities for electric vehicles and T&D optimization and loss reduction during its five-year EEP.

2.23.5. Program Details on the Alliant Energy Website

Not applicable

2.24. Residential Direct Load Control (DLC)

2.24.1. Description

The DLC program operates during the peak summer season, from May 15 to September 15. During a cycling event, IPL sends a signal to a participant's air conditioner switch. The air conditioner switch cycles for 15 minutes out of every half hour, and then returns the unit's compressor controls to the individual's thermostat control for the other 15 minutes of the half hour. Participant water heaters are turned off for the duration of the cycling event. A typical cycling event lasts six hours (1 p.m. to 7 p.m.) and, except in the case of a system reliability concern, would never occur on weekends or holidays.

The DLC program operates under two decision rules. The first decision rule is in response to system reliability issues. System reliability issues may include, but are not limited to: a Midcontinent Independent System Operator, Inc. (MISO) directive; congested transmission; and when sufficient generation is unavailable to meet consumer demand. The second decision rule is based on energy efficiency when events are triggered by temperature forecasts.

2.24.2. Successes

- IPL added a net 828 new customers and 954 additional devices over the 2014 season, adding another .97 MW to its MW of demand reduction.
- As of December 31, 2014, 51,096 customers have enrolled in the program. This includes 49,873 central air-conditioning units and 7,987 electric water heaters, totaling 57,860 appliances.
- With testing, switch upgrades and replacements, IPL will be able to achieve approximately 41.5 MW of demand reduction by the end of 2015.

Table 2.15-1 2014 DLC Events[5]

Events		Forecasted High Temperature (°F)			Available AC units			Available kWh and MW load	
Date	**Zone**	**S**	**C**	**N**	**South**	**Central**	**North**	**kWh**	**MW**
No Cycling Events		Temp triggers not met			5,248	20,309	23,461	51,923	39.04
2014 Total Annual Energy Savings								**0**	

2.24.3. Challenges

- With the cooler summer in 2014, there were no cycling events called. None of the three cycling regions met their temperature triggers during the entire summer.
- Rising costs of transmitter towers throughout the Iowa territory continues to be a challenge.

2.24.4. Future Steps

- In 2015, IPL will begin its second round of the maintenance program to check all of the switches installed in its electric territory and replace those not functioning properly. This process will take approximately five years to complete; 2015 will be year one of five.
- IPL will continue to research the feasibility of offering DLC on additional technologies as DLC implementation devices evolve.

2.24.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/appliancecycling

[5] All events start at 1:00 p.m. and end at 7:00 p.m. for a cycling event period of six hours.

2.25. Nonresidential Interruptible

2.25.1. Description

This program provides IPL with flexible peak demand response resources and offers large commercial and industrial customers the opportunity to reduce power during critical system peak conditions or high market prices. In return for reducing power when called upon to do so, IPL program participants earn incentives in the form of bill credits.

The Interruptible program is a mature and successful program. It has proven to be a reliable resource, providing IPL with a flexible means to manage its peak load. By reducing consumption during periods of high demand on the electric grid, program participants enable IPL to provide reliable, consistent service to all customers.

2.25.2. Successes

- IPL called five test curtailment events in 2014 over five days: August 7, 19 – 22.
    - Each customer participated in one test event.
- See Table 2.16-1 below for summer weather data.
- The 2014 curtailment events are detailed in Table 2.16-2.
- IPL added eight customers and removed five customers, netting a gain of three customers in 2014, for 174 participants.

Table 2.16-1 Weather Comparison[6]

Weather Parameters (May 15 – September 15)	2009	2010	2011	2012	2013	2014	30-Year Average
Cooling Degree Days (base 70° F)	110	381	417	726	524	347	359
Days >= 90° F	4	2	14	33	15	1	n/a
Weekdays >= 90° F	3	2	13	27	12	0	10
Weekdays >= 95° F	0	0	2	12	6	0	n/a

Table 2.16-2 Summary of Curtailments

Curtailment Detail	Thu 08/07/14	Tue 08/19/14	Wed 08/20/14	Thu 08/21/14	Fri 08/22/14
Total Number of Enrolled Customers	170	171	171	171	171
Total Interruptible Load	267 MW	268 MW	268 MW	268 MW	268 MW
Start Time	2 PM	3 PM	3 PM	3 PM	3 PM
End Time	4 PM	5 PM	5 PM	5 PM	5 PM
Decision Rule Condition[1]	4	4	4	4	4
Number of Customers Called	8	7	12	77	71
Buy Through Available?	No	No	No	No	No
Number of Customers Who Selected Buy Through	N/A	N/A	N/A	N/A	N/A
Targeted Potential Reduction	1 MW	17 MW	33 MW	102 MW	108 MW
Bought Through (less)	0	0	0	0	0
Curtailment Achieved[2]	1 MW	17 MW	33 MW	102 MW	108 MW

1 Decision Rule 1 = Reliability
Decision Rule 2 = Energy Efficiency-Reducing Peak Demand
Decision Rule 3 = Energy Efficiency-Reducing Energy Usage
Decision Rule 4 = Program Quality Control (system test)
2 Curtailment Achieved = Targeted Potential Reduction (MW) minus Bought Through (MW)

2.25.3. Challenges

Cooler weather during the 2014 summer resulted in no curtailments other than a test interruption for the program year.

[6] As recorded at Cedar Rapids, Iowa, Airport. Data retrieved from commercial provider, Weather Underground. Cooling days provided by www.degreedays.net.

2.25.4. Future Steps

IPL will continue to promote the program and its benefits to qualifying customers under the electric tariff.

2.25.5. Program Details on the Alliant Energy Website

Detailed information on eligibility, measures, incentives, and other participation criteria can be found at:

alliantenergy.com/interruptible

2.26. Legislative Assessment

The Legislative Assessment program is the budget allocated for two legislatively authorized programs: Iowa Energy Center (IEC) at Iowa State University and the Center for Global and Regional Environmental Research (CGRER) at the University of Iowa.

2.27. Evaluation, Measurement and Verification

Evaluation, measurement, and verification (EMV) provides the means to ensure effective program operation and the reliability of the Plan's program savings and cost- effectiveness. In July 2014, IPL issued a Request for Proposal (RFP) for an independent evaluation of its five-year Plan. Through a competitive bid process, Itron, Inc. was selected as the consultant to conduct this study. The RFP included both process and impact evaluation objectives. The process objectives will assess program activities in order to provide specific recommendations. The impact evaluations are designed to validate IPL's energy savings impact results. Throughout the EMV, Itron, Inc. will work with IPL to identify and address program-specific challenges and successes, both from a process and impact perspective.

IPL will provide final EMV plans by program as they are completed in the spring of 2015 as well as draft EMV reports in the fall of 2016 to the Board, the OCA, and other interested Parties to the EEP. IPL anticipates completion of the final EMV report for the energy efficiency and demand response programs in the first quarter of 2016. IPL anticipates the full evaluation of the renewable energy program to be completed by fourth quarter 2015.

2.28. Next Plan

This program is the budget item to provide the funding to develop IPL's Plan for the program years 2019 through 2023. This includes budget amounts for the years 2014 through 2018. There are no impacts or program descriptions associated with this program. Amounts reported as "actual" spending for this program in 2014 and later years may include expenditures to implement the 2014-2018 Plan that cannot be assigned to specific programs.

2.29. Renewable Energy Portfolio (suspended)

IPL's Renewable Energy Portfolio Pilot (Pilot) programs provided cash rebates to residential and nonresidential customers across IPL's service territory who purchased, installed and operate onsite renewable energy generating systems, including wind, solar photovoltaic (PV), and solar thermal water heating. In addition, IPL offered nonresidential rebates for anaerobic digestion or biomass for combined heat and power (CHP) applications that use a 100 percent renewable fuel source.

The Pilot was initially included in IPL's 2009-2013 EEP. The Board in its December 2, 2013 Order, suspended the part of the renewable energy program that pays incentives to customers for renewable installations but directed IPL to continue offering information and technical assistance for renewable projects as part of its outreach, education and training program. IPL was allowed to incent projects in the pipeline at the time of suspension pursuant to the renewable program guidelines.

IPL reports that in closing out the pipeline of eligible projects, 1,088 projects resulted in 14,275 kW savings, 22,975,427 kWh savings and 147 therms during the 2014 program year at a cost of $15,614,437.

Table 2.29-1 Summary Tracking Participation – January 1- December 31, 2014

Customer/Technology Type	Completed EE Audit	Completed Site Assessment	Submitted Interconnection Agreement	Installed Equipment and Received Rebate (finished program)
Residential Solar PV	385	425	222	603
Residential Solar Thermal	3	5	N/A	2
Residential Wind	0	1	1	2
Nonresidential Digester	0	0	0	1
Nonresidential Solar PV	315	324	297	474
Nonresidential Wind	1	1	2	6

Table 2.29-2 Summary Customer Characteristics and Qualification and Installed Measures

Customer/Technology Type	Energy Efficiency (EE) Criterion Met	Cost-Effective EE Measures Recommended	Cost-Effective EE Measures Installed	Impact of EE Measures (kWh)	Impact of EE Measures (therms)	Direct Install Savings (kWh)	Direct Install Savings (therms)	Project Energy Savings	Totals of Project Sizes (kW)
Residential Solar PV	597 Yes; 6 No	120 Yes	118 Yes	105,460	19	241,528	114	5,901,202 kWh	3,820
Residential Solar Thermal	N/A[7]	N/A	N/A	N/A	N/A	1,077	0	5,381 kWh; 148 therms	1
Residential Wind	2 Yes	0 Yes	0 Yes	0	0	372	0	83,495 kWh	40
Nonresidential Digester	N/A[7]	N/A	N/A	N/A	N/A	0	0	1,323,900 kWh	600
Nonresidential Solar PV	464 Yes; 10 No	303 Yes	296 Yes	1,273,439	487	196,650	16	15,283,554 kWh	9,677
Nonresidential Wind	4 Yes; 2 No	3 Yes	1 Yes	4,867	0	426	0	377,895 kWh	136

IPL will provide a full evaluation of the Pilot for the years 2010 through 2013 (including the projects paid in 2014) in a report to the Board that will be filed in late 2015 in compliance the December 2, 2013 Board Order.

[7] Digester and Solar Thermal measures did not have an EE rebate tier.