

March 6, 2013

IOWA UTILITIES BOARD

EEP-2012-0001 (Revised)

1. Executive Summary

Interstate Power and Light Company (IPL), a service company subsidiary of Alliant Energy Corporation (Alliant Energy), hereby submits its proposed 2014-2018 Energy Efficiency Plan (the Plan), in compliance with Iowa Code §§ 476.6(14) and (16) (2011) and 199 Iowa Administrative Code (IAC) Chapter 35. This filing is made pursuant to the Iowa Utilities Board (Board) Final Order issued June 24, 2009, in Docket No. EEP-08-1. IPL's Plan describes extensive portfolios of residential and nonresidential energy-efficiency; demand response; and education, outreach, and training programs.

The Plan offers a comprehensive portfolio of programs and initiatives for acquiring energy-efficiency resources during the five-year planning period from 2014 to 2018. This Plan expands upon and expands IPL's 2009–2013 Energy Efficiency Plan (2009-2013 EEP), filed with the Board April 23, 2008, and approved June 24, 2009, in Docket No. EEP-08-1. The Plan extends the savings targets for IPL's existing programs, introduces enhancements to individual programs, where warranted, and incorporates new programs and initiatives. Once approved, this Plan will replace the 2009-2013 EEP beginning on January 1, 2014. The Plan consists of 25 programs comprising three portfolios, as well as three additional funding initiatives.

In developing this Plan, IPL has designed innovative programs that are tailored to the unique characteristics of IPL's service territory. Taken together, the programs outlined in this Plan continue IPL's more than 20-year history of offering customers cost-effective, equitable, flexible, and wide-ranging programmatic choices, incentive options,

information, and educational opportunities, designed to produce long-term savings and bring about lasting change in the way lowans use energy.

IPL has established annual electricity savings targets ranging from 1.09 to 1.13 percent of its retail sales forecast. The electric component targets 163 gigaWatt hours (GWh) of savings in 2014, projected to increase to 166 GWh in 2018. In each year of the Plan, IPL's natural gas component is expected to produce more than 2.3 million therms of savings on average. The targets for IPL's demand response offerings will remain at approximately their current levels, providing IPL with optional peak load management potential of 314 over the course of the Plan.

In total, IPL's Plan projects slightly lower savings than those estimated in its 2009-2013 EEP, at a lower overall cost to customers. IPL plans to achieve these saving targets by: enhancing its already aggressive outreach, marketing, and education efforts; offering robust incentives for measures with the highest, cost-effective achievable savings potential; targeting new, previously untapped sources of savings potential; and streamlining customer delivery and administrative processes to achieve greater operational efficiencies. Table 1.1 provides a summary of electric and natural gas costs and cumulative savings by program.

Table 1.1 Savings and Cost Summary by Program

Programs	2014-2018 Cumulative Energy Savings		Total Costs (\$MM)
	Electricity (GWh)	Natural Gas (therms)	
<i>Energy-Efficiency Portfolio</i>	764.26	10,671,736	\$235.24
Residential Prescriptive Rebates	63.13	1,834,148	\$65.21
Home Energy Assessments	12.81	1,645,068	\$16.60
Change-a-Light	56.89	0	\$12.56
Appliance Recycling	52.78	0	\$8.68
New Home Construction	1.17	338,826	\$5.12
Multifamily	0.76	29,414	\$0.79
Weatherization	11.85	1,098,226	\$16.15
EnergyWise Education	4.36	141,170	\$0.47
Low Income Multifamily and Institutional Efficiency Improvements	0.50	19,609	\$0.47
Home Energy Savers	0.45	129,943	\$2.46
Nonresidential Prescriptive Rebates	121.47	3,378,382	\$44.09
Business Assessments	14.54	259,709	\$5.37
Custom Rebates	343.31	1,259,641	\$46.44
Commercial New Construction	62.12	537,600	\$6.29
Agriculture Sector	18.13	0	\$4.54
<i>Outreach, Education, and Training Portfolio</i>	20.99	1,249,179	\$16.42
Non-Targeted Energy Awareness and Information	0	0	\$2.29
School-Based Energy Education	20.99	1,249,179	\$3.13
Tree Planting	0	0	\$4.51
Hometown Rewards	0	0	\$2.60
Builder Training	0	0	\$0.60
Energy Efficiency Dealer Network	0	0	\$1.04
Bright Ideas	0	0	\$1.16
Research, Development, and Demonstration	0	0	\$1.09
<i>Demand Response Portfolio</i>	29.5	0	\$135.13
Residential Direct Load Control	2.5	0	\$12.76
Nonresidential Interruptible	27.0	0	\$122.37
<i>Other Funding Initiatives</i>	0	0	\$12.50
Legislative Assessment	0	0	\$8.00
Evaluation, Measurement, and Verification	0	0	\$3.00
Next Plan	0	0	\$1.50
TOTAL PORTFOLIO	814.8	11,920,915	\$399.30

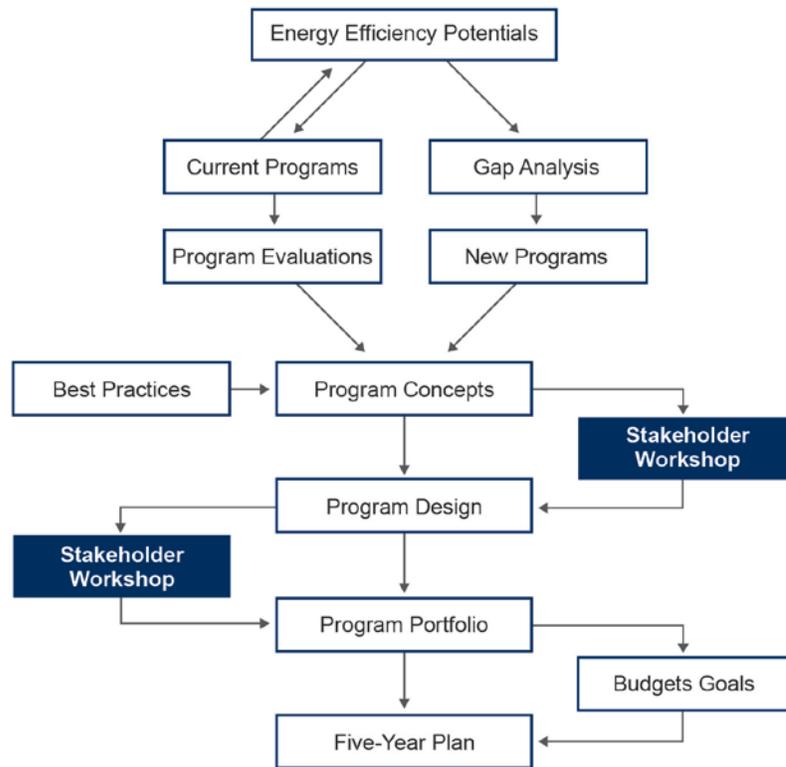
Cumulative Savings and Costs were calculated by aggregating incremental annual savings and cost data (adding 2014 to 2018 data). Total Cost is defined as the sum of the 2014-2018 yearly budget for each program and portfolio (total electric plus gas). Source: Workbook Appendix J Program Participant Data. 1) Tab "Summary" 2) Tab "Budget Summary"

1.1. Background

To develop the Plan, IPL was largely guided by the findings of the joint-utility *Assessment of Energy and Capacity Savings Potential in Iowa* (Statewide Assessment, included as Appendices H and I), a comprehensive study of energy efficiency and demand response savings potential in the service territories of Iowa's three investor-owned utilities (IOUs): IPL, Black Hills Energy (BHE), and MidAmerican Energy Company (MEC). The Assessment focused on reporting potential savings over a 10-year planning horizon from 2014 to 2023. The electric portion of this assessment was revised in July 2012 (Revised Assessment, included as Appendix G with detailed data and calculations in Appendix M) to reflect IPL's revised avoided electricity costs.

As illustrated in Figure 1.1, IPL systematically compared end-uses in each of its existing programs to the results of the Assessment and other market data to identify potential programmatic gaps, untapped potential, or opportunities to increase customer participation and depth of savings by incorporating new market sectors, technologies, or delivery strategies.

Figure 1.1 Plan Development Process



To develop its Plan, IPL began with a bottom-up process, which involved compiling a comprehensive list of measures with significant economic potential and aggregating them into appropriate programs by customer sector and equipment type. Additionally, IPL reviewed findings and recommendations resulting from collaborative efforts, program ideas from stakeholders, and results from the third-party evaluation of select programs contained in its 2009-2013 EEP. IPL conducted additional research on market conditions, program best practices, and other external factors that could affect economic, temporal, market, and administrative conditions associated with delivery of its programs. This information, combined with a structured review of its on-the-ground program delivery experience, provided IPL with a framework for its Plan development

process. The process culminated in a top-down balancing exercise to ensure that the composition and performance of the Plan meet IPL's goals and regulatory requirements.

At several points during the planning process, IPL coordinated with the other IOUs and held stakeholder meetings to present ideas, gather feedback, and report on the development of the Plan. IPL carefully considered the input it received in developing the Plan. (See Section 2.4, the Collaborative Process Section, and Appendix B for details on IPL's collaborative process.)

1.2. Plan Composition

The Plan's overarching approach may be best described as a portfolio perspective, addressing virtually every significant energy end-use in a customer's home, farm, or business, through a comprehensive, whole-facility approach or a menu approach, whichever works best for the customer. IPL employs multiple market intervention strategies in its Plan, including information, education, and technical assistance and, most importantly, financial incentives to produce long-term savings and provide IPL and its customers with the highest returns in terms of market reach, energy savings, and cost-effectiveness.

The Plan is composed of 25 programs, organized in three primary portfolios: Energy Efficiency; Demand Response; and Outreach, Education, and Training. Additionally, the Plan includes three additional funding initiatives. In designing the portfolios, IPL sought to provide program opportunities for every customer sector with a range of available measures, delivery mechanisms, and educational opportunities.

IPL's Plan builds on its 2009-2013 EEP, adding new elements to capture untapped market potential, eliminating certain elements that failed to produce long-term benefits for Iowa customers, and streamlining program operations and delivery. Table 1.2 summarizes the changes to IPL's 2009-2013 EEP that are included in the Plan. **Chapter 3 includes a detailed account of proposed changes to IPL's programs in this Plan.**

Table 1.2 2014-2018 Plan Changes

Program	Markets Served	Changes/Details
New Programs		
Multifamily	Buildings with four or more units	<ul style="list-style-type: none"> • Holistic approach to multifamily efficiency, allowing the building owner to focus on both common areas and tenant units. • Available for new construction as well as after-market upgrades. • Will draw from existing programs (e.g., assessments, prescriptive and custom rebates, new construction programs). • Addresses a hard-to-reach market with untapped efficiency potential.
Change-a-Light	All IPL customers	<ul style="list-style-type: none"> • Year-round upstream point-of-purchase incentives and marketing campaign. • Energy-efficient light bulbs including a variety of compact fluorescent lamps and LED bulbs.
Business Assessments	All commercial and industrial customers	<ul style="list-style-type: none"> • Offers three types of business assessments to business owners for a wide range of facility types and sizes. • Offers a small business direct install component that includes a comprehensive lighting package and technical support for the hard-to-reach small business sector.
Discontinued Programs/Initiatives		
Performance Contracting	Large commercial and industrial	<ul style="list-style-type: none"> • Only one active project developer supporting the program. • Customers find that the Custom Rebate Program better addresses their internal constraints. • IPL will continue to offer support to those customers interested in financing as an effective way to implement energy efficiency.
Tree Planting	Residential customers	<ul style="list-style-type: none"> • Eliminating three Tree Planting Program initiatives: <ul style="list-style-type: none"> ○ Iowa Hometown Celebrations: eliminated due to lack of customer interest. ○ Industrial Park Developments: often benefited private developers that had not paid into the Iowa energy-efficiency fund. ○ Growing Kids, Growing Trees: Iowa's Department of Natural Resources offers a similar program.

Program	Markets Served	Changes/Details
Enhancements and Changes to Existing Programs		
Home Energy Assessments	Residential single family customers	<ul style="list-style-type: none"> • Adding electric-only assessments to serve customers who: 1) have an all-electric home; 2) heat with propane; or 3) have natural gas service that is not provided by an Iowa IOU. • Adding comprehensive assessments including diagnostic testing for customers to identify specific improvements that offer the greatest return-on-investment opportunities. • Offering bonus incentives to encourage customers to install multiple recommended measures.
Residential Prescriptive Rebates	Residential customers	<ul style="list-style-type: none"> • Expanding HVAC system tune-up options. • Requiring quality installation for all furnace rebates. • Adding prescriptive incentives for whole-house fans. • Eliminating some measures with low participation and low cost-effectiveness.
New Home Construction	Residential builders and homeowners	<ul style="list-style-type: none"> • Simplifying the program for builders who use the Home Energy Rating System index to measure new home performance. • Adding two performance paths with tiered incentive levels. • Reducing required measures and incentives in the prescriptive path to adjust for new building codes.
Weatherization	Income-qualified residential customers	<ul style="list-style-type: none"> • Allowing for annual adjustments to match program eligibility to the current federal poverty level.
EnergyWise Education	Income-qualified residential customers	<ul style="list-style-type: none"> • Adding window film and one additional compact fluorescent lamp to the kit based on feedback from Community Action Program agencies.
Home Energy Savers	Income-qualified residential customers	<ul style="list-style-type: none"> • Allowing for annual adjustments to match program eligibility to the current federal poverty level. • Transferring program administration and marketing to Community Action Program agencies; IPL will partner with Community Action Program agencies to coordinate promotion.
Nonresidential Prescriptive Rebates	Nonresidential customers	<ul style="list-style-type: none"> • Adding prescriptive incentives for new measures. • Exploring an upstream incentive mechanism for motors and variable-speed drives. • Eliminating some measures with low participation and low cost-effectiveness.
Hometown Rewards	Communities	<ul style="list-style-type: none"> • Expanding community eligibility to populations between 5,000 and 25,000. • Additional funding for administrative expenses and implementation costs.
School-Based Energy Education	Schools	<ul style="list-style-type: none"> • Adding 5th grade to participant targets for the Alliant Energy Kids component.
Research, Development, and Demonstration	Varies	<ul style="list-style-type: none"> • Exploring new sources of potential energy savings, including: <ul style="list-style-type: none"> ○ Behavior change, ○ Transmission and distribution infrastructure, ○ Electric and plug-in hybrid vehicles, and ○ Data centers.

1.3. Energy-Efficiency Targets

The results of the Statewide Assessment were IPL's principal basis for establishing its 2014-2018 targets. The study provided information on energy-efficiency measures and their savings, costs, and market opportunities. The development of saving targets was also informed by IPL's more than two decades of experience with energy-efficiency product markets and information on what has been achieved by other utilities operating in markets similar to IPL's. Based on these considerations and the lessons learned from implementing its 2009-2013 EEP, IPL has established savings targets that it believes are reasonably achievable.

The Revised Assessment of electric potential identified 3,099 GWh of economic electric energy-efficiency potential over the 10-year planning horizon, from 2014 to 2023, representing 20 percent of IPL's forecast load in 2023. The Assessment further identified 2.634 GWh of market potential (16.8 percent of the 2023 forecast load), might be achievable under an aggressive acquisition scenario with utility incentives covering up to 100 percent of incremental measure costs, and that participants have access to financing.

The Statewide Assessment also identified nearly 62 million therms of economic natural gas potential. This economic potential represents 23 percent of IPL's 2023 natural gas load, 65 percent of which (18.6 percent of 2023 load) is expected to be achievable under an aggressive market scenario. Assuming an even acquisition rate, the identified economic potential translates into 1.86 percent per year. The Plan targets average annual natural gas savings equivalent to 0.88 percent of retail sales on

average, which represent 47 percent of the market potential identified in the Assessment.

In the original filing dated November 30, 2012, Table 1.3 Technical and Economic Electric Energy-Efficiency Potential (Cumulative in 2023) by Sector was located in this section. That table has been updated, expanded and moved to Table 2.2 per the Board Order dated December 26, 2012.

Assuming the same aggressive achievable potential of 85 percent, results of the revised Assessment indicated a maximum achievable economic potential equal to 17 percent of IPL's 2023 forecast load, translating into approximately 1.7 percent per year on average. The Plan includes average annual electric saving of 1.11 percent of retail sales, which represents nearly 65 percent of the maximum achievable potential identified in the revised Assessment.

1.4. Demand Response Targets

The Assessment also developed estimates of market potential for the two demand response programs IPL currently operates: the Residential Direct Load Control (DLC) Program and the Nonresidential Interruptible Program. The Assessment included an evaluation of three scenarios based on program participation levels achieved by IOUs offering similar programs in other jurisdictions. The results of the Assessment indicated a total market potential ranging from 35 megaWatts (MW) under the base-case scenario to 46 MW under an aggressive expansion scenario for the Residential DLC Program. The Assessment also estimated the market potential for the Nonresidential Interruptible

Program to range from 296 MW to 354 MW under the base-case and aggressive expansion scenarios, respectively.

In the original filing dated November 30, 2012, Table 1.4 Projected Demand Response Market Potential in 2023 (MW) was located in this section. That table has been updated, expanded and moved to Table 2.2 as per the Board Order dated December 26, 2012.

Based partly on the results of the Assessment and IPL's experience with these programs, in its Plan, IPL will primarily aim to maintain the current levels of participation and the corresponding demand reduction targets of 44 MW for the Residential DLC Program and 270 MW for the Nonresidential Interruptible Program. The two programs are expected to provide a total load reduction capability of 314 MW, which represents 126 percent and 91 percent of the base case market potential for the DLC Program and Nonresidential Interruptible Program respectively.

1.5. Benefits, Costs, and Cost-Effectiveness of the Plan

For each program in the Plan, IPL assessed cost-effectiveness by valuing its gross societal benefits, as measured by IPL's avoided energy and capacity, costs (including externalities), and the program's total life-cycle costs. A program's cost-effectiveness is determined by the net present value of its benefits. A program is considered cost-effective if its net societal benefits are positive, in other words, when the ratio of the net present value of the program's benefits as compared to costs is greater than 1.0.

IPL strived to design every portfolio in this Plan to be cost-effective when analyzed from a societal test perspective, as required by 199 IAC Chapter 35 (199 IAC

35.8(1)“e”(1)). Taken as a whole, the Plan is cost-effective, with a societal cost-benefit ratio of 2.48 to 1. However, some individual programs and measures are not cost-effective according to the societal test. Additionally, several of IPL’s natural gas measures are not cost-effective. Due to low projections for avoided natural gas costs, several measures that historically provided cost-effective natural gas savings in IPL’s Plan do not pass the societal test.

Cost-effectiveness had to be balanced against the objectives of equity and comprehensiveness. IPL designed individual programs to incorporate a comprehensive set of measures. In some cases, IPL retained measures that are not cost-effective, if those measures offered other benefits such as high, sustained customer satisfaction and savings. An additional confounding factor affecting the cost-effectiveness of the Plan’s natural gas components is the manner in which costs are allocated for certain measures producing electric and natural gas savings.

Shell-improvement, weatherization, and certain upgrades to heating and cooling systems affect the consumption of both electricity and natural gas. To separately determine the cost-effectiveness of a measure for each fuel, it is necessary to account for the benefits and costs associated with each fuel separately. While calculating energy savings and the corresponding benefits for each fuel is straightforward, there are no conventions for allocating joint implementation costs to each fuel. For the purpose of this Plan, IPL allocated the joint costs based on each fuel’s relative British thermal unit (Btu) savings. This method, although practical, tends to shift a disproportionately large share of the measures’ joint costs to the natural gas component of the Plan, lowering the cost-effectiveness of the natural gas measure and component as a whole. Absent a

more equitable method for allocating these costs, it is reasonable to judge cost-effectiveness for the Plan as a whole, rather than separately for its electric and natural gas components.

The tables below provide summary information on benefits and costs that comprised the cost-effectiveness analysis of IPL's Plan and the results of that analysis. Table 1.3 and Table 1.4 provide summary-level data incorporating electric and natural gas components combined. Table 1.5 and Table 1.6 show cost-effectiveness inputs and results for the electric component. Table 1.7 and Table 1.8 show cost-effectiveness inputs and results for the natural gas component.

Table 1.3 Total Plan Benefits and Costs

Benefit/Cost Component	Plan Year					Total
	2014	2015	2016	2017	2018	
Electric Savings (kWh)	163,084,964	162,779,248	160,200,436	162,872,055	165,813,594	814,750,297
Capacity Savings (kW)*	25,754	25,351	24,428	24,807	25,216	125,556
Natural Gas Savings (therms)	2,337,308	2,311,741	2,365,178	2,422,708	2,483,980	11,920,915
Capacity Savings (therms)	23,726	22,930	23,498	24,107	24,756	119,016
Participant Cost Net of Incentives (\$)	\$48,846,926	\$49,350,171	\$49,786,228	\$51,485,864	\$53,324,458	\$252,793,646
Direct Utility Costs (\$)	\$76,900,714	\$78,938,476	\$80,098,813	\$81,451,247	\$81,897,972	\$399,287,221
Planning and Design	\$1,083,104	\$1,104,744	\$1,300,722	\$1,326,111	\$1,353,330	\$6,168,011
Program Administration	\$6,259,508	\$7,333,131	\$7,452,518	\$7,539,216	\$6,630,745	\$35,215,118
Advertising and Promotion	\$3,126,288	\$3,193,675	\$3,252,165	\$3,327,903	\$3,407,865	\$16,307,895
Incentives	\$58,747,394	\$59,539,697	\$60,148,497	\$61,215,684	\$62,364,175	\$302,015,447
Equipment	\$3,345,191	\$3,369,503	\$3,393,845	\$3,422,130	\$3,450,557	\$16,981,225
Installation	\$3,188,903	\$3,226,016	\$3,263,586	\$3,304,744	\$3,346,178	\$16,329,426
Program Review and Assessment	\$1,150,326	\$1,171,710	\$1,287,481	\$1,315,459	\$1,345,122	\$6,270,098
Total Societal Cost	\$125,747,639	\$128,288,647	\$129,885,041	\$132,937,111	\$135,222,429	\$652,080,867

*Demand response is not included in cumulative capacity savings.

Source: Workbook Appendix J Program Participant Data. 1) Tab "Summary" 2) Tab "Budget Summary"

Table 1.4 Total Plan Cost-Effectiveness

	Societal	Participant	Utility	Ratepayer
Net Present Value Benefits (\$)	\$1,419,835,186	\$765,795,507	\$999,353,347	\$999,353,347
Net Present Value Costs (\$)	\$573,633,840	\$387,395,504	\$350,403,366	\$911,660,061
Benefit/Cost Ratio	2.48	1.98	2.85	1.10

Source: Workbooks 1) Common Assumptions 2) Appendix K Benefit Cost Model_Electric 3) Appendix K Benefit Cost Model_Gas. Workbook 1 must be open for workbooks 2 and 3 to produce results 4) Appendix K Benefit Cost Model_Demand Response 5) Workbook Appendix K Benefit Cost Model_OET and Other. Add program level results (Electric + Gas)

Table 1.5 Electric Benefits and Costs

Benefit/Cost Component	Plan Year					Total
	2014	2015	2016	2017	2018	
Electric Savings (kWh)	163,084,964	162,779,248	160,200,436	162,872,055	165,813,594	814,750,297
Capacity Savings (kW)*	25,754	25,351	24,428	24,807	25,216	125,556
Participant Cost Net of Incentives (\$)	\$38,222,207	\$38,364,561	\$38,465,264	\$39,702,622	\$41,054,809	\$195,809,464
Direct Utility Costs (\$)	\$62,582,181	\$64,031,901	\$64,747,634	\$65,645,838	\$65,799,437	\$322,806,990
Planning and Design	\$850,413	\$864,782	\$1,019,442	\$1,036,782	\$1,055,397	\$4,826,815
Program Administration	\$4,525,368	\$5,383,766	\$5,468,268	\$5,527,352	\$4,779,917	\$25,684,671
Advertising and Promotion	\$2,445,598	\$2,491,222	\$2,529,134	\$2,581,601	\$2,637,036	\$12,684,591
Incentives	\$51,056,924	\$51,555,873	\$51,886,117	\$52,617,251	\$53,404,693	\$260,520,858
Equipment	\$865,607	\$869,889	\$874,159	\$878,865	\$883,609	\$4,372,129
Installation	\$2,013,609	\$2,029,019	\$2,044,684	\$2,060,833	\$2,077,047	\$10,225,192
Program Review and Assessment	\$824,661	\$837,351	\$925,830	\$943,154	\$961,737	\$4,492,734
Total Societal Cost	\$100,804,388	\$102,396,462	\$103,212,898	\$105,348,460	\$106,854,246	\$518,616,454
<i>Savings as a % of Total Sales (Electric)</i>	1.13%	1.12%	1.09%	1.10%	1.11%	

* Demand response is not included in cumulative capacity savings.

Source: Workbook Appendix J Program Participant Data. 1) Tab "Summary" 2) Tab "Budget Summary"

Table 1.6 Electric Cost Effectiveness

	Societal	Participant	Utility	Ratepayer
Net Present Value Benefits (\$)	\$1,316,525,899	\$651,869,477	\$933,607,876	\$933,607,876
Net Present Value Costs (\$)	\$445,773,291	\$288,097,373	\$283,600,939	\$769,411,894
Benefit-Cost Ratio	2.95	2.26	3.29	1.21

Source: Workbooks 1) Common Assumptions 2) Appendix K Benefit Cost Model_Electric. Workbook 1 must be open for workbook 2 to produce results 3) Appendix K Benefit Cost Model_Demand Response 4) Workbook Appendix K Benefit Cost Model_OET and Other. Add program level results (Electric).

Table 1.7 Natural Gas Benefits and Costs

Benefit/Cost Component	Plan Year					Total
	2014	2015	2016	2017	2018	
Electric Savings (therms)	2,337,308	2,311,741	2,365,178	2,422,708	2,483,980	11,920,915
Capacity Savings (therms)	23,726	22,930	23,498	24,107	24,756	119,016
Participant Cost Net of Incentives (\$)	\$10,624,719	\$10,985,609	\$11,320,964	\$11,783,242	\$12,269,649	\$56,984,182
Direct Utility Costs (\$)	\$14,318,533	\$14,906,575	\$15,351,179	\$15,805,410	\$16,098,535	\$76,480,231
Planning and Design	\$232,691	\$239,962	\$281,280	\$289,329	\$297,933	\$1,341,196
Program Administration	\$1,734,140	\$1,949,366	\$1,984,250	\$2,011,864	\$1,850,827	\$9,530,447
Advertising and Promotion	\$680,689	\$702,453	\$723,030	\$746,302	\$770,829	\$3,623,304
Incentives	\$7,690,470	\$7,983,825	\$8,262,380	\$8,598,433	\$8,959,482	\$41,494,589
Equipment	\$2,479,584	\$2,499,614	\$2,519,685	\$2,543,265	\$2,566,948	\$12,609,096
Installation	\$1,175,294	\$1,196,997	\$1,218,902	\$1,243,911	\$1,269,131	\$6,104,235
Program Review and Assessment	\$325,665	\$334,359	\$361,651	\$372,304	\$383,385	\$1,777,363
Total Societal Cost	\$24,943,252	\$25,892,185	\$26,672,142	\$27,588,651	\$28,368,183	\$133,464,413
<i>Savings as a % of Total Sales (Gas)</i>	0.84%	0.84%	0.87%	0.90%	0.93%	

Source: Workbook Appendix J Program Participant Data. 1) Tab "Summary" 2) Tab "Budget Summary"

Table 1.8 Natural Gas Cost Effectiveness

	Societal	Participant	Utility	Ratepayer
Net Present Value Benefits (\$)	\$103,309,289	\$113,926,031	\$65,745,468	\$65,745,468
Net Present Value Costs (\$)	\$127,860,551	\$99,298,128	\$66,802,426	\$142,248,161
Benefit-Cost Ratio	0.81	1.15	0.98	0.46

Source: Workbooks 1) Common Assumptions 2) Appendix K Benefit Cost Model_Gas Workbook 1 must be open for workbook 2 to produce results 3) Workbook Appendix K Benefit Cost Model_OET and Other. Add program level results (Gas)

As shown in the tables above, the total societal cost for the full five-year deployment of the Plan is estimated at \$655 million, \$539 million of which is attributable to electric and \$115¹ million to natural gas. The electric component accounts for 82 percent of the total societal cost of the Plan by this measure. Direct IPL costs of \$323 million for electric and \$76 million for natural gas constitute 61 percent of the total societal cost; the remaining costs are paid directly by participating customers as they install their electric and natural gas measures. Over \$335 million of IPL's costs, or 84 percent, constitute incentive payments.² IPL will spend an additional \$16 million for program promotion, representing four percent of IPL's costs. In sum, over 88 percent of IPL's spending is for incentives and advertising and promotion.

1.6. Schedule

IPL expects to implement this Plan starting on January 1, 2014, after approval by the Board. The majority of programs described in this Plan are already in place and operational. IPL has undertaken considerable collaboration with interested parties on Assessment and Plan design. IPL believes it is reasonable to assume contested issues will be limited and the Board can render a decision on this Plan in the early part of 2013's fourth quarter to enable efficient, cost-effective delivery and implementation.

1.7. Plan Contents and Organization

IPL's Plan includes two Volumes. Volume I of the Plan is organized in two documents: Book 1 and Book 2, described below.

¹ Please note that numbers are rounded, and therefore do not total precisely in this sentence.

² IPL includes the costs for equipment and installation of free direct installation measures provided to customers in its incentive calculations.

- Book 1 consists of three chapters:
 - Chapter 1 is the executive summary (this Chapter).
 - Chapter 2, the Plan Overview, describes the context for the Plan and explains the methodology, data and assumptions used in its development.
 - Chapter 3 provides a comparison of the programs in IPL's 2009-2013 EEP to this Plan and provides a rationale for discontinued programs.
- Book 2 includes an introduction to IPL's three program portfolios and 28 chapters providing descriptions, budgets, savings projections, and cost-effectiveness ratios for each of IPL's proposed 25 programs. Book 2 also includes information on each of IPL's three additional funding initiatives.

Volume II contains the following appendices to IPL's Plan.

- Appendix A, Customer Rate and Bill Impacts (Revised), outlines the method IPL used to calculate Energy Efficiency Cost Recovery of expenses related to the new EEP, and explains the impacts on average customer bills.
- Appendix B, Collaborative Efforts, details the collaborative efforts IPL undertook in 2012 to develop the 2014-2018 Plan.
- Appendix C, Electric and Natural Gas Forecasts, provides the current electric and natural gas forecast reports, as required by 199 IAC 35.9(1) and 35.10(1).
- Appendix D, Electric Customer Load Profiles, provides electric Customer Class Load Profiles as required by 199 IAC 35.9(2).

- Appendix E, Electric Avoided Costs, provides IPL's electric avoided cost data, as required by 199 IAC 35.9(3)"a."
- Appendix F, Natural Gas Avoided Costs, includes natural gas avoided cost data, as required by 199 IAC 35.10(2) through 35.10(4). Additionally, Appendix F discusses capacity surpluses and shortfalls, supply options and costs, and natural gas avoided capacity and energy costs.
- Appendix G, IPL Technical and Economic Potential, provides cumulative technical and economic potential for both electric and natural gas energy efficiency in IPL's service area from 2014 through 2023 (Revised Assessment). IPL updated its electric economic potential identified in the Statewide Assessment based on its new avoided costs.
- Appendix H, Assessment of Energy and Capacity Savings Potential in Iowa – Volume I, includes Volume I of the Statewide Assessment, prepared for the Iowa Utility Association and the IOUs by The Cadmus Group, Inc. (Cadmus) and issued on February 28, 2012. Volume I discusses the study's general approach and methodology along with energy-efficiency technical, economic and market potential.
- Appendix I, Assessment of Energy and Capacity Savings Potential in Iowa – Volume II, includes Volume II of the Statewide Assessment, prepared for the Iowa Utility Association and the IOUs by Cadmus and issued on February 28, 2012. Volume II includes Appendices A through C of the Assessment, covering supplemental material on energy efficiency, demand response and assessment of net-to-gross of the study.

- Appendix J, Program Participant Data, is a Microsoft Excel workbook providing data and calculations IPL used to develop projected energy savings, capacity savings, measure counts, and budgets for each program in the Plan.
- Appendix K, Cadmus Benefit Cost Model, includes five Microsoft Excel workbooks detailing the data and calculations IPL used to develop benefit to cost ratios for each program in the Plan.
- Appendix L, IPL 2012 Integrated Resource Plan, provides a complete copy of IPL's 2012 Integrated Resource Plan as filed with the Board on November 14, 2012, in Docket Nos. GCU-2012-0001/RPU-2012-0003, in support of its Plan.
- Appendix M, Analysis Supporting Revised Assessment, includes five Microsoft Excel workbooks containing measure details and calculations used in the development of the Revised Assessment (included as appendix G). The files provided in Appendix M are fully populated and operational versions of Cadmus' proprietary assessment model.