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Revised IRP
December 27, 2011
Indiana Utility Regulatory Commission

Indianapolis Power & Light Company

2011 Integrated Resource Plan

Revised: December 12, 2011

INTRODUCTION

Indianapolis Power & Light Company ("IPL"), incorporated in October 1926, provides retail electric service to approximately 470,000 residential, commercial and industrial ("C&I") customers in a 528 square mile area covering metropolitan Indianapolis, as well as portions of other central Indiana communities.

Residential customers account for approximately one-third of IPL's total retail electric sales volume, while C&I customers constitute the remainder. Most of the generation to meet this sales volume is provided by IPL's four electric power production facilities comprised of 2,651 MW of coal-fired, 480 MW of gas-fired and 222 MW of oil-fired generating units for a total of 3,353 MW of summer generating capacity.

IPL submits this Integrated Resource Plan ("IRP") under the guidelines required by the Indiana Utility Regulatory Commission ("IURC") in Rule 170 IAC 4-7 – Guidelines for Integrated Resource Planning by an Electric Utility, LSA Document #94-132, RM3 1994.

The purpose of this IRP is to consider the future demand and energy requirements of IPL's customers and how best to manage those demand and energy needs in a reasonable and cost- effective manner that is consistent with reliability and efficiency.

This IRP covers the 20-year period from 2012 to 2031 with primary emphasis on the 10-year period 2012 to 2021. The data and results contained herein may change substantially as IPL's business environment evolves. Accordingly, plans contained herein will be adjusted as necessary to reflect the changing business environment. This IRP is based on information available at the time the studies were performed. Changes in the basis of the studies and other alternatives that may be considered could change the results of this IRP over time.

This IRP serves as a guideline for future resource decisions, but is not a commitment to any particular future resource. This IRP provides a framework for identifying specific resources that are subject to further consideration. A particular resource will be selected contingent upon the receipt of appropriate regulatory approvals.

TABLE OF CONTENTS

IRP RULE 7 REQUIREMENTS CROSS REFERENCE TABLE

Rule 7 Reference	Rule 7 Description	Report Reference (As Page # or Attachment)
170-IAC 4-7-4	**Methodology and documentation requirements** Sec. 4. An IRP covering at least a twenty (20) year future period prepared by a utility must include a discussion of the methods, models, data, assumptions, and definitions used in developing the IRP and the goals and objectives of the plan. The following information must be included:	
4-7-4(1)	(1) The data sets, including data sources, used to establish base and alternative forecasts. A third party data source may be presented in the form of a reference. The reference must include the source title, author, publishing address, date, and page number of relevant data. The data sets must include an explanation for adjustments. The data must be provided on electronic media and hard copy, or as specified by the commission.	9, 10 24 30 through 66 81, 93, 95 119 through 134 Section 7, Attachment V-Tables A through D Section 7, Attachment V-3-Year DSM Plan Section 7, Attachment VII Section 7, Attachment VIII-Folder A through Folder H
4-7-4(2)	(2) A description of the utility's effort to develop and maintain, by customer class, rate class, SIC code, and end-use, a data base of electricity consumption patterns. The data base may be developed using, but not limited to, the following methods:	119 through 123
4-7-4(2)(A)	(A) Load research developed by the individual utility.	Section 7, Attachment IV
4-7-4(2)(B)	(B) Load research developed in conjunction with another utility.	Not applicable
4-7-4(2)(C)	(C) Load research developed by another utility and modified to meet the characteristics of that utility.	Not applicable
4-7-4(2)(D)	(D) Engineering estimates.	Not applicable
4-7-4(2)(E)	(E) Load data developed by a non-utility source.	Section 7, Attachment VIII-Folders C and D

4-7-4(3)	(3) A proposed schedule for industrial, commercial, and residential customer surveys to obtain data on end-use appliance penetration, end-use saturation rates, and end-use electricity consumption patterns.	Not applicable
4-7-4(4)	(4) A discussion of customer self-generation within the service territory and the potential effects on generation, transmission, and distribution planning and load forecasting.	79 through 80 89, 100, 103 104 through 107
4-7-4(5)	(5) A description of model structure and an evaluation of model performance.	30 through 66 91 through 97, 104 119 through 127 Section 7, Attachment V-Tables A through D Section 7, Attachment V-3-Year DSM Plan Section 7, Attachment VII Section 7, Attachment VIII-Folder A through Folder H
4-7-4(6)	(6) A complete discussion of the alternative forecast scenarios developed and analyzed, including a justification of the assumptions and modeling variables used in each scenario.	30 through 66 119 through 127 Section 7, Attachment VII Section 7, Attachment VIII-Folder A through Folder H
4-7-4(7)	(7) A description of the fuel inventory and procurement planning practices, including the rationale, used in the development of the utility's integrated resource plan.	127 through 133
4-7-4(8)	(8) A description of the SO_2 emission allowance inventory and procurement planning practices, including the rationale, used in the development of the utility's integrated resource plan.	10 14 through 25 30, 39 69 through 79
4-7-4(9)	(9) A description of the generation expansion planning criteria used in developing the integrated resource plan. The description must fully explain the basis for the criteria selected, including an analysis and rationale for the level of system wide generation reliability assumed in the 1RP.	12, 32, 65 108 through 114 139

4-7-4(10)	(10) A regional, or at a minimum, Indiana specific power flow study prepared by a regional or subregional organization. This requirement may be met by submitting Federal Energy Regulatory Commission (FERC) Form 715, as adopted in Docket No. RM93-10-00, in effect October 30, 1993. The power flow study shall include the following: (A) Solved real flows. (B) Solved reactive flows. (C) Voltages. (D) Detailed assumptions. (E) Brief description of the model(s). (F) Glossary of terms with cross references to the names of buses and line terminals. (G) Sensitivity analysis, including, but not limited to, the forecast of the following: (i) Summer and winter peak conditions. (ii) Light load as well as heavy transfer conditions for one (1), two (2), five (5), and ten (10) years out. (iii) Branch circuit ratings, including, but not limited to, normal, long term, short-term, and emergency.	Section 7, Attachment I
4-7-4(11)	(11) Any recent dynamic stability study prepared for the utility or by the utility. This requirement may be met by submitting FERC Form 715, as adopted in Docket No. RM93-10-00, in effect October 30, 1993.	Section 7, Attachment I
4-7-4(12)	(12) Applicable transmission maps. This requirement may be met by submitting FERC Form 715, as adopted in Docket No. RM93-10-00, in effect October 30, 1993.	Section 7, Attachment I
4-7-4(13)	(13) A description of reliability criteria for transmission planning as well as the assessment practice used. This requirement may be met by submitting FERC Form 715, as adopted in Docket No. RM93-10-00, in effect October 30, 1993.	12, 32, 65 108 through 115 139, 140 Section 7, Attachment I

4-7-4(14)	(14) An evaluation of the reliability criteria in relation to present performance and the expected performance of the utility's transmission system. This requirement may be met by submitting FERC Form 715, as adopted in Docket No. RM93-10-00, in effect October 30, 1993.	65 108 through 115 Section 7, Attachment I
4-7-4(15)	(15) A description of the utility's effort to develop and improve the methodology and the data for evaluating a resource (supply-side or demand side) option's contribution to system wide reliability. The measure of system wide reliability must cover the reliability of the entire system, including transmission, distribution, and generation.	12, 65 108 through 115 139, 140 Section 7, Attachment I
4-7-4(16)	(16) An explanation, with supporting documentation, of the avoided cost calculation. An avoided cost must be calculated for each year in the forecast period. The avoided cost calculation must reflect timing factors specific to the resource under consideration such as project life and seasonal operation. Avoided cost shall include, but is not limited to, the following: (A) The avoided generating capacity cost adjusted for transmission and distribution losses and the reserve margin requirement. (B) The avoided transmission capacity cost. (C) The avoided distribution capacity cost. (D) The avoided operating cost, including fuel, plant operation and maintenance, spinning reserve, emission allowances, and transmission and distribution operation and maintenance.	91 through 94 Section 7, Attachment V-Table A
4-7-4(17)	(17) The hourly system lambda and the actual demand for all hours of the most recent historical year available. For purposes of comparison, a utility must maintain three (3) years of hourly data and the corresponding dispatch logs.	Section 7, Attachment II

4-7-4(18)	(18) A description of the utility's public participation procedure if the utility conducts a procedure prior to the submission of an IRP to the commission.	Not applicable
170-IAC 4-7-5	**Energy and demand forecasts** Sec. 5. (a) An electric utility subject to this rule shall prepare an analysis of historical and forecasted levels of peak demand and energy usage which includes the following:	
4-7-5(a)(1)	(1) An historical and projected analysis of a variety of load shapes, including, but not limited to, the following: (A) Annual load shapes. (B) Seasonal load shapes. (C) Monthly load shapes. (D) Selected weekly and daily load shapes. Daily load shapes shall include, at a minimum, summer and winter peak days and a typical weekday and weekend day.	97, 104 Section 7, Attachment IV Section 7, Attachment VIII-Folders B and F
4-7-5(a)(2)	(2) Historical and projected load shapes shall be disaggregated, to the extent possible, by customer class, interruptible load, and end-use and demand side management program.	97, 104 Section 7, Attachment IV Section 7, Attachment VIII-Folders B and F
4-7-5(a)(3)	(3) Disaggregation of historical data and forecasts by customer class, interruptible load, and end-use where information permits.	97, 104 Section 7, Attachment IV Section 7, Attachment VIII-Folders B and F
4-7-5(a)(4)	(4) The use and reporting of actual and weather normalized energy and demand levels.	121 through 126 Section 7, Attachment VIII-Folder D & E
4-7-5(a)(5)	(5) A discussion of all methods and processes used to normalize for weather.	121 through 126 Section 7, Attachment VIII-Folder D & E
4-7-5(a)(6)	(6) A twenty (20) year period for energy and demand forecasts.	121 Section 7, Attachment VIII-Folder B

4-7-5(a)(7)	(7) An evaluation of the performance of energy and demand forecasts for the previous ten (10) years, including, but not limited to, the following: (A) Total system. (B) Customer classes or rate classes, or both. (C) Firm wholesale power sales.	124, 126 Section 7, Attachment VIII-Folder H
4-7-5(a)(8)	(8) If an end-use methodology has not been used in forecasting, an explanation as to why this methodology has not been used.	121 Section 7, Attachment VIII-Folder A
4-7-5(a)(9)	(9) For purposes of section 5(a)(1) and 5(a)(2) *[subdivisions (1) and (2)],* a utility may use utility specific data or more generic data, such as, but not limited to, the types of data described in section 4(2) of this rule.	Informational
4-7-5(b)	Sec. 5. (b) A utility shall provide at least three (3) alternative forecasts of peak demand and energy usage. At a minimum, the utility shall include high, low, and most probable energy and peak demand forecasts based on combinations of alternative assumptions such as:	9 through 12 13 through 29 31 through 62 67 through 70 81 through 86 119 through 134
4-7-5(b)(1)	(1) Rate of change in population.	
4-7-5(b)(2)	(2) Economic activity.	
4-7-5(b)(3)	(3) Fuel prices.	
4-7-5(b)(4)	(4) Changes in technology.	
4-7-5(b)(5)	(5) Behavioral factors affecting customer consumption.	
4-7-5(b)(6)	(6) State and federal energy policies.	
4-7-5(b)(7)	(7) State and federal environmental policies.	
170-IAC 4-7-6	**Resource assessment** Sec. 6. (a) For each year of the planning period, excluding subsection 6(a)(6) *[subdivision (6]*, recognizing the potential effects of self-generation, an electric utility shall provide a description of the utility's electric power resources that must include, at a minimum, the following information:	36
4-7-6(a)(1)	(1) The net dependable generating capacity of the system and each generating unit.	36, 37 Section 8, Form II

4-7-6(a)(2) **4-7-6(a)(2)(D)** **4-7-6(a)(2)(E)**	(2) The expected changes to existing generating capacity, including, but not limited to, the following: (A) Retirements. (B) Deratings. (C) Plant life extensions. (D) Repowering. (E) Refurbishment.	36 Not applicable Not applicable
4-7-6(a)(3)	(3) A fuel price forecast by generating unit.	133
4-7-6(a)(4) **4-7-6(a)(4)(A)** **4-7-6(a)(4)(B)** **4-7-6(a)(4)(C)** **4-7-6(a)(4)(D)**	(4) The significant environmental effects, including: (A) air emissions; (B) solid waste disposal; (C) hazardous waste; and (D) subsequent disposal; at each existing fossil fueled generating unit.	13 through 29
4-7-6(a)(5)	(5) The scheduled power import and export transactions, both firm and nonfirm, as well as cogeneration and non-utility production expected to be available for purchase by the utility,	133
4-7-6(a)(6) **4-7-6(a)(6)(A)** **4-7-6(a)(6)(B)** **4-7-6(a)(6)(C)** **4-7-6(a)(6)(D)**	(6) An analysis of the existing utility transmission system that includes the following: (A) An evaluation of the adequacy to support load growth and long term power purchases and sales. (B) An evaluation of the supply-side resource potential of actions to reduce transmission losses. (C) An evaluation of the potential impact of demand side resources on the transmission network. (D) An assessment of the transmission component of avoided cost.	108 through 114 95, 108 ,114 78 93 Section7, Attachment V-Table A
4-7-6(a)(7)	(7) A discussion of demand side programs, including existing company-sponsored and government-sponsored or mandated energy conservation or load management programs available in the utility's service area and the estimated impact of those programs on the utility's historical and forecasted peak demand and energy.	81 through 107 Section 7, Attachment V-3-Year DSM Program
4-7-6(b)	Sec. 6. (b) An electric utility shall consider	39

	alternative methods of meeting future demand for electric service. A utility must consider a demand side resource, including innovative rate design, as a source of new supply in meeting future electric service requirements. The utility shall consider a comprehensive array of demand side measures that provide an opportunity for all ratepayers to participate in DSM, including low-income residential ratepayers. For an utility-sponsored program identified as a potential demand side resource, the utility's plan shall, at a minimum, include the following:	67 through 80 97, 104, 114
4-7-6(b)(1)	(1) A description of the demand side program considered.	97 through 104 Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(2)	(2) A detailed account of utility strategies designed to capture lost opportunities.	82, 90, 99, 104, 138
4-7-6(b)(3)	(3) The avoided cost projection on an annual basis for the forecast period that accounts for avoided generation, transmission, and distribution system costs. The avoided cost calculation must reflect timing factors specific to resources under consideration such as project life and seasonal operation.	93 Section 7, Attachment V Table A
4-7-6(b)(4)	(4) The customer class or end-use, or both, affected by the program.	97 through 104 Section 7, Attachment V-Table D Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(5)	(5) A participant bill reduction projection and participation incentive to be provided in the program.	100, 103, 122 Section 7, Attachment V-Table D Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(6)	(6) A projection of the program cost to be borne by the participant.	Section 7, Attachment V-Table C Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(7)	(7) Estimated energy (kWh) and demand (kW) savings per participant for each program.	95 Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(8)	(8) The estimated program penetration rate	121

	and the basis of the estimate.	Section 7, Attachment V-3-Year DSM Plan
4-7-6(b)(9)	(9) The estimated impact of a program on the utility's load, generating capacity, and transmission and distribution requirements.	95 Section 7, Attachment V-3-Year DSM Plan
4-7-6(c)	Sec. 6. (c) A utility shall consider supply-side resources as an alternative in meeting future electric service requirements. The utility's plan shall include, at a minimum, the following:	67 through 80
4-7-6(c)(1)	(1) Identify and describe the resource considered, including the following: (A) Size (MW). (B) Utilized technology and fuel type. (C) Additional transmission facilities necessitated by the resource.	67 through 80
4-7-6(c)(2) **4-7-6(c)(2)(A)** **4-7-6(c)(2)(B)** **4-7-6(c)(2)(C)**	(2) Significant environmental effects, including the following: (A) Air emissions. (B) Solid waste disposal. (C) Hazardous waste and subsequent disposal.	13 through 29
4-7-6(c)(3)	(3) An analysis of how a proposed generation facility conforms with the utility-wide plan to comply with the Clean Air Act Amendments of 1990.	29
4-7-6(c)(4)	(4) A discussion of the utility's effort to coordinate planning, construction, and operation of the supply-side resource with other utilities to reduce cost.	11, 65
4-7-6(d)	Sec 6. (d) A utility shall identify transmission and distribution facilities required to meet, in an economical and reliable manner, future electric service requirements. The plan shall, at a minimum, include the following:	108 through 118
4-7-6(d)(1)	(1) An analysis of transmission network capability to reliably support the loads and resources placed upon the network.	108 through 118
4-7-6(d)(2)	(2) A list of the principal criteria upon which the design of the transmission network is based. Include an explanation of the principal criteria and their significance in identifying the need for and selecting transmission facilities.	108
4-7-6(d)(3)	(3) A description of the timing and types of expansion and alternative options considered.	111
4-7-6(d)(4)	(4) The approximate cost of expected expansion	111

	and alteration of the transmission network.	
170-IAC 4-7-7 **4-7-7(a)**	**Selection of future resources** Sec. 7. (a) In order to eliminate nonviable alternatives, a utility shall perform an initial screening of all future resource alternatives listed in sections 6(b) through (c) of this rule. The utility's screening process and the decision to reject or accept a resource alternative for further analysis must be fully explained and supported.	30 through 66 67 through 80 Section 7, Attachment V-3-Year DSM Plan
4-7-7(b)	Sec. 7. (b) Integrated resource planning includes one (1) or more tests used to evaluate the cost-effectiveness of a demand side resource option. A cost-benefit analysis must be performed using the following tests except as provided under subsection (e):	94 Section 7, Attachment V-Table C
4-7-7(b)(1)	(1) Participant.	
4-7-7(b)(2)	(2) Ratepayer impact measure (RIM).	
4-7-7(b)(3)	(3) Utility cost (UC).	
4-7-7(b)(4)	(4) Total resource cost (TRC).	
4-7-7(b)(5)	(5) Other reasonable tests accepted by the commission.	
4-7-7(c)	Sec. 7. (c) A utility is not required to express a test result in a specific format. However, a utility must, in all cases, calculate the net present value of the program impact over the life cycle of the impact. A utility shall also explain the rationale for choosing the discount rate used in the test.	95 Section 7, Attachment V-3-Year DSM Plan, Table 4, page 6
4-7-7(d)	Sec. 7. (d) A utility is required to:	94 Section 7, Attachment V-Tables A through D Section 7, Attachment V-3-Year DSM Plan
4-7-7(d)(1)	(1) specify the components of the benefit and the cost for each of the major tests; and	
4-7-7(d)(2)	(2) identify the equation used to express the result.	
4-7-7(e)	Sec. 7. (e) If a reasonable cost-effectiveness analysis for a demand side management program cannot be performed using the tests in subsection (b), where it is difficult to establish an estimate of load impact, such as a generalized information program, the cost-effectiveness tests are not required.	

4-7-7(f)	Sec. 7. (f) To determine cost-effectiveness, the RIM test must be applied to a load building program. A load building program shall not be considered as an alternative to other resource options.	Not applicable.
170-IAC 4-7-8	**Resource integration** Sec. 8. A utility shall select a mix of resources consistent with the objectives of the integrated resource plan. The utility must provide the commission, at a minimum, the following information:	62 through 66
4-7-8(1)	(1) Describe the utility's resource plan.	
4-7-8(2)	(2) Identify the variables, standards of reliability, and other assumptions expected to have the greatest effect on the least-cost mix of resources.	
4-7-8(3)	(3) Determine the present value revenue requirement of the utility's resource plan, stated in total dollars and in dollars per kilowatt-hour delivered, with the discount rate specified.	41through 62
4-7-8(4)	(4) Demonstrate that the utility's resource plan utilizes, to the extent practical, all economical load management, conservation, nonconventional technology relying on renewable resources, cogeneration, and energy efficiency improvements as sources of new supply.	30 through 66 81 through 96 Section 7, Attachment V-3-Year DSM Plan
4-7-8(5)	(5) Discuss how the utility's resource plan takes into account the utility's judgment of risks and uncertainties associated with potential environmental and other regulations.	64, 65, 104, 114
4-7-8(6)	(6) Demonstrate that the most economical source of supply-side resources has been included in the integrated resource plan.	30 through 66 67 through 80
4-7-8(7)	(7) Discuss the utility's evaluation of dispersed generation and targeted DSM programs including their impacts, if any, on the utility's transmission and distribution system for the first ten (10) years of the planning period.	30 through 66 93, 114, 120

4-7-8(8) **4-7-8(8)(A)** **4-7-8(8)(B)** **4-7-8(8)(C)** **4-7-8(8)(D)** **4-7-8(8)(E)**	(8) Discuss the financial impact on the utility of acquiring future resources identified in the utility's resource plan. The discussion shall include, where appropriate, the following: (A) The operating and capital costs of the integrated resource plan. (B) The average price per kilowatt-hour as calculated in the resource plan. The price must be consistent with the electricity price assumption used to forecast the utility's expected load by customer class in section 5 of this rule. (C) An estimate of the utility's avoided cost for each year of the plan. (D) The impact of a planned addition to supply-side or demand side resources on the utility's rate. (E) The utility's ability to finance the acquisition of a required new resource.	69 57, 69 108 140
4-7-8(9)	(9) Identify and explain assumptions concerning existing and proposed regulations, laws, practices, and policies made concerning decisions used in formulating the IRP.	1through 8 13 through 29 30 through 66 135 through 140
4-7-8(10)	(10) Demonstrate, to the extent practicable and reasonable, that the utility's resource plan incorporates a workable strategy for reacting to unexpected changes. A workable strategy is one that allows the utility to adapt to unexpected circumstances and preserves the plan's ability to achieve its intended purpose. Unexpected changes include, but are not limited to, the following: (A) The demand for electric service. (B) The cost of a new supply-side or demand side technology. (C) Other factors which would cause the forecasted relationship between supply and demand for electric service to be in error.	64, 65, 104, 114

170-IAC 4-7-9	**Short-term action plan** Sec. 9. A short-term action plan shall be prepared as part of the utility's IRP filing or separately, and shall cover each of the two (2) years beginning with the IRP submitted pursuant to this rule. The short-term action plan is a summary of the resource options or programs contained in the utility's current integrated resource plan where the utility must take action or incur expenses during the two (2) year period. The short-term action plan must include, but is not limited to, the following:	135 through 140
4-7-9(1) **4-7-9(1)(A)** **4-7-9(1)(B** **4-7-9(1)(C**	(1) A description of each resource option or program included in the short-term action plan. The description must include, but is not limited to, the following: (A) The objective of the resource option or program. (B) The criteria for measuring progress toward the objective. (C) The actual progress toward the objective to date.	
4-7-9(2)	(2) The participation of small business in the implementation of a DSM resource option or program.	
4-7-9(3)	(3) The implementation schedule for the resource option or program.	
4-7-9(4)	(4) The timetable for implementation and resource acquisition.	
4-7-9(5)	(5) A detailed budget for the cost to be incurred for each resource or program.	

INDEX OF FIGURES

SECTION 1. EXECUTIVE SUMMARY

The goal of IPL's integrated resource planning effort is to identify a resource plan that meets all federal, state, and IURC requirements, and withstands the risks of uncertain future landscapes to reliably serve IPL customers, while maintaining rates as affordable as possible.

As identified two years ago in the IPL 2009 IRP, the future landscape impacts on IPL's resource plan were uncertain amidst unknown but anticipated climate change legislation and other U.S. Environmental Protection Agency ("EPA") regulations coupled with ramifications of the largest economic downturn in over 70 years. While the electric industry still faces a multitude of environmental challenges and landscape uncertainties, clarity has emerged that will dictate IPL resource decisions in some areas, and provide resource choice and opportunities in others.

More specifically, IPL's integrated resource plan will be shaped by five primary external drivers. First is the suite of new EPA rules affecting air, water, and solid waste targeted at coal-fired generation. The rules governing the emission of hazardous air pollutants under the Mercury and Air Toxics Standard ("MATS") includes mercury and other air toxics, plus stricter rules on sulfur dioxide ("SO_2") and nitrogen oxides ("NOx") will require considerable investment in IPL's coal-fired fleet to continue operation beyond 2015. Second are the significant Demand Side Management ("DSM") targets mandated by the IURC over the next 10 years. These requirements will lower the growth of IPL's load forecast; thus contributing to a portion of IPL's resource needs. Third is the technological breakthrough and commercial operation of hydraulic fracturing natural gas drilling that considerably reduces costs and risks of natural gas-fired generation. Fourth is the federal legislative failure to impose strict climate change legislation that would have levied significant costs on carbon dioxide ("CO_2") emissions and mandated significant levels of renewable generation. While climate change legislation looks to be deferred and less severe than the congressional bills that failed passage, some form of legislation may yet be enacted. And finally, how the changing dynamics in the regional transmission planning authority (MISO) with regard to resource adequacy, including tighter realigned compliance zones and auction mechanics, will modify the capacity needs and pricing for MISO load serving entities ("LSEs") such as IPL. While the future landscape is never fully known, recent activities around these five landscape drivers provide some additional clarity and provide the base planning assumptions and scenarios for IPL's integrated resource plan. These landscape drivers and their impacts on IPL's resource planning, and a summary of IPL's reference plan, are discussed below.

New EPA Rules – Impact on IPL's Existing Generation

EPA is in the process of developing and implementing a broad set of rules that will negatively impact IPL's coal-fired fleet generation. The environmental challenges facing utilities are both extensive and urgent with a wide array of rules covering air, including emissions of hazardous air pollutants under the MATS, water, and waste, but also in the compressed time frame required for compliance. MATS regulation will have the largest impact on IPL's generation fleet. To control hazardous air pollutants, generating sources must control to the Maximum Achievable Control Technology ("MACT"), to achieve over 90% reduction in mercury emissions from 2002 levels. Significant reductions of all other hazardous air pollutants will also be required. MATS compliance could require a combination of SO_2 scrubbers, baghouses (also known as fabric filters), dry sorbent injection ("DSI"), and activated carbon injection ("ACI"). Moreover, unlike more recent air pollution regulations based on cap-and-trade that would allow tradable allowances, the trading of pollutant allowances is not allowed. Instead each plant must physically comply with the stringent limitations on a plantwide average basis.

For IPL's newer, more efficient coal-fired units, this means investing in the required controls to meet EPA standards. A study conducted by Sargent & Lundy identified full baghouses, ACI and DSI emission control technologies on Petersburg Generation Station ("Pete") Units 1 and 2; polishing baghouses, electrostatic precipitator ("ESP") upgrades, ACI, and DSI on Pete Units 3 and 4; and a full baghouse and ACI on Harding Street Station ("HSS") Unit 7. These are IPL's largest most efficient controlled units that comprise the core of its generating fleet and the investments are clearly cost-effective and prudent.

That same study showed significant and proportionate higher investment requirements on IPL's smaller uncontrolled coal-fired units. Environmental control investments for these IPL units approaching the end of their useful life are not cost-effective. These units include Eagle Valley Generating Station ("EV") Units 3, 4, 5, and 6 and HSS Units 5 and 6. Those units, all over 50 years old and representing 472 MW of summer-rated capacity, will likely be forced to retire up to six years ahead of previous planning estimates which were based solely on age and condition.

IPL also has four oil-fired steam units as part of its generating fleet. HSS Units 3 and 4 and EV Units 1 and 2 are all over 60 years old. While retirement of these units is not required for MATS compliance these units have been operating well in excess of their design life and have been experiencing reliability issues in recent years. Based on age and condition, and operational links to retiring coal-fired generation, these units were also assumed to be retired at the end of 2015 in conjunction with the planned shutdown of the smaller IPL coal-fired units at these stations. These oil-fired units represent an additional 148 MW of summer-rated capacity, bringing the total retirements to 620 MW by the end of 2015.

Mandated Demand Side Management – Impact on Supply Resource Needs

IPL's demand side initiatives are comprised of three different elements: energy efficiency demand side management ("DSM"), demand response DSM, and customer-based renewables[1] that also reduce utility generation requirements. The most significant DSM development impacting IPL is the recent IURC rules targeting prescribed levels of energy efficiency DSM and their impact in reducing IPL's future load growth and IPL's future supply needs. While the IURC targets were the primary driver in the development of this current plan, DSM already plays a lead role in IPL's resource strategy. The IURC Generic DSM Order (Cause No. 43623) specified 10 years of annual energy savings goals from energy efficiency DSM ramping up to 2.0% gross new DSM per year by 2019, representing a significant increase in IPL's DSM efforts. The impact of these targets on IPL's resource needs shows an approximate net 337 MW reduction from energy efficiency DSM and another 119 MW from demand response DSM, including Air Conditioning Load Management ("ACLM") and interruptible programs, by 2021. This will result in about 456 MW of total demand side peak load reductions over the next 10 years. The targets also present some level of risk and may need to be revisited after additional experience is gained with DSM.

Climate Change Legislation – Delayed But Not Forgotten

In 2008 and 2009, numerous bills were introduced in Congress in an attempt to reduce the emission of carbon from various sources, particularly electric utility generation. Since no commercial carbon emission controls have been developed for coal-fired generation, this essentially amounted to a significant tax on Midwestern coal-fired plant operation and correspondingly IPL customers. The bills introduced very strict and imminent target emission levels and ultimately Congress was unable to pass any form of direct climate change legislation. However, climate change legislation is likely to be revisited, and remains a major risk to coal-fired generation. It is anticipated that any new rules will allow a more gradual transition to lower carbon emitting utility generation featuring gas-fired generation in addition to wind and DSM, and a more orderly and reliable retirement timeline for less-efficient coal units.

Natural Gas – Shale Gas Paradigm Shift and the Promise of Gas-Fired Generation

Until recently, the reliance on natural gas ("NG") for intermediate or base load generation presented significant risks with regard to supply reliability and price. Tight supplies and expensive and unreliable liquefied natural gas ("LNG") imports were the expected norm for the United States ("U.S.") natural gas market. Gas reserves in conventional wells had peaked and begun to decline. LNG gas imports looked to provide some relief, but also added supply risk, especially since the primary sources of LNG were regarded as less than reliable U.S. trading partners. Certainly any heavy reliance on NG generation would have been considered risky, even imprudent. However, breakthroughs and commercial developments in hydraulic fracturing technologies have economically tapped previously inaccessible reserves and brought huge supplies of shale gas from domestic sources, including Midwest sources, to market. This represents a true paradigm shift in domestic

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1 See Section 4B, Demand Side Management, Net Metering and Rate REP for details.

NG markets that has lowered NG prices and price forecasts dramatically. This market shift signals to the industry that gas-fired generation has overcome its key hurdle as a reliable and affordable power source for electric generation. Gas-fired generation, especially intermediate or even base load generation, can now provide low cost, reliable, and fuel diverse resource benefits to the IPL portfolio.

MISO – Structural Changes and Capacity Cost Risk

MISO continues to transform its transmission expansion and resource adequacy requirements. The methodology for the socialization of transmission expansion costs has been one of the significant drivers of uncertainty in the past several years. In 2010, MISO filed and the Federal Energy Regulatory Commission ("FERC") accepted a cost sharing methodology for transmission projects built to meet the renewable mandates of states within the footprint. These projects are called Multi-Value Projects ("MVP"). The costs of these projects are socialized across the footprint regardless of the individual state requirements for renewable energy. Subsequent to the MVP Order, on July 21, 2011, FERC issued Order 1000. This Order is designed to compel planning to meet "public policy" as MISO did in their MVP filing. The Order also compels determination of costs sharing methodologies between RTOs, as well as entities outside of RTOs. IPL has challenged the MISO trend toward increasing socialization of transmission costs for projects that are not required for reliability on the basis that the benefits to IPL customers from these projects is not commensurate with their allocated costs.

Structured resource adequacy changes by MISO that impact IPL customers include the introduction of a zonal planning requirement and capacity auction modifications. These rules were filed with FERC in July 2011 and have not yet been approved by FERC. As currently written, these rules could result in higher capacity prices in Indiana as compared to the current construct. Historically IPL has successfully relied on the regional market for a portion of its capacity needs. The zonal planning requirement aspect of MISO's proposal will likely reduce the pool of qualifying capacity resources that can be used to meet IPL customer load requirements. Executing bilateral capacity purchases will be more challenging due to the risk that generation sighted outside of the local resource zone will clear at different prices than the clearing price for IPL's load. This will place a premium on capacity resources located close to IPL's load, and may incentivize IPL and other MISO LSE's to advance the construction of new capacity additions to avoid or minimize the deliverability risk associated with bilateral capacity transactions.

Supply Resource Modeling – New Resource Selection

[170-IAC 4-7-4(5)]

IPL worked with Ventyx to model and evaluate IPL's portfolio of existing generation and new resource options against forecast load requirements to derive its integrated resource plan. The modeling takes a structured multi-step process from load forecast to resource needs to a resource plan. First the base load forecast is established through econometric modeling using proprietary Moody's forecast economic parameters. This forecast is adjusted by incorporating all forecast energy efficiency DSM and other direct load impacts, such as electric vehicles. IPL then adds cost effective load management resources including demand response DSM, such as ACLM and interruptible programs plus any other load modifications, such as distribution automation enabled voltage reductions. This adjusted net load forecast, adjusted for MISO resource adequacy requirements, determines the supply resources needed to reliably serve IPL load and meet MISO resource adequacy requirements.

IPL then uses its forecast of existing generation resources, including the accelerated retirements from the new EPA rules, to identify the resource gap to be met by additional supply resources. IPL's base case identified about a 600 MW resource gap by 2021. Selected commercially available resources including coal, nuclear, gas, and renewables generation were identified for detailed supply evaluation against IPL's supply needs. The Ventyx Capacity Expansion and Scenario Evaluation modules were used to identify low cost and low risk resources for IPL's resource portfolio. In addition to Ventyx's reference case, the future landscape scenarios included cases around environmental sensitivity – targeting CO_2 costs, fuel sensitivity - targeting natural gas costs, and load demand sensitivity - targeting DSM load impacts. Following the analyses results and interpretation, the selection of supply resources completes the overall resource identification process and forms basis for the IRP reference plan.

IPL Resource Portfolio Overview and IRP Reference Case

Existing Generation Resources

IPL's portfolio of generation resources includes its five largest and cleanest coal-fired units. Coal still represents a reliable and low cost fuel source for the region and IPL, and will continue to be the core of IPL's base load portfolio. These units are fully scrubbed for SO_2, and largely controlled for NOx as well. While new EPA rules around mercury and air toxics, water, and ash certainly will necessitate additional controls, the investment in these units is clearly prudent and necessary. The future portfolio will likely not include its six smaller coal-fired units and four small oil fired units. As indicated previously, these units are at or nearing the end of their useful lives and additional large environmental and maintenance capital investments are not economic.

Renewables Generation

While no mandatory federal or state renewable energy standard ("RES") currently exists, in the event of an RES, IPL has about 300 MW of wind generation, representing about 7% of load toward any RES requirement, secured under long term Power Purchase Agreements ("PPAs"). Under the terms of the PPAs, IPL receives all of the energy and Renewable Energy Credits ("RECs") from the two wind farms[2]. Previous RES

[2] The null energy of the Wind PPAs is used to supply the load for IPL customers and, in the absence of any RES mandates, IPL is currently selling the associated RECS, but reserves the right to use RECs from the Wind PPAs to meet any future RES requirement. The Wind PPAs were approved by the IURC

legislation also allowed for energy efficiency DSM to contribute to RES requirements, and IPL anticipates having considerable contributions from that source going forward. With both wind generation and DSM, IPL is well-positioned toward any future RES requirement.

Demand Side Management

Driven largely by retirements, IPL's resource need is forecasted to be roughly 1,100 MW by 2021, before any DSM considerations. In order to meet this resource gap and to comply with the IURC's energy efficiency goals, IPL's resource portfolio will include considerable investment in demand side management resources. IPL's DSM program is comprised of conservation or energy efficiency DSM targeting broader energy reductions, load management or demand response DSM targeting system peaking conditions, and customer based renewables targeting customer-owned renewable installations[3]. IPL forecasts the net energy efficiency DSM impact on its capacity resource needs to be approximately 337 MW net summer coincident peak demand reduction by 2021. In addition, demand response resources are projected to add another 119 MW of peak load reductions. These DSM levels will lower IPL's supply resource needs by roughly 500 MW when adjusted for planning reserve margins.

Distribution Automation

IPL plans to enhance service reliability and system demand response opportunities through its distribution automation ("DA") initiatives over the next two years. Reliability improvements will be driven by adding distribution Supervisory Control and Data Acquisition ("SCADA") software tools and protective distribution devices throughout the system so fewer customers experience a service interruption when a fault occurs on the system. In addition, restoration efforts should be more effective as sections of circuits are isolated and brought back in-service. IPL is in the process of implementing a voltage reduction ("VR") program to reduce system peak demand by up to 40 MW during approximately 100 peak hours per year. This will be achieved through interactive voltage monitoring of the 13.2 kV distribution system with two-way communication voltage regulation equipment and remote capacitor bank controls and the distribution SCADA control software system. The system should be fully operational by 2013.

New Generation

EPA's environmental rules drive the premature retirements of IPL's small coal-fired units and add further urgency to the selection and implementation of new generation resources. IPL is considering several alternatives to replace this capacity. The analysis to date

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and if IPL chooses to monetize the RECs that result from the agreements, IPL shall use the revenues to first offset the cost of the Wind PPAs and next to credit IPL customers through its fuel adjustment clause proceedings. The Green-e Dictionary (http://green-e.org/learn_dictionary.shtml) defines null power as, "Electricity that is stripped of its attributes and undifferentiated. No specific rights to claim fuel source or environmental impacts are allowed for null electricity. Also referred to as commodity or system electricity."

[3] See Section 4B, Demand Side Management, Net Metering and Rate REP for details.

suggests that the preferred option is likely to be a modern, natural-gas fired Combined Cycle Gas Turbine ("CCGT") power plant. The results of Ventyx's resource modeling identified a CCGT as the least-cost supply resource over wind, coal, and nuclear over a range of future horizons. Consequently IPL's reference case includes a CCGT based on overall costs and risks, including fuel diversity benefits. With the advent of abundant and low cost NG supplies, gas-fired generation has become reliable and affordable electric generation. Forecasts of obtainable domestic supply have surged and long-term price forecasts have fallen. Intermediate or base load gas-fired generation, will provide a number of benefits to the IPL portfolio. Gas-fired generation emits about half the CO_2 per unit of electricity of a coal-fired unit and will be a larger energy contributor, if or when, new greenhouse gas ("GHG") legislation is enacted. Even with the retirement of some small coal-fired units, IPL's generation output will still be dominated by coal, and at risk for future climate change legislation. Gas-fired generation looks to be the right fit for IPL's generation portfolio. Before IPL commits to a CCGT or any new resource, it will study the comparative costs of other alternatives including purchased power, joint ownership of facilities, refurbishment of existing facilities, conservation, load management, and cogeneration that may cost-effectively serve IPL load and request a Certificate of Public Convenience and Necessity ("CPCN") from the Commission.

Capacity Purchases

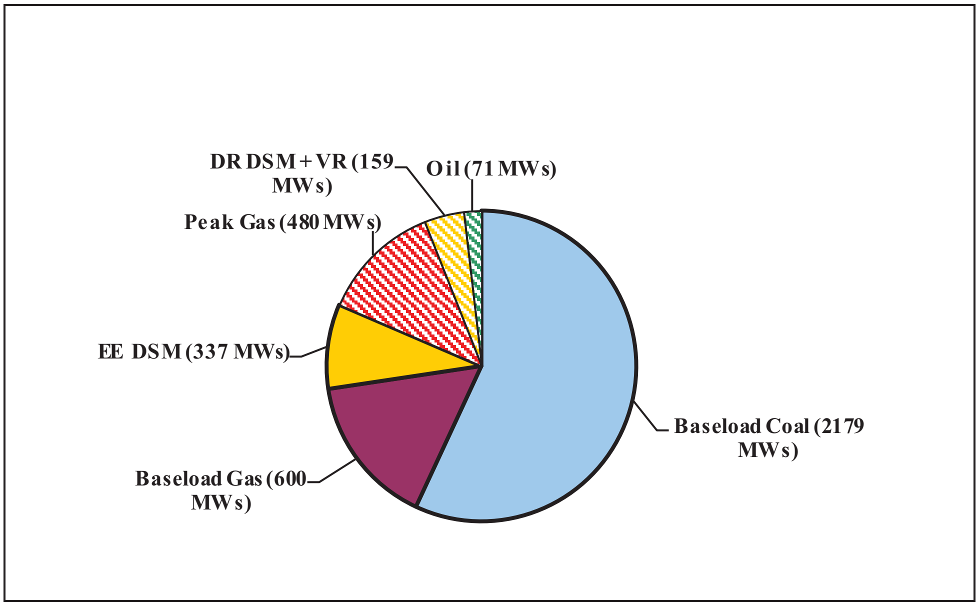
IPL customers have benefited in recent years from IPL's ability to purchase capacity at prices well below the levelized cost of building new generation. Although market capacity prices have remained depressed in the near term, they are not expected to remain at these levels as the supply-demand balance of capacity and load comes more into equilibrium in the MISO footprint. This balance could be hastened by new EPA rules driving premature retirements of coal-fired generation over the next few years. IPL assumed that under a normal approval and construction schedule, new build capacity in the form of a CCGT will not be available until 2018. IPL may need about 600 MW of capacity purchases to bridge the gap between forced small unit retirements and projected new generation in-service dates if EPA MATS rules are finalized as currently proposed. IPL will evaluate and identify the resource alternative that best meets this potential resource need, which could include an accelerated schedule for CCGT installation.

Portfolio 2021

Much of the IRP reporting is appropriately focused on where IPL is, what IPL is facing, and how IPL is going to navigate those challenges. The process ultimately results in a resource plan, as identified above, that best serves IPL customers. In addition to defining the reference case resource plan, it is also helpful focus on where IPL ends up when the reference plan is executed. "Portfolio 2021" is a 10 years out snapshot of IPL's resource mix broken out by base load capacity and peaking capacity resources. Of note, the energy efficiency DSM identified is the incremental DSM forecast from 2011 forward, as previous DSM programs continually get incorporated as reduced load into the total internal demand ("TID") load forecast.

This 10 year look-forward projects about 3,116 MW of base load and intermediate resources, including 2,179 MW of coal-fired generation, 600 MW of new gas-fired generation, and about 337 MW of new energy efficiency DSM. It will also include about 710 MW of peaking resources, including 480 MW of gas-fired generation, and 71 MW of oil-fired generation, 119 MW of demand response DSM and 40 MW of DA voltage reduction savings. These resources are diagrammed in the figure that follows. IPL will also expect to have a 12% composite renewable generation position from 300 MW of Wind PPAs[4] and energy efficiency DSM (assuming 5% contribution from DSM) toward any legislated future RES requirement.

Figure 1.1 – IPL Resources – 2021 (by Summer Capacity)



Source: IPL

[4] See Section 4, Integration, Renewables Generation/Climate Change for the details of these Wind PPAs.

SECTION 2. THE CHANGING BUSINESS LANDSCAPE

[170-IAC 4-7-5(b)(2)-(4)] [170-IAC 4-7-8(9)]

Since the submission of the IPL 2009 IRP, the landscape for IPL and the electric utility industry has shifted in a number of key areas. The following landscape issues are key drivers in the development of this IRP and IPL's future resource strategy.

Demand Side Management

[170-IAC 4-7-4(1)] [170-IAC 4-7-5(b)(6)] [170-IAC 4-7-6(a)(7)]

The landscape for Demand Side Management ("DSM") in Indiana has changed significantly in the two years since the submittal of the IPL 2009 IRP document. The two primary developments in Indiana are the significant energy efficiency targets established for jurisdictional utilities and the delivery of a common set of core programs by a statewide third party administrator. Both of these developments were the consequence of the IURC's Phase II Generic Order. This order requires the jurisdictional electric utilities to submit a series of three discrete three year DSM plans. The net result of these developments is that DSM will become a much more significant component of utility resource plans.

While IPL was in the process of increasing the scale and scope of its DSM offerings in the 3 Year Plan filed in February 2009, the Phase II Generic Order (issued in December, 2009) required IPL to file an updated three year plan in October 2010 to achieve these higher targets. The next set of three year DSM plans for achievement of the IURC targets for the period from 2014 to 2016 will be filed in 2012. The order specified annual energy savings goals based on a percent of weather-normalized average electric sales for prior three years. These targets start at a 0.3% level in 2010 and ramp up to 2.0% in 2019. For IRP planning purposes, the DSM levels were considered mandatory, and integration of these load impacts on IPL's base case load forecast was treated as a resource planning requirement.

There is, however, uncertainty in the DSM impacts. The longer term impacts of DSM on the forecast will depend on how yet to be identified programs will impact the net energy forecast, including load profiles of the measures, program measure duration, and program free riders, as well as the coincident summer peak impact of the programs. Long term cost-effectiveness at the targeted DSM levels is another uncertainty. Thus, for resource planning robustness, several additional load forecast scenarios based on DSM and/or economy uncertainties were also evaluated in this IRP.

Forecast

[170-IAC 4-7-4(1)] [170-IAC 4-7-5]

Economic conditions have begun to stabilize in Indiana after Indiana's Gross State Product fell nearly 7% from its peak in February of 2008 after the start of the financial crisis to its trough in March of 2009. The impact of the economic recession and recovery is forming more of a U-shaped recovery. IPL's load bottomed in 2009 and recovered modestly in 2010. From its economic bottom Indiana's economy recovered 2.4% by the end of 2010. According to Moody's Analytics, Indiana's economy is forecasted to grow at an average rate of 3.9% per year during its recovery from 2011 to 2013. After this recovery period, growth is expected to slow down to 2% per year for the following five years. This uptick in economic activity is also reflected in the stronger employment and industrial output variables that are key drivers of IPL's load forecast. Sales before any DSM adjustments are expected to grow at a compound annual growth rate of 1.34% over the next three years, and 1.09% over the next 10 years.

Natural Gas

[170-IAC 4-7-4(1)] [170-IAC 4-7-4(7)] [170-IAC 4-7-5(b)(2)-4)] [170-IAC 4-7-6(b)]

The emergence of shale gas into the United States ("U.S.") natural gas ("NG") supply has sparked a renaissance in domestic NG markets. As little as five years ago, the outlook for U.S. NG production was rather bleak. Reserves in conventional wells had peaked and begun to decline in 2001 with little expectation for a reversal. Tight supplies and expensive and unreliable liquefied natural gas imports were the expected new normal of the U.S. natural gas market. However, developments in hydraulic fracturing technologies brought the massive quantities of shale gas, reportedly one hundred years' worth of supply, from what was one of the most expensive sources in the market to one of the cheapest. Furthermore, shorter drilling time and front-loaded well yields make shale supplies more flexible to swings in demand as well as less expensive. It is now widely expected that the electricity generation sector will significantly grow its gas generation fleet to be the consumers of this plentiful resource. The price response of these factors, according to Ventyx, is a stabilization between $5-$6/MMBtu (2011$) over the next 10 years from their current recession levels near $4/MMBtu. More discussion and industry commentary on NG markets can be found in Section 4D, Market Trends and Forecasts, Fuel Forecasts.

Environmental Landscape

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(c)(2)(A)-(C)] [170-IAC 4-7-5(b)(7)]

The environmental challenges facing utilities are unprecedented in terms of the number of rules coming due simultaneously and the compressed time frame for compliance that will negatively impact IPL's coal-fired fleet generation. These include:

- Cross State Air Pollution Rule ("CSAPR") for SO_2 and NOx
- Maximum Achievable Control Technology ("MACT") for Mercury and Hazardous Air Pollutants ("HAPs"); more recently known as "MATS"
- Coal Combustion Residuals ("CCR")
- Cooling Water Intake
- Greenhouse Gas ("GHG")

Of these five, the MACT rules governing HAPs including mercury emissions will have the most significant impact on IPL's resource plan. Significant reductions of all hazardous air pollutants will be required. For mercury and acid gases, MACT could require a combination of SO_2 scrubbers, and activated carbon injection. For metal HAPs, MACT could require significant upgrades to existing controls and will likely require baghouses (also known as fabric filters). In addition, extensive continuous emissions monitoring systems will be required. Moreover, unlike traditional air pollution regulations, the trading of pollutants for MACT compliance is not allowed. Instead each plant must comply with the stringent limitations of pollutants, which have not previously been regulated, on a plantwide average basis. Without regulatory or Congressional relief, coal-fired utilities will be forced to install expensive controls on every operating unit or be forced to shut them down. The compliance period for MATS is three years from the effective date of the rule. Thus, it appears compliance will begin around January 1, 2015, which will represent a challenging timeline to install the needed controls. As a result, it is anticipated IDEM will grant a one-year extension for the installation of controls as permitted by the proposed regulations. This will help, but not alleviate the situation.

Resource Adequacy Requirements

[170-IAC 4-7-6(c)(4)]

In July 2011, MISO filed a new resource adequacy construct with the Federal Energy Regulatory Commission ("FERC") that if accepted by FERC will fundamentally change how resource adequacy targets are met in MISO. The target implementation date for the new changes is June 1, 2013. MISO's proposed construct has proven to be highly controversial and has been protested at FERC by many market participants. Protests range from complaints that MISO didn't go far enough to incent generation by some stakeholders, to complaints by other stakeholders that MISO went too far with its proposal and that it is unnecessary, too complex, inadequately developed, and infringes on states' rights. MISO requested that FERC provide an Order by February 29, 2012, to permit modifications to software and business rules and to provide time to train stakeholders. Likely impacts to IPL of the new construct will be reduced population of qualified capacity resources for resource adequacy compliance and higher capacity prices. Key features of the new construct are described in Section 4, Integration, Resource Adequacy (2013 and Beyond).

Transmission Expansion Cost Sharing

[170-IAC 4-7-4(9)] [170-IAC 4-7-4(13), (15)] [170-IAC 4-7-4(15)] [170-IAC 4-7-6(d)(2)(2)]

The methodology for the socialization of transmission expansion costs has been one of the significant drivers of uncertainty in the past several years. MISO and the transmission owners began development of a methodology for sharing of costs for reliability projects in 1994, and shortly thereafter launched into development of a methodology for the sharing of costs of projects deemed to be "economic." Economic projects are those projects that are not needed to meet North American Electric Reliability Corporation ("NERC") criteria for reliability but for which there may be an economic benefit. In 2010, MISO filed and FERC accepted a cost sharing methodology for transmission projects built to meet the renewable mandates of states within the footprint. These projects are called Multi-Value Projects ("MVP"). The costs of these projects are socialized across the footprint regardless of the individual state requirements for renewable energy. Included in the MVP filing was a renaming of economic projects; they are now called 'Market Efficiency projects". Subsequent to its MVP Order, on July 21, 2011, FERC issued Order 1000. This Order is designed to compel planning to meet "public policy" as MISO did in their MVP filing. The Order also compels determination of costs sharing methodologies between Regional Transmission Organizations ("RTOs"), as well as entities outside of RTOs. Additional information on transmission expansion cost sharing is provided in Section 4C, Transmission and Distribution.

SECTION 3. ENVIRONMENTAL RULES AND REGULATIONS

[170-IAC 4-7-5(b)(6)-(7)] [170-IAC 4-7-6(a)(4)(A)-(D)] [170-IAC 4-7-6(c)(2)] [170-IAC 4-7-8(9)]

EPA is in the process of developing and implementing a new suite of rules that will negatively impact coal-fired fleet generation. The environmental challenges facing utilities is unprecedented in terms of (1) the number of rules coming due simultaneously; (2) the compressed time frame for compliance; and (3) the wide array of rules covering all environmental media. For air, EPA is regulating for the first time greenhouse gas ("GHG") emissions and emissions of hazardous air pollutants, including mercury ("Hg") under the Mercury and Air Toxics Standard ("MATS"). Under the water rules EPA is proposing to regulate cooling water intake structures. Finally, under the waste rules, EPA is further restricting its requirements for ash and PCB management. Below is a partial list of the impending EPA rules:

- In January 2010, EPA for the first time issued rules requiring GHG permits under prescribed increases or new sources;
- In June 2010, EPA proposed new rules on the management of ash with final rules due out by late 2012;
- In June 2010, EPA lowered the National Ambient Air Quality Standard ("NAAQS") for sulfur dioxide ("SO_2") and it is expected that EPA will propose lowering the particulate matter standard in 2012;
- In July 2010, EPA released final rules requiring additional SO_2 and nitrogen oxides ("NOx") reductions beginning in 2012 with further reductions in 2014;
- In March 2011, EPA proposed new regulations governing hazardous air pollutants – Hg, trace metals, and acid gases – by 2015; and
- In March 2011, EPA proposed a revised regulation requiring utilities to reduce the adverse impacts to fish and other aquatic life caused by cooling water intake structures no later than 2020.

Each of these rules will require significant investment especially compliance costs as a result of MATS. In addition, there are a number of key factors and uncertainties which make planning difficult, such as (1) what will the final rules require; (2) what will be the result of impending litigation; (3) will Congress act on any or all of these proposals; (4) what will be the impact of the 2012 elections; (5) will compliance occur as planned around 2015 or will there be extensions.

In light of these uncertainties, each of the EPA rules will be discussed in detail later in this section. Before doing so, however, here is a review of the existing environmental rules and regulations.

Existing Regulations – Significant Environmental Effects

[170-IAC 4-7-4(8)]

Air Emissions

[170-IAC 4-7-6(a)(4)(A)] [170-IAC 4-7-6(c)(2)(A)]

Sulfur Dioxide

Title IV of the Clean Air Act Amendments of 1990 ("CAAA") established a two-phase statutory program to reduce SO_2 emissions. The EPA allocated SO_2 emissions allowances based on a formula that uses historical operating data for specified years multiplied by the allowable limit and then converted to tons of emissions allowed. These tons of emissions are called "allowances" that can then be bought, sold or transferred between units for compliance purposes. Phase I of the program became effective on January 1, 1995, for larger, higher emitting units. In Phase I, the EPA allocated SO_2 emissions allowances based on an emission rate of 2.5 lbs. per MMBtu. Phase II of the program became effective on January 1, 2000, and the EPA lowered the emissions rate used to allocate SO_2 allowances from 2.5 to 1.2 lbs. per MMBtu.

In response to this regulatory program, IPL developed an Acid Rain Compliance Plan that was submitted to the IURC on July 1, 1992, (IURC Cause No. 39437) and subsequently approved on August 18, 1993. This plan called for the installation of two SO_2 retrofit Flue Gas Desulfurization ("FGD") units on Pete Unit 1 and Pete Unit 2. These FGD units were placed in-service in 1996. FGD is the technology used for removing SO_2 from the exhaust flue gases in power plants that burn coal or oil to produce steam for the steam turbines that drive their electricity generators.

The SO_2 regulations remained relatively unchanged as did the IPL compliance plan until March 10, 2005, when the EPA issued Clean Air Interstate Rule ("CAIR") which covered the 28 eastern states and the District of Columbia ("D.C."). The federal CAIR established a two-phase regional cap-and-trade program for SO_2 and NO_x. Phase I of CAIR for SO_2 had an effective date of January 1, 2010, and reduced SO_2 emissions by 4.3 million tons; 45% lower than 2003 levels. Phase II of CAIR, was scheduled to become effective on January 1, 2015.

In anticipation of this CAIR regulatory program and to help meet the existing CAAA regulatory requirements, IPL developed a Multi-Pollutant Plan ("MPP") that was submitted to the IURC on July 29, 2004, (IURC Cause No. 42700) requesting approval of certain core elements of the plan which were approved on November 30, 2004. In order to reduce SO_2 emissions, IPL completed the Petersburg Generating Station ("Pete") Unit 3 FGD enhancement (May 2006) and the new Harding Street Generating Station ("HSS") Unit 7 FGD (September 2007). IPL also identified the enhancement of the Pete Unit 4 FGD as a core element of its MPP. IPL is nearing completion of the Pete Unit 4 FGD upgrade project (IURC Cause No. 43403 approved April 2, 2008) with a scheduled in-service date of late 2011 to help meet the additional SO_2 emission reduction requirements. IPL materially meets the Phase I CAIR requirements for SO_2 upon completion of all of these projects. However, IPL may be required to supplement its compliance plan with the purchase of emission allowances on the open market.

As IPL was developing and implementing its MPP, the United States ("U.S.") Court of Appeals for the D.C. Circuit vacated the federal CAIR in July 2008 and remanded it to the EPA. Subsequently, in September 2008, the EPA moved for rehearing to the full bench (en banc). In December 2008, the U.S. Court of Appeals for the D.C. Circuit issued an order requiring the EPA to revise the federal CAIR and reinstate the effectiveness of the existing rule until the EPA revises CAIR. Thus, CAIR has remained in effect and will do so until the end of 2011. At that time, CAIR will cease to exist and all existing allowances will expire.

On January 1, 2012, a new program comes into effect which replaces CAIR and is referred to as the Cross-State Air Pollution Rule ("CSAPR"). The details of CSAPR will be discussed later in this section as it relates to SO_2 emission reduction requirements.

Nitrogen Oxide

On September 24, 1998, the EPA issued a final rule, referred to as the NO_x State Implementation Plan ("SIP") Call. The rule imposed more stringent limits on NO_x emissions from fossil fuel-fired steam electric generators in 21 states in the eastern third of the U.S., including Indiana. In June 2001, the Indiana Air Pollution Control Board adopted the Federal NO_x SIP Call rule requiring IPL and other Indiana utilities to meet a systemwide NO_x emissions rate of 0.15 lb. MMBtu during the annual ozone season from May 1 – September 30 each year. In a similar fashion with the CAAA, compliance was demonstrated via an emission allowance trading program. In order to meet these more stringent NO_x emission reduction requirements which became effective in 2004, IPL installed Selective Catalytic Reduction ("SCR") equipment on Pete Unit 2, Pete Unit 3 and HSS Unit 7 along with several low NO_x clean coal technology ("CCT") projects on other units. The Pete SCR units commenced operations in May 2004 whereas the HSS Unit 7 SCR came online in May 2005.

As previously discussed, the EPA issued CAIR in May 2005. The federal CAIR not only required additional SO_2 emission reductions but it also required further NO_x emission reductions. Phase I of CAIR became effective for NO_x on January 1, 2009, and required NO_x emission reductions by 1.7 million tons, 53% from 2003 levels. In addition, for the first time, NO_x compliance was required on a year-round basis in addition to the annual summer ozone requirements. Phase II of CAIR was scheduled to become effective on January 1, 2015.

IPL has already substantially met the Phase I CAIR emission reduction requirements for NO_x as a result of the installation of the SCR equipment on Pete Unit 2, Pete Unit 3 and HSS Unit 7. The only major impact from CAIR Phase I is IPL must now operate its NO_x emission reduction equipment on a year-round basis.

As mentioned earlier, the CAIR regulation sunsets at the end of 2011 and is replaced by CSAPR which becomes effective on January 1, 2012. The NOx requirements of the new CSAPR will be discussed later in this section.

Regional Haze

A Regional Haze rule established planning and emissions reduction timelines for states to use to improve visibility in national parks throughout the U.S. The rule sets guidelines for states in setting Best Available Retrofit Technology ("BART") at older power plants. The EPA determined that states, such as Indiana, which adopt the federal CAIR cap-and-trade program for SO_2 and NO_x will be allowed to apply federal CAIR controls to satisfy BART requirements. The Indiana Air Pollution Control Board also approved a final rule implementing BART which provides that sources in compliance with federal CAIR controls are also in compliance with BART requirements for SO_2 and NO_x. It is anticipated the CSAPR will also meet the BART requirements.

Mercury

On March 15, 2005, the EPA not only issued CAIR which covered NO_x and SO_2 but also issued the Clean Air Mercury Rule ("CAMR"). CAMR was the first federal rule to permanently cap and Hg emissions from coal-fired power plants and the first rule worldwide that addresses Hg. When fully implemented, CAMR, in conjunction with CAIR, would have reduced utility emissions of Hg from 48 tons a year to 15 tons, a reduction of nearly 70%. In 2010, the first phase cap was 38 tons and emissions will be primarily reduced by taking advantage of "co-benefit" reductions where Hg is reduced by the equipment installed to reduce SO_2 and NO_x emissions under CAIR. In the second phase, beginning in 2018, coal-fired power plants were subject to a second cap, which would further reduce emissions to 15 tons upon full implementation. In October 2007, the Indiana Air Pollution Control Board adopted an Hg rule which mirrored the federal CAMR.

Based upon the co-benefits derived from meeting CAIR, IPL did not anticipate the need to install Hg-specific control technology to meet Phase I requirements. However, since Hg was a new regulatory program, IPL would have been required to install new monitoring systems by January 1, 2009, to ensure that Hg emissions are correctly measured. As such, IPL sought and received IURC approval to install Hg emissions monitoring systems (sorbent traps) in IURC Cause No. 43403.

In February 2008, the U.S. Court of Appeals for the D.C. Circuit vacated the federal CAMR. The court ruling required EPA to reconsider the Hg emissions rule and adopt a new Hg emissions reduction rule which presumably will not include a cap-and-trade program. Subsequently, in July 2008 the Indiana Office of the Attorney General ("AG") issued an Advisory Letter No. 08-17 regarding implementation and enforcement of the Indiana CAMR, which resulted in IDEM providing a formal opinion that the Indiana CAMR should not be enforced. As a result of the federal court vacate and the Indiana AG opinion letter, IPL will not be required to meet either the Hg emission reduction requirements or install Hg monitors until such time as there is either judicial or regulatory finality.

Subsequently, in March 2011 EPA proposed a new rule which regulates Hg with a final rule scheduled to be issued by November 2011. As anticipated the new rule requires a 90% reduction in mercury emissions based upon the top 12 performing units, no trading of pollutants, and installation of emission control monitors. Details of the mercury rule can be found in the discussion on Mercury and Air Toxics Standards.

Nonattainment

[170-IAC 4-7-4(8)]

Over the past several years, the EPA has tightened NAAQS for ground level ozone by lowering the standard for daily emissions from 0.080 parts per million to 0.075 parts per million and lowering the standard for daily emissions of fine particulate matter from 65 micrograms per cubic meter to 35 micrograms per cubic meter. Several counties in Indiana were designated as nonattainment for fine particulate matter and several counties are expected to be redesignated as nonattainment for ozone. It is anticipated a new particulate matter standard will be issued in 2012 that will require the state to develop a SIP demonstrating how to regain attainment status in 2018.

On June 22, 2010, EPA issued a new one-hour standard for SO_2 of 75 ppb. As a result, IDEM will be developing a SIP that is required to be submitted to EPA by 2013 detailing how counties will return to attainment with this standard by 2017.

Greenhouse Gas

The only current national regulation for GHG is for existing sources with significant increases in emissions and for new sources. Over the last several years, many pieces of legislation have been introduced (i.e., Waxman-Markey) that if promulgated would have required utilities to reduce GHG emissions via a cap-and-trade program. However, over the last 12 months or so, Congress has been unable to implement a national GHG program due to the potential impacts on a struggling economy. Potential future regulation in this area is discussed in the Impending and Future Regulations later in this section.

Existing Controls to Reduce Air Emissions

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(a)(4)(A)] [170-IAC 4-7-6(c)(2)(A)]

As shown in Figure 3.1 below, IPL has already installed a myriad of environmental pollution control equipment. IPL has invested over $600 million in the last seven years which has significantly reduced IPL's NO_x, SO_2, Hg, and particulate matter emissions as outlined below.

- Pete Unit 2 and Pete Unit 3 SCR in 2004
- HSS Unit 7 SCR in 2005
- Pete Unit 3 FGD upgrade in 2006
- HSS Unit 7 FGD in 2007
- Pete Unit 4 FGD upgrade in late 2011

Figure 3.1 – IPL Generating Units: Environmental Controls

Unit	Fuel	Summer Output (MW)	Environmental Controls
Pete Unit 1	Coal	232	FGD, NN, LNB/OFA
Pete Unit 2	Coal	435	FGD, SCR, LNB/OFA
Pete Unit 3	Coal	540	FGD, SCR
Pete Unit 4	Coal	545	FGD, NN, LNB
Pete DG	Diesel	8	
HSS Units 3 & 4	Oil	70	
HSS Unit 5	Coal	106	SNCR, NN, LNB/OFA
HSS Unit 6	Coal	106	SNCR, NN, LNB/OFA
HSS Unit 7	Coal	435	SCR, FGD, NN, LNB/OFA
HSS CTs 1-3	Oil	60	
HSS CT 4	Oil/Gas	82	Water Injection
HSS CT 5	Oil/Gas	82	Water Injection
HSS CT 6	Gas	158	LNB
HSS DG	Diesel	3	
EV Units 1 & 2	Oil	78	
EV Unit 3	Coal	43	
EV Unit 4	Coal	56	LNB/OFA
EV Unit 5	Coal	62	LNB/OFA
EV Unit 6	Coal	99	NN, LNB/OFA
EV DG	Diesel	3	
Georgetown GT 1	Gas	79	LNB
Georgetown GT 4	Gas	79	LNB

Note: Acronyms used in Figure 3.1 – CCOFA (Closed-Coupled Overfire Air), FGD (Flue Gas Desulfurization), LNB (Low NO_x Burner), NN (Neural Net), SCR (Selective Catalytic Reduction), SNCR (Selective Non-Catalytic Reduction), SOFA (Separated Overfire Air)

Source: IPL

Water

The National Pollution Discharge Elimination System ("NPDES") permit system obtains its authority from Clean Water Act ("CWA"). Section 402 requires permits for the direct discharge of pollutants to the waters of the U.S. These permits, which IPL maintains for each of its power plants, have three main components: technology based and water quality based effluent limitations; monitoring requirements; and reporting requirements.

Effluent limitations identify the nature and amount of specific pollutants that facilities may discharge from regulated outfalls which are identified by unique numbers and internal wastewater streams as defined by 40 CFR Part 423. Currently, the NPDES permits require that the outfalls be monitored regularly for specified parameters. However, the IPL NPDES permits are in the process of being revised to include, for the first time ever, metal effluent limitations associated with IPL's regulated outfalls and non-numeric stormwater limitations.

In addition to establishing effluent limits, the NPDES permit also includes compliance requirements with Section 316(a) and Section 316(b) of CWA. Section 316(a) provides thermal effluent limitations for certain facility outfall discharges which IPL must meet. These limits ensure the facility does not harm the fish, shellfish, and wildlife of the receiving waterbody. Section 316(b) provides regulations requiring that facility cooling water intake structures demonstrate the best technology available to minimize adverse environmental impact. In addition, EPA is in the process of modifying its cooling water intake regulations under Section 316(b) of CWA.

Solid Waste (Solid Waste, Hazardous Waste and Disposal)

[170-IAC 4-7-6(a)(4)(B)] [170-IAC 4-7-6(c)(2)(B)]

The solid waste generated at IPL's power plants is classified as either non-hazardous or hazardous. IPL generates hazardous and non-hazardous waste with the handling of both waste streams regulated under the Resource Conservation and Recovery Act ("RCRA").

Hazardous Waste

[170-IAC 4-7-6(a)(4)(C)] [170-IAC 4-7-6(c)(2)(C)]

Hazardous waste is regulated under RCRA Subtitle C. There are three categories of hazardous waste generators for industry with each category having its own scope of regulations that must be met. The more hazardous waste that is generated, the higher the risk to the environment, hence the more regulation and oversight is imposed.

The three categories of hazardous waste are: 1) large quantity generator ("LQG"); 2) small quantity generator ("SQG"); and 3) conditionally exempt small quantity generator ("CESQG"). IPL plants are historically categorized as SQG and CESQG. As such, IPL faces minimal regulations and risk in this area.

Non-Hazardous Waste

[170-IAC 4-7-6(a)(4)(D)]

Solid waste is regulated under Subtitle D of RCRA. IPL generates a large amount of solid waste every year that must be handled in accordance with this regulation. The primary sources of non-hazardous waste in the steam electric industry are fly ash, bottom ash, and scrubber sludge resulting from the FGD process. The fly ash and bottom ash are generated from the combustion of coal. Generally, IPL generates about 10% ash from the burning of coal or approximately 800,000 tons of ash per year, based on a typical coal burn of about 8,000,000 tons of Indiana coal per year. All ash is managed in accordance with federal, state and local laws and permits.

Ash is normally placed in ponds for treatment via sedimentation, to which the effluent is regulated pursuant to NPDES, shipped back to mines, and/or reused in an environmentally sound manner. In addition, fly ash is mixed with dewatered scrubber sludge and lime to make a stabilized product which is disposed of in a permitted, on-site landfill. Further, the Pete Unit 1, Pete Unit 2 SO_2 FGD units, HSS Unit 7 FGD, and Pete Unit 4 FGD upgrade will produce commercial grade gypsum that can be beneficially reused for wallboard manufacturing, cement manufacturing, and agricultural use. In general, ash management activities have not changed for several years. However, as a result of the recent Tennessee Valley Authority ("TVA") incident in December 2008, more stringent ash management rules are anticipated, as discussed in the next section.

Impending and Future Regulations – Significant Environmental Effects

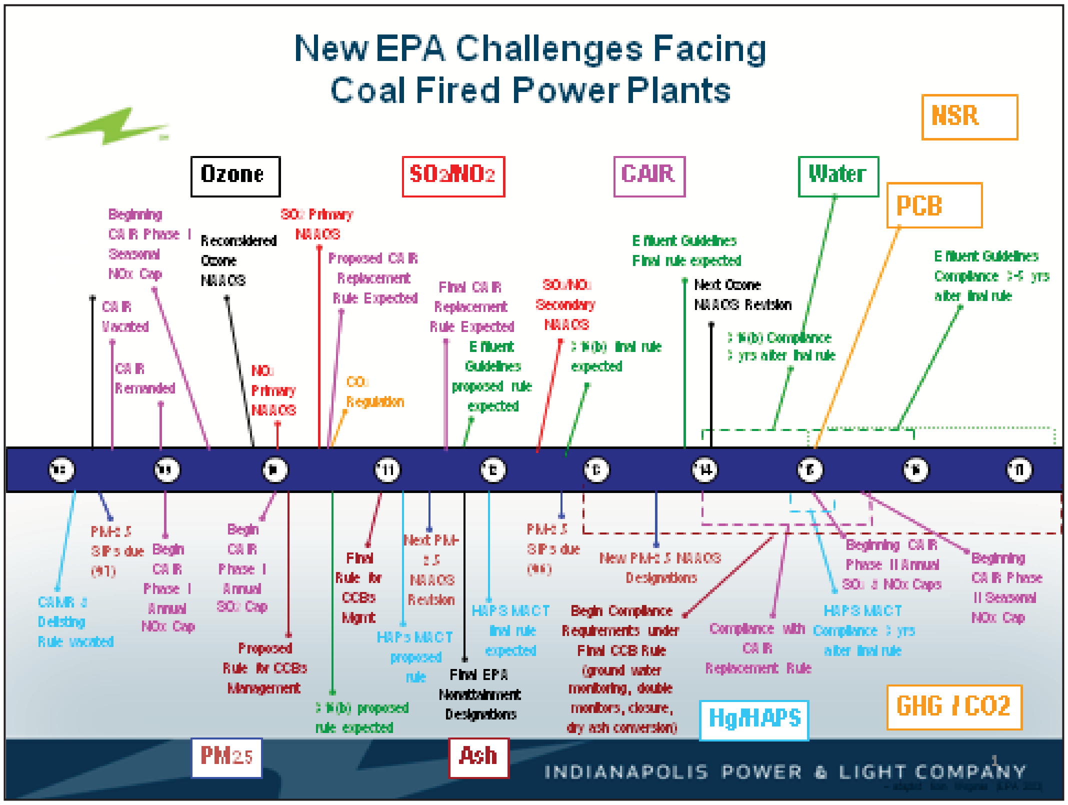
[170-IAC 4-7-4(8)] [170-IAC 4-7-6(a)(4)(A)] [170-IAC 4-7-6(c)(2)(A)]

There are a number of environmental initiatives that are being considered at the federal level that will impact the cost of electricity derived from the burning of coal. This includes, but is not limited to more stringent regulations requiring:

- Additional SO_2 emission reductions
- Additional NO_x emissions reductions
- Hg emission reductions for the first time
- More stringent water management including 316(a) and 316(b)
- Metal and other various pollutant reductions associated with wastewater effluents
- More stringent ash management handling requirements for both wet and dry ash

In fact, the entire landscape is changing for coal-fired electric utilities. Figure 3.2 provides an overview of the new suite of rules that EPA is in the process of implementing for coal-fired generation in a very compressed time frame with a detailed overview to follow.

Figure 3.2 – New EPA Challenges Facing Coal-Fired Power Plants



Source: EPA as modified by IPL

Cross State Air Pollution Rule

On July 6, 2011, the EPA finalized the Cross-State Air Pollution Rule. Once the rule becomes effective on January 1, 2012, it will require utilities in the eastern 27 states, including Indiana, to greatly reduce its emissions of SO_2 and NOx.

The CSARP replaces EPA's Clean Air Interstate Rule of 2005. A December 2008 court decision kept the requirements of CAIR in place temporarily but directed EPA to issue a new rule to implement the Clean Air Act ("CAA") requirements concerning the transport of air pollution across state boundaries.

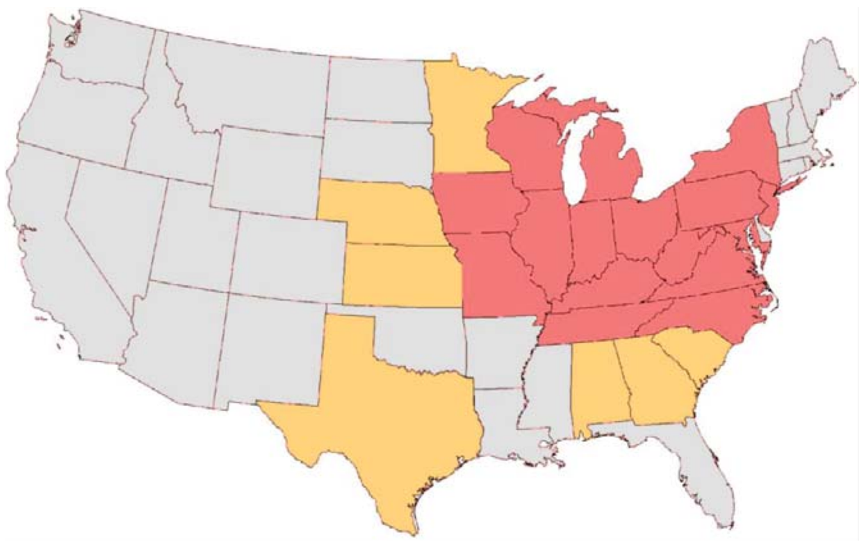
Emission reductions will take effect quickly with the first phase beginning January 1, 2012, for SO_2 and the NOx annual program. The first installment of the NOx seasonal program reductions begin on May 1, 2012. A second, more stringent reduction takes place beginning in 2014. Overall, the CSAPR further reduces SO_2 emissions by 73% and 54% for NOx in 2014 from the 2005 CAIR levels.

The goal of the CSAPR is to reduce emissions contributing to fine particulate and ozone nonattainment that often travel across state lines. As a result, the trading provisions of the CSAPR differ from that of the prior CAIR and Title IV programs.

SO_2 states have been divided into two separate trading groups which may trade only within their own group, not between the two groups. Indiana belongs to Group 1 (see Figure 3.3, Indiana's trading zone is in red), along with 15 other states. NOx trading is allowed between any states included in the CSAPR program.

Another key change to CSAPR as it relates to allowances is that if the State of Indiana and IPL both exceed its budget allowance allocation, then IPL will be required not only to submit one allowance for each ton emitted but also a penalty of two allowances for a total of three allowances per ton. As a result, it is important that IPL stay under its budget allocation or potentially face emission allowance submittal penalties.

Figure 3.3 – Trading Areas for the CSAPR



The Indiana trading zone is in red.

Source: EPA

Mercury and Air Toxics Standard

On May 3, 2011, EPA proposed the mercury and air toxics standard ("MATS"). MATS, which is also commonly referred to within the industry as the national emission standard for hazardous air pollutants ("HAPs") or Utility Maximum Achievable Control Technology ("Utility MACT"), is designed to reduce Hg, acid gases, and other hazardous air pollutants. Regardless of how it is referred to, MATS will limit emissions of Hg, metals (arsenic, cadmium, chromium, nickel) and acid gases (hydrochloric acid, hafnium) for the first time at the national level.

EPA is under court order to issue a final rule by November 16, 2011. Under this rule, once finalized, EPA will require Hg emission reductions of over 90%, based upon the best performing 12 of existing utility units. Significant reductions of all hazardous air pollutants will be required.

To control hazardous air pollutants, source must control to the maximum achievable control technology (MACT). For Hg and acid gases, MACT could comprise a combination of SO_2 scrubbers, baghouses (also known as fabric filters), and activated carbon injection ("ACI"). Moreover, unlike traditional air pollution regulations, the trading of pollutants is not allowed. Instead each plant must comply with the stringent limitations on a plantwide average basis.

In addition to the plantwide averaging provisions, the compliance period for MATS is three years from the effective date of the rule. Thus, it appears compliance will begin around January 1, 2015, which is a very compressed timeline to install the needed controls. As a result, it is anticipated IDEM will likely consider granting a one-year extension for the installation of controls on a case-by-case basis. Further, the CAA provides for Presidential extensions of up to two additional years if: (1) the technology is not available to meet the standard and (2) it is in the national security interest to do so.

To identify the impacts of the proposed MATS rules, which are scheduled to be finalized under court order by November 2011, IPL engaged Sargent & Lundy in July to work with IPL to perform a detailed analysis of the proposed rule's impact on IPL's generating units. The results of that study identified considerable control technologies needed on all IPL coal-fired units. The landscape may change timelines but the course appears to have been set for utilities and will likely lead to the retrofit of emission controls to remove Hg and other air toxics on IPL's five large scrubbed coal-fired units.

The report identifies full baghouses, ACI and dry sorbent injection ("DSI") emission control technologies on Pete Units 1 and 2, polishing baghouses and electrostatic precipitators ("ESP") upgrades, ACI, and DSI on Pete Units 3 and 4, and a full baghouse and ACI on HSS Unit 7. These are IPL's largest most efficient controlled units that are at the core of its generating fleet and investment was clearly prudent.

The report also identified the need for extensive controls including baghouses on IPL's smaller coal-fired units as well. An assessment that included costs of this equipment, compliance costs with other EPA rules around SO_2, NOx, water, and ash, the potential risk of future GHG regulation, and the age and condition of the units was undertaken. The costs of MATS compliance, the limited life cycle of these older units and risks of other current and future EPA rules made additional investment in these units uneconomic. Consequently, retirement of IPL's six smaller unscrubbed coal-fired units is forecast by the end of 2015 and this retirement is included in the Ventyx scenario analysis modeling. **[170-IAC 4-7-4(1)]**

National Ambient Air Quality Standards

The CAA requires EPA to set national ambient air quality standards for "criteria pollutants." Currently, SO_2 and five other major pollutants are listed as criteria pollutants. The others are ozone, lead, carbon monoxide, NOx, and particulate matter. The law also requires EPA to periodically review the standards and revise them if appropriate to ensure that they provide the requisite amount of health and environmental protection and to update those standards as necessary.

In June 2010 EPA issued a more stringent standard for SO_2. EPA has proposed lowering the standard in 2012 for particulate matter. EPA has also proposed lowering the ozone standard in 2013.

When EPA establishes a NAAQS or revises an existing NAAQS, it sets in motion a series of actions aimed at ensuring that air quality throughout the country meets those standards.

EPA must designate areas as meeting (attainment) or not meeting (nonattainment) the standard. The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These SIP plans are developed by state and local air quality management agencies and submitted to EPA for approval.

When EPA revises one of the NAAQS or establishes a new NAAQS, states and EPA must undertake specific obligations to ensure the NAAQS are met.

- Within two years after NAAQS promulgation EPA must identify or "designate" areas as meeting (attainment areas) or not meeting (nonattainment areas), the standards. Designations are based on the most recent set of air monitoring data.
- Within three years after NAAQS promulgation all states must submit plans, SIPs, to show they have the basic air quality management program components in place to implement a new or revised NAAQS.
    - Each nonattainment area SIP must outline the strategies and emissions control measures that show how the area will improve air quality and meet the NAAQS.
- Utilities could face installation of additional pollution control equipment to help ensure an area remains in or returns to attainment status.
- New or increased emission sources will face the lowest achievable emission rate.

Greenhouse Gas Regulation

For the last several years, Congress has debated the need for a Federal cap-and-trade program for GHG gases and carbon dioxide ("CO_2"). Those discussions have stalled at the Federal level due to the potential negative impacts to the economy and jobs.

However, even though Federal legislation appears to be stalled for the near future, EPA has already begun regulating GHG. In January 2011, EPA implemented a GHG permitting requirement that applies only to new sources or for existing sources that make major modifications which greatly increase GHG emissions above a certain threshold. If one triggers either of those requirements the utility is subject to a new GHG permitting process, Best Available Control Technology, or "BACT". Under BACT, states issue permits on a case-by-case basis requiring utilities to minimize the impacts of the GHG emissions by requiring, among other things, options to improve energy efficiency, requiring the source to fuel switch, or install the best available control technology, such as carbon capture and sequestration.

In addition to the BACT permitting process, EPA is also considering a new GHG performance standard for all utilities including both new and existing sources. It is unclear what those requirements might entail as a proposal is not scheduled to be issued until late 2011 or early 2012.

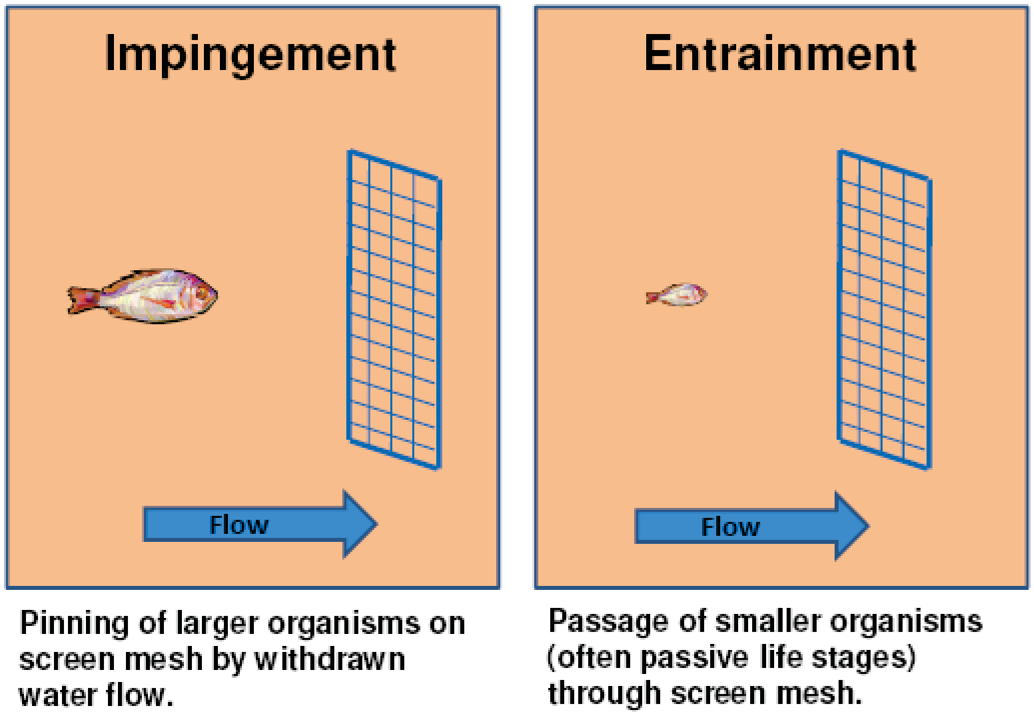
Cooling Water Intake Structures – Clean Water Act Section 316(b)

On April 20, 2011, EPA published a proposed version of the 316(b) rule that will regulate existing power generation facilities' cooling water intake structures. Section 316(b) of the CWA requires that the location, design, construction and capacity of cooling water intake structures reflect BACT for minimizing adverse environmental impacts. The proposed rule, in its current form, will have major impacts on the configurations of cooling water intakes for IPL's facilities. EPA is under court order to issue a final rule by July 2012.

There are three components to the proposed regulation:

- First, existing facilities that withdraw at least 25% of their water from an adjacent waterbody exclusively for cooling purposes and have a design intake flow of greater than 2 million gallons per day ("MGD") will to be subject to how many fish can be impinged against intake screens at the plant (impingement standards). The plant will determine which technology will be best suited to meeting the limit. Alternately, the facility could reduce their intake velocity to 0.5 feet per second. At this rate, EPA has determined that fish can swim away from the cooling water intake.
- Second, existing facilities that withdraw large amounts of cooling water – at least 125 MGD – will be required to conduct studies to help their permitting authority determine whether and what site-specific controls, if any, will be required to reduce the number of aquatic organisms sucked into the cooling water system (entrainment standards). See Figure 3.4.
- Third, new units will be required to add technology that is equivalent to closed-cycle cooling (continually recycles and cools the water so that minimal water needs to be withdrawn from the adjacent waterbody). This can be done by incorporating a closed-cycle system into the design of a new unit. Closed-cycle cooling systems – often referred to as cooling towers or wet cooling – are the most effective, albeit most expensive, way of reducing entrainment.

Figure 3.4 –Impingement and Entrainment



Source: EPA

National Pollution Discharge Elimination System – Section 402 of the Clean Water Act

The NPDES permit system obtains its authority from CWA. Section 402 requires permits for the direct discharge of pollutants to the waters of the U.S. These permits, which IPL maintains for each of its power plants, have three main components: technology based and water quality based effluent limitations, monitoring requirements, and reporting requirements.

Two categories of effluent limitations exist for NPDES permits: 1) Technology based effluent limits ("TBELs"), and 2) Water quality based effluent limits ("WQBELs"):

- TBELs are developed by applying the national effluent limitation guidelines ("ELGs") established by EPA for specific industrial categories pursuant to 40 CFR Part 423. TBELs were established to require a minimum level of treatment for industrial or municipal sources using available technology. In the absence of federally promulgated guidelines effluent limits can also be based upon Best Professional Judgment ("BPJ"). TBELs are the primary mechanism of control and enforcement of water pollution under the CWA. Technology based treatment requirements under Section 301(b) of the CWA represent the minimum level of control that must be imposed in a Section 402 permit [40 CFR 125.3(a)]. At this time, IPL anticipates that EPA will issue revised/new ELGs for steam electric power generating facilities as part of a court settlement with organizations that sued the EPA for failing to meet CWA requirements. Under the agreement, EPA will propose controls for heavy metals and other toxic pollutants discharged from coal-fired power plants by July 23, 2012, and finalize the regulations by January 31, 2014.

- WQBELs are designed to be protective of the beneficial uses of the receiving water and are independent of the available treatment technology. In addition, when performing a permit renewal, there are existing permit limits. These may be technology-based limits, water quality-based limits, or limits based on BPJ. When renewing a permit, the most stringent of technology based or water quality based limits apply.

The IPL NPDES permits are in the process of being revised to include, for the first time ever, WQBELs for various metals, including but not limited to copper, lead, boron, mercury, sulfate, selenium, cadmium associated with IPL's regulated outfalls. As a result of the proposed metal effluent limitations, utilities could face installation of additional metal reduction control equipment to help ensure compliance with the proposed limitations. It is anticipated that utilities will have to comply with the proposed WQBELs within three years from the final issuance date of the facility's respective NPDES permit. IPL anticipates this date to be 2015 for IPL's facilities.

Coal Combustion (Ash)

EPA issued two proposed options to regulated coal ash and other coal combustion residuals in June 2010. The two options are to maintain the existing program by regulating ash as solid waste under Subtitle D of RCRA or implementing a new program by regulating ash as hazardous waste under Subtitle C of RCRA.

EPA is not acting under a court deadline for ash, but EPA has indicated publicly it will issue the new ash rules by the end of 2012 or the beginning of 2013. If ash remains a solid waste, the new requirements will go into effect within six months of the final rule. On the other hand, if ash is regulated under Subtitle C as hazardous waste, the new rules will be applicable within two years.

The key provisions of the proposed rule, besides whether to regulate as a solid or hazardous waste, are:

- Retrofit ash ponds with liners or close within five years
- Install ground water monitoring wells within one year for existing units (landfills, ash ponds)
- Switch from wet to dry handling if ponds close
- Location restrictions, including but not limited to floodplains and seismic zone areas

New Generation – Clean Air Act Amendments of 1990

[170-IAC 4-7-6(c)(3)]

With regard to new generating capacity, a number of regulatory provisions ensure that air emissions from new sources will not have a significant environmental impact. Pursuant to the CAAA, any new generation, either coal-fired or gas-fired, will be required to install control technology to meet applicable BACT, or Lowest Achievable Emission Rate ("LAER") requirements, and/or some combination of offsets from the shutdown of existing emission sources.

SECTION 4. INTEGRATION

[170-IAC 4-7-4(1)] [170-IAC 4-7-4(5)-(6)] [170-IAC 4-7-5(b)(1)-(7)] [170-IAC 4-7-6(b)] [170-IAC 4-7-7(a)] [170-IAC 4-7-8,(2),(4)-(7),(9)-(10)]

Resource Screening and Evaluation

[170-IAC 4-7-4(8)] [170-IAC 4-7-8(9)]

The goal of IPL's integrated resource planning effort is to identify a resource plan that reliably serves IPL customers while meeting all federal, state, and IURC requirements, maintaining rates as low as possible, and remaining robust against the risks of an uncertain future landscape.

To achieve this, IPL selects and tests resource plans against future landscapes that target the key drivers that could significantly impact the electric industry and IPL customers. IPL combines the outcome of the future landscape analysis with other resource selection requirements and targets to select a robust reference plan which meets IPL's resource goals and represents IPL's base case resource strategy.

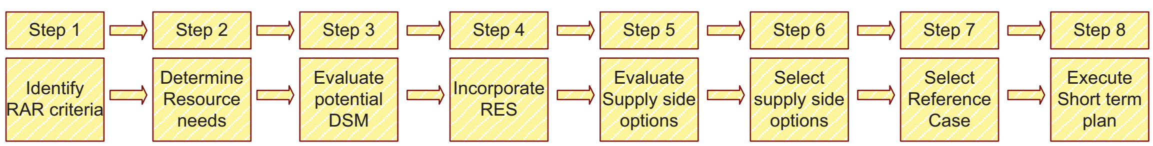
As discussed in detail in the Changing Business Landscape and Environmental Rules and Regulations (Sections 2 and 3), the electric industry faces a multitude of environmental challenges and landscape uncertainties, but also some opportunities. EPA's existing, pending, and future regulations governing air, water, and solid waste targeting coal-fired generation clearly challenges IPL's existing and future generation resources. Significant among the challenges are the recent and pending EPA rules governing mercury ("Hg") and hazardous air toxics, the new Cross State Air Pollution Rule ("CSAPR") for sulfur dioxide ("SO2") and nitrogen oxide ("NOx"), and new rules pending around water and solid waste management. Greenhouse gas ("GHG") regulation via Congressional legislation, that seemed imminent just two years ago, has been abandoned as a consequence of other national priorities but still remains a future planning consideration.

In addition, new IURC rules targeting prescribed levels of energy efficiency DSM also impact the resource planning strategy, as they will reduce IPL's future load growth and future supply needs.

One positive landscape change of note has been the outlook for natural gas ("NG") supply and prices. The advent and wide commercial use of hydraulic fracturing ("fracking") technology has opened up abundant reserves of shale gas supplies, driving NG supplies higher and prices lower. Long-term forecasts reflect continued low NG prices. NG supplies have historically been more risky relative to coal. This technology to tap abundant gas reserves represents a paradigm shift in gas markets, pricing, and sourcing reliability. Since fuel source reliability is a primary resource selection criterion, gas-fired generation now presents a more viable resource consideration.

To assist in modeling these drivers and conducting IPL's resource planning evaluation, IPL engaged Ventyx in a consulting and modeling role for its integrated resource planning. Ventyx's extensive modeling capability, and use of scenario analyses through the use of future landscape modeling, provides valuable information and insight into how specific resource plans perform against a range of possible future drivers. This cost-based evaluation is supplemented by additional decision criteria important to the planning process and ultimate resource selection. Inclusion of such criteria as fuel source reliability and diversity, new technology reliability, demand side resource targets and selection, the possible future timing of GHG regulation and possible future renewable mandates presents planning challenges. IPL uses the capabilities of Ventyx to identify and model future landscapes. IPL employs additional consultants with specific expertise in demand side management ("DSM") and uses multiple test criteria for DSM selection (see Section 4B). The resource screening, evaluation and planning at IPL follows a robust multi-step process, as shown below in Figure 4.1, which incorporates refining the long-term plan in keeping with changes and challenges in the business and regulatory environment. The goal of this process is to identify a plan that provides IPL customers with a low cost, low risk and reliable resource portfolio. **[170-IAC 4-7-5(b)(2)-(3).(6)-(7)]**

Figure 4.1 – IPL's Resource Screening and Evaluation Process



Step 1. Identify resource planning criteria including the target reserve margin consistent with MISO resource adequacy requirements.

Step 2. Determine resource needs to meet that criteria based on a gross internal demand ("GID") load forecast, including previous energy efficiency DSM, but excluding any load management DSM and any new energy efficiency DSM initiatives.

Step 3. Evaluate and model potential DSM programs and incorporate all identified and future expected DSM including any IURC requirements into the plan and also into a netted load forecast, to determine net internal demand ("NID").

Step 4. Incorporate and required supply resources, such as renewable generation, as appropriate and prudent as projected to be required by state or federal law.

Step 5. Determine remaining resource requirements and evaluate needs against an array of viable supply-side generation options based on minimum revenue requirements criteria and the future volatility/risk around those generation options in future worlds.

Step 6. Assess supply options against all resource selection objectives, including minimum revenue requirements, risk planning, fuel source reliability, possible future legislation and other pertinent planning criteria.

Step 7. Select a reference case expansion plan that incorporates all the DSM, renewable and supply resources that best meet IPL's long term planning objectives.

Step 8. Identify and execute the short-term resource plan as appropriate, while continuing to refine, challenge, and update its longer-term resource plan as new information becomes available.

Source: IPL

Resource Planning Criteria

[170-IAC 4-7-4(13), (15)] [170-IAC 4-7-6(a)(6)(A)]

IPL is a member of MISO, an Independent System Operator. MISO determines the resource needs of Load Serving Entities ("LSE") based on peak forecasts, models its footprint to determine planning reserve margin, and demand response. IPL, as a MISO member, meets the reliability standards set forth by MISO. These targets are set to ensure that adequate resources are available for all MISO LSEs. The MISO reliability methodology and targets are identified below.

Resource Adequacy Requirements (2011-2013)

[170-IAC 4-7-4(9)] [170-IAC 4-7-4(13)]

MISO's Loss of Load Expectation ("LOLE") study for the 2011-2012 planning year (June 1, 2011, through May 31, 2012) indicated the need for a 12.06% MISO-wide reserve requirement based on MISO Installed Capacity ("ICAP") ratings.

LOLE is the probabilistic measure of the ability of a system's resources to cover load. It is normally expressed as the expected number of days per year that capacity resources will be insufficient to meet load. The most widely accepted level is one day in 10 years. LOLE calculations take into account factors that affect system reliability, such as load shapes and patterns, load forecast uncertainty, load diversity between companies, capacity resource information, and transmission interconnections internal and to other systems. This criterion creates a good system target, however not all resources contribute to that system goal equally.

Resources with higher availability contribute more to resource adequacy. Using an Unforced Capacity ("UCAP") methodology is a way to recognize the relative contribution towards the MISO-wide resource adequacy goal of each generating unit. This methodology sends appropriate signals to support unit availability and assigns unit availability risk to the owners of the generation.

The UCAP methodology converts planning reserve margin to an unforced value for each generating unit based on the weighted average Equivalent Forced Outage Rate demand

("EFORd") of all generating units in the footprint. All units are required to annually demonstrate their maximum capacity via actual testing to establish its MISO ICAP rating. The ICAP rating of each unit is then adjusted by its specific EFORd value for the past three years. EFORd is a forced outage rate that includes partial derate information and is measured only during periods when the resource is in demand.

Applying this methodology on a MISO-wide basis for the 2011-2012 planning year resulted in a Planning Reserve Margin on UCAP ("PRM_{UCAP}") of 3.81%. Maintaining a 3.81% reserve on UCAP ensures that the MISO-wide ICAP planning reserve margin requirement of 12.06% is met. MISO will determine its reserve margin for planning year 2012-2013 in December 2011.

Resource Adequacy Requirements (2013 and Beyond)

Future planning years are subject to some changes if MISO's proposed resource adequacy changes are accepted by the Federal Energy Regulatory Commission ("FERC"). In July 2011, MISO filed a new resource adequacy construct with FERC that if accepted by FERC will fundamentally change how resource adequacy targets are met in MISO. The target implementation date for the new changes is June 1, 2013. MISO's proposed construct has proven to be highly controversial and has been protested at FERC by many market participants. Protests range from complaints that MISO didn't go far enough to incent generation by some stakeholders, to complaints by other stakeholders that MISO went too far with its proposal and that it is unnecessary, too complex, inadequately developed, and infringes on states' rights. MISO requested that FERC provide an Order by February 29, 2012, to permit modifications to software and business rules and to provide time to educate stakeholders. Key features of the new construct include:

Forecasting Methodology

Under the new construct LSEs will be responsible for forecasting to MISO's peak, removing the MISO-wide diversity factor adjustment from the reserve margin calculation. The forecasting methodology, if accepted, will likely reduce IPL's diversity with respect to MISO's peak and as a consequence increase IPL's reserve margin requirement.

Zonal Planning Requirements

MISO's proposal includes zonal planning resources and zonal planning requirements compared to MISO's current construct which has one reserve requirement for the entire footprint and allows most resources to be used to meet resource requirements anywhere in the MISO footprint. MISO's proposal is designed to recognize the physical location of planning resources and to properly take into account physical import and capacity export constraints. MISO claims the proposal will appropriately consider capacity limitations into and out-of the various local resource zones when developing local reliability requirements for each of the local resource zones, and again when conducting the proposed planning resource auction.

MISO has deferred the identification of the specific local resource zones (a critical aspect of zonal resource planning for its stakeholders) until after the proposals in the July 2011 FERC filings are approved by FERC. MISO anticipates developing seven local resource zones. Under MISO's anticipated zones, Indiana will be a zone unto itself. While Indiana utilities could build or buy capacity from other zones, the proposed construct will likely introduce increased capacity price risk, since the cost of capacity for each zone will be determined separately, and could be different. The current construct uses a single price for capacity throughout the MISO footprint.

The zonal planning requirements aspects of MISO's proposal will likely reduce the pool of qualifying capacity resources available to meet IPL customer load requirements. Executing bilateral capacity purchases will be more challenging due to the risk that generation sighted outside of the local resource zone may clear the Planning Resource Auctions ("PRA") at different prices than the clearing price for IPL's load. This will place a premium on capacity resources located close to IPL's load.

Capacity Auction Modifications

MISO's proposed plan includes an annual requirement and auction (the PRA) versus the current monthly requirements and voluntary auctions. All resources and all loads are used to determine the clearing price for the PRA, whereas, the current monthly auctions and clearing prices are determined using load and resources that voluntarily choose to make bids and offers in the auction. A separate clearing price will be determined for each zone, versus the current system that produces one price for capacity throughout the MISO footprint.

MISO's proposal includes a Minimum Offer Price Requirements ("MOPR") for the PRA that will establish floor offer prices for certain resources in the PRAs. The MOPR concept has become a highly controversial aspect in both the PJM RTO[5] and ISO New England[6] capacity markets constructs. MISO's proposal also includes PRA provisions that MISO calls 'self-scheduling' and 'opt-out' that MISO claims provide LSEs with multiple options to minimize the financial consequences of the planning resource auction. There has been considerable debate in the various MISO stakeholder meetings concerning the effectiveness of these provisions.

IPL is concerned that if FERC accepts the principles of MISO's proposal without modification, the impact will be increased upward pressure on capacity prices in Indiana as compared to the current construct. IPL anticipates that if FERC accepts the principles of MISO's proposal, MISO will, over the next few years, make additional changes in the construct design so that the MISO capacity construct will more resemble the PJM capacity construct. This will likely put additional upward pressure on capacity prices in

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[5] PJM is a RTO that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia. Additional information may be found at www.pjm.com.

[6] ISO New England is a RTO serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. Additional information may be found at www.iso-ne.com.

Indiana. Over the past couple decades, IPL has relied on the market for a portion of its capacity needs. A capacity construct that increases market capacity prices will result in higher near term costs for IPL

Planning Reserve Margin Modeling

IPL's minimum resource adequacy requirement established by MISO for 2011 equates to an effective 12.69% reserve margin for IPL. As identified above, many factors are used by MISO to establish an LSE's resource adequacy requirement. The LSE's planning reserve margin will change each year as MISO updates its LOLE analysis and the LSE incorporates changes in its EFORd rates and its assumptions with regard to diversity with the MISO system peak. IPL's MISO ICAP ratings are based on annual unit ratings tests and can also change annually. For Ventyx's long term modeling purposes in this IRP, IPL identified a 14% planning reserve margin to be used consistent with IPL's summer-rated capacity. This longer-term modeling number provides for targeted reserves in the range of future expected MISO-determined resource needs and is consistent with the MISO specific calculations shown in Figure 4.2(b).

Determine Resource Needs

Load Forecast, Incorporation of Demand Side Management, and Application of Planning Criteria

IPL's load history and forecast of economic drivers are used to derive a base econometric forecast. IPL then overlays any non-economic drivers that are on the landscape but not in the economic drivers (such as, electric vehicle penetration) to derive the gross internal demand ("GID"). The GID load forecast includes historical conservation or energy efficiency DSM, but excludes any new energy efficiency DSM initiatives and any load management DSM.

IPL determines the targeted energy efficiency DSM levels to be included in the resource planning portfolio consistent with IURC energy efficiency requirements. The first three-year program initiative and impacts are described in Section 4B. Estimates of future DSM profiles, program measure duration, program free riders, and coincident peak impacts will generally be used to identify the expected load impacts. Since these long-term DSM programs are yet to be determined, estimates of their load impacts were used. The GID forecast is then adjusted to incorporate all energy efficiency DSM to determine the total internal demand ("TID") load forecast and then further adjusted to include all cost-effective demand response DSM to derive the NID. These load forecasts are shown in the supply-demand balance report in Figure 4.2(b).

IPL's resource planning reserve margin is applied to the NID forecast to determine the additional IPL resource needs beyond the DSM resources identified, and used by Ventyx in their resource scenario modeling. Note, the current MISO resource adequacy methodology is not based directly on a long-term targeted IPL reserve margin, but rather based on short-term targeted IPL resource requirements and influenced by both IPL and regional MISO conditions and correlations as discussed previously. An effective MISO reserve margin based on MISO's IPL ICAP and long-term regional assumptions has been back-calculated, for informational purposes only, in Figure 4.2(b), and is expected to change annually.

Supply Resource Modeling

Generation Resource Needs

After inclusion of all DSM, IPL will need to satisfy the balance of its resource needs through existing and new supply-side generation and/or capacity purchases.

Existing Generation

[170-IAC 4-7-6(a)(1)-(2)(A-C)]

Figure 4.2(a) shows IPL's current generation resources with projected summer capacity ratings for the next 20 years. These numbers reflect all known and/or planned unit derates, life extensions and retirements. This table includes the identified planned retirements of Harding Street ("HSS") Units 3 through 6 and the Eagle Valley Generating Plant ("EV") Units 1 through 6 by end-of-year 2015.

No decision as to the precise retirement dates had been made at the time of the modeling, although a target date of 2015 has most recently been identified. Incorporated in the Ventyx capacity expansion modeling, the timing of the small unit retirements ranges from 2014 to 2021. Note however the portfolio scenario modeling, which was done subsequent to the capacity expansion modeling, was adjusted to reflect the anticipated impacts of the MATS that essentially set an end-of-year 2015 timeline to either fully comply or cease operations. These are the dates reflected in the generation resources portfolio shown in Figure 4.2(a). The scenario evaluations reflect this updated MATS driven retirement timeline. Since the rules are not yet final, the retirement timing is not final as well.

Figure 4.2(b) reflects IPL's latest estimated load and resource balance. The MISO methodology is different than applying a standard reserve margin, but an equivalent reserve margin was calculated for informational purposes. The MISO criteria and determinants beyond 2012 are not yet known, so the equivalent reserve margins are estimated and not necessarily defined targets.

Figure 4.2(a) – IPL's Current Generation Resources with Summer Capacity Ratings (MW)

[170-IAC 4-7-6(a)(1)]

Generating Resource Report

Generating Resource Report

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Unit Capacity (MW)																				
HSS ST5	106	106	106	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HSS ST6	106	106	106	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HSS ST7	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427	427
EV ST3	43	43	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EV ST4	56	56	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EV ST5	62	62	62	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EV ST6	99	99	99	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PETE ST1	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232
PETE ST2	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435	435
PETE ST3	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
PETE ST4	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545	545
HSS GT4	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
HSS GT5	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
HSS GT6	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158
GTOWN GT1	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
GTOWN GT4	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
HSS ST3	35	35	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HSS ST4	35	35	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HSS GT1	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
HSS GT2	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
HSS GT3	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
HSS IC1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
EV ST1	39	39	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EV ST2	39	39	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EV IC1	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PETE IC1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PETE IC2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PETE IC3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IPL Summer Rated Capacity	3,353	3,353	3,353	3,310	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730
with 2018 CCGT	3,353	3,353	3,353	3,310	2,730	2,730	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330	3,330
MISO Installed Capacity (ICAP)	3,214	3,214	3,214	3,174	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711	2,711
with 2018 CCGT	3,214	3,214	3,214	3,174	2,711	2,711	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311	3,311

Source: IPL

Figure 4.2(b) – IPL's Load and Resource Balance Report[7]

Supply - Demand Balance Report										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Obligations (MW)										
Gross Internal Demand (GID)	3,049	3,119	3,162	3,199	3,236	3,269	3,302	3,336	3,370	3,403
Total Internal Demand (TID) - includes Energy Efficiency DSM	3,032	3,084	3,109	3,103	3,092	3,089	3,081	3,074	3,070	3,066
Net Internal Demand (NID) - includes all DSM	2,945	2,952	2,970	2,962	2,948	2,941	2,931	2,921	2,913	2,907
PRMucap	3.8%	6.2%	6.2%	6.1%	6.3%	6.5%	6.7%	6.8%	7.0%	7.0%
UCAP Requirement	3,057	3,135	3,154	3,142	3,133	3,131	3,126	3,121	3,118	3,111
Demand Reduction programs (MW)										
Total DR UCAP (DR)	87	93	99	102	105	107	110	113	116	119
Voltage Reducation (DR)	-	40	40	40	40	40	40	40	40	40
DSM-IURC (EE)	17	34	54	96	144	181	221	262	301	337
Generator UCAP Resources from IPL Fleet (MW)	2,959	2,971	2,984	2,961	2,554	2,554	2,554	2,554	2,554	2,554
Summary (MW)										
UCAP Requirement	3,057	3,135	3,154	3,142	3,133	3,131	3,126	3,121	3,118	3,111
Total Generator UCAP Resources	2,959	2,971	2,984	2,961	2,554	2,554	2,554	2,554	2,554	2,554
Net Resource Needs - before new generation resources	(98)	(164)	(170)	(181)	(579)	(577)	(572)	(567)	(564)	(557)
Effective Capacity Reserve Margin										
MISO Installed Capacity (ICAP)	3,214	3,214	3,214	3,174	2,711	2,711	2,711	2,711	2,711	2,711
MISO ICAP Plus Purchases Plus 2018 CCGT	3,312	3,378	3,384	3,355	3,290	3,288	3,311	3,278	3,275	3,268
NID	2,945	2,952	2,970	2,962	2,948	2,941	2,931	2,921	2,913	2,907
Effective Reserve Margin using MISO ICAP	12.4%	14.4%	13.9%	13.3%	11.6%	11.8%	13.0%	12.2%	12.4%	12.4%

Source: IPL

[7] The MISO methodology is different than a standard reserve margin, but an equivalent reserve margin was calculated for informational purposes. The MISO criteria and determinants are not yet known, so the equivalent reserve margins are estimated and not necessarily defined targets.

New Generation Resource Modeling

The supply resource selection process includes consideration of a range of generation resource options. These technologies are identified in detail in Section 4A. IPL will also need to incorporate renewable resources to satisfy any renewable energy mandates ("RES") during this step. Currently there are no new or pending mandates, and IPL is well positioned for the future with about 300 MW of associated energy secured under long-term Wind Power Purchase Agreements ("PPAs")[8] and a high forecast of DSM that has been allowed to count toward any requirement in previous climate change bills. Therefore, absent any pending RES bills, and a solid renewable energy foundation, no specific renewables requirements were used to constrain the generation resource modeling.

Once the existing resources were profiled and potential new resources were identified, IPL worked with Ventyx to define and model these new generation resources including IPL's cost definitions and operating profiles. The generation profiles are described in Section 4A and include heat rates, Operation and Maintenance ("O&M") costs, capital costs, and emission rates for each technology.

Capacity Purchase Modeling

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(b)] [170-IAC 4-7-6(c)(4)]

IPL customers have benefited in recent years from IPL's ability to purchase capacity at prices below the levelized cost of building new capacity. Although bilateral market capacity prices have remained depressed in the near term, they are not expected to remain at the current level as the supply-demand balance of capacity comes more into equilibrium in the MISO footprint over the next few years. This balance will likely be hastened by new EPA rules around Hg, SO_2, and NOx set to take effect over the next few years. IPL may need to use capacity purchases to bridge the gap between forced small unit retirements and new generation in-service dates.

The capacity prices used for IRP modeling reflect 25% of the levelized cost of a combustion turbine ("CT") through 2015 and 110% of the levelized cost starting in 2016. These prices reflect the current surplus capacity situation in the near term and the assumption that regional supply and demand situation will come more into balance around 2016.

Future Landscapes – Evaluation of Potential Future Directions

With the resources options identified and profiled, IPL next drew on the expertise of Ventyx to help define possible future power industry landscapes. The base case is defined by Ventyx's Reference Case, which represents their expected view of the future

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[8] See Section 4, Integration, Renewables Generation/Climate Change for the details of these Wind PPAs.

electric industry landscape. To test the robustness of the possible expansion plans, IPL uses additional Ventyx future landscape, targeting the two major resource drivers – NG prices and climate change legislation impacts to stress test its current generation portfolio and potential future resource additions against alternative conditions. These future landscapes have been modeled by Ventyx with correlated input parameters. In addition, IPL had Ventyx create an additional landscape that reflects a more moderate carbon dioxide ("CO_2") case with deferred compliance to fill the wide gap between Ventyx's Reference Case with no CO_2 costs, and their environmental case that has very high CO_2 costs. A brief description of the future landscapes and how they relate to the power industry are briefly described below. All price references are in nominal dollars.

Natural Gas Prices – Reference Plus Two Additional Landscapes: High Gas and Low Gas

- Reference Case Gas Prices ($11.92/MMBtu in 2031)
- High Gas Prices Landscape ($17.37/MMBtu in 2031)
- Low Gas Prices Landscape ($6.92/MMBtu in 2031)

Environmental Regulation – CO_2 Prices: Reference Plus Two Additional Landscapes: Ventyx Environmental and Ventyx/IPL Moderate Environmental

- Ventyx Reference Case ($0/ton CO_2 in 2031)
- Ventyx Environmental Landscape – High CO_2 Prices ($62/ton in 2031)
- Ventyx/IPL Moderate Environmental Landscape ($31/ton in 2031)

Load Forecast – Reference plus Two Additional Landscapes: High Load and Low Load (DSM based, but could be based on economic or other load drivers).

- Reference Load Forecast (2,960 MW TID in 2031)
- High Load Forecast (3,188 MW TID in 2031)
- Low Load Forecast (2,858 MW TID in 2031)

Supply Resource Evaluation

Overall Methodology Description

With the generation resource technologies profiled, the future landscapes identified, and supply resource needs established, the next step was to evaluate the generation technologies against the future landscapes. IPL worked with Ventyx to perform a multi-step evaluation process. First, Ventyx performed a capacity expansion evaluation for the profiled supply resources allowing the model's least-cost planning algorithm to select resources based on resource needs and targeting a minimum revenue requirement objective. Modeling using Ventyx's "Capacity Expansion" module was performed for all future landscapes. Next, based on these results, IPL then derived select resource plans for future landscape analysis. This involved identifying the resource and timing and running the resource portfolio against all future landscapes.

Capacity Expansion Simulation Methodology

[170-IAC 4-7-8(3)]

The Capacity Expansion simulation uses minimum revenue requirements planning criteria to evaluate generation technologies based on a given set of future landscape assumptions. This is performed by calculating the present value of revenue requirements ("PVRR") for multiple resource expansion plans and selecting the resources and timing that result in the lowest present value. The model is a good tool to generate informative cost-focused planning insights, based on a given set of future assumptions. Different future landscapes will produce a different set of future drivers and could produce different capacity expansion results.

For the modeling, Ventyx and IPL selected a group of generation options that represent proven and commercially available technologies. These are shown in Figure 4.3. Ventyx's Capacity Expansion model was then run for the selected generation technologies against the future landscapes.

The expansion simulation modeling is deterministic – looking at one set of future conditions, and does not consider the variance risk of the inputs or other relevant decision criteria. So in that respect, the model does not necessarily generate the preferred solution, but rather information to screen resources and support the overall resource decision making process. Descriptions of the capacity expansion analysis modeling and inputs are discussed below.

Capacity Expansion Simulation Modeling

The following resources were used in the Capacity Expansion modeling.

Figure 4.3 – Resources for Capacity Expansion Modeling (2010$)

	PC	GT	CC	IGCC	NUC	Photo-voltaic	Wind Turbine
Summer (MW)	600	160	542	600	600	10	50
Winter (MW)	600	180	600	600	600	10	50
Average Heat Rate	8,800	10,850	7,050	8,700	10,400	-	-
VOM ($/MWh)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
FOM ($/kW)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Capital Cost ($/kW)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Ventyx

To test the seven generating resources against a range of possible future landscapes, IPL had Ventyx evaluate the resources using their Capacity Expansion module. For all future horizons, IPL included assumed retirements of its small coal-fired units based primarily on a 60-year planning life, as identified below. Note that the IRP modeling was in progress as new EPA rules were being released and evaluated by IPL this summer. Specifically, Ventyx's capacity expansion modeling was performed early in the summer, before new, but still preliminary MATS rules were released and evaluated. Ventyx's scenario planning modeling was performed later and included updated assumptions around unit retirements. The updated assumptions and later modeling has the small coal- and oil-fired units retiring by the end of 2015.

- Retired end of 2014: EV Unit 3
- Retired end of 2015: EV Unit 4, EV Unit 5,
- Retired end of 2021: HSS Unit 5, HSS 6, EV Unit 6
(Note: 2021 date is for Capacity Expansion model only)

In addition, oil-fired units HSS Unit 3, HSS Unit 4, EV Unit 1, and EV Unit 2, were assumed to be retired at the end of 2015. Seven future landscapes, based on three primary drivers, were used to screen the capacity expansion resources as identified below.

(1) Environmental Sensitivity

IPL considered three environmental landscapes around CO_2 costs and timing. Ventyx's Reference Case did not include any CO_2 costs, their Environmental Landscape had high and imminent costs, and the Moderate Environmental Landscape had deferred and lower CO_2 cost assumptions.

(2) Fuel Sensitivity

IPL considered three fuel forecasts around NG prices. NG pricing has historically been the most volatile, but promises and assumptions on shale gas supply and pricing make this fuel source a key resource driver.

(3) Demand Sensitivity

IPL considered three load and energy forecasts for demand sensitivity. All three forecast scenarios are based around the DSM targets identified by the IURC. The longer term impacts of DSM on the forecast will depend on how yet-to-be identified programs will impact the net load forecast, including load profiles of the measures, program measure duration, and program free riders. In addition, assumptions around how these programs impact IPL's peak demand and reduce capacity needs, as well as whether DSM will remain cost-effective at the levels identified in the future remain uncertainties. The forecast scenarios, while based on IURC-targeted DSM levels, could also be driven by economic and other impacts. The forecast scenarios should be viewed broadly as demand driven sensitivity scenarios from all load impact sources. For example, the low load forecast could be driven by high DSM levels, or a weak economy, or some combination.

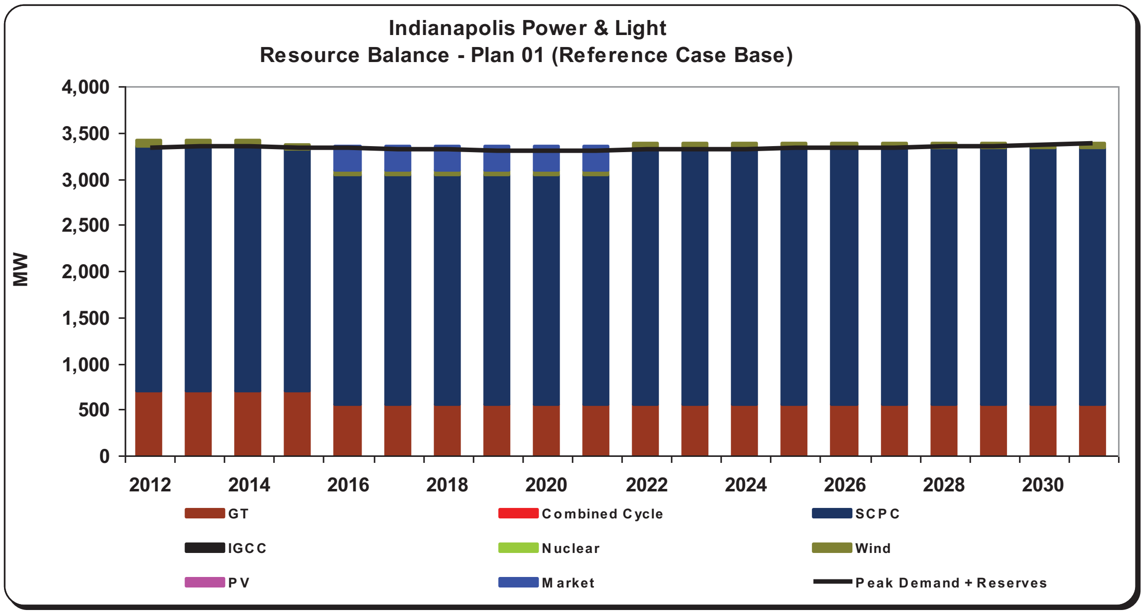
Capacity Expansion Results

The results of the capacity expansion modeling are presented below. Note that new environmental regulations could change the timing of the small coal-fired retirements and correspondingly impact the timing of new planned generation. The results of plans that reflect a delayed retirement scenario are shown below.

Ventyx Reference Case Landscape

The capacity expansion results for the Reference Case, including IPL's existing and proposed generation, are shown in Figure 4.4. For this future landscape the Capacity Expansion model identified new coal unit generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling. Timing for these retirements has not been established and will affect the timing of new planned generation.

Figure 4.4 – Capacity Expansion Results for Ventyx Reference Case Landscape



Source: Ventyx

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	600	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	-	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

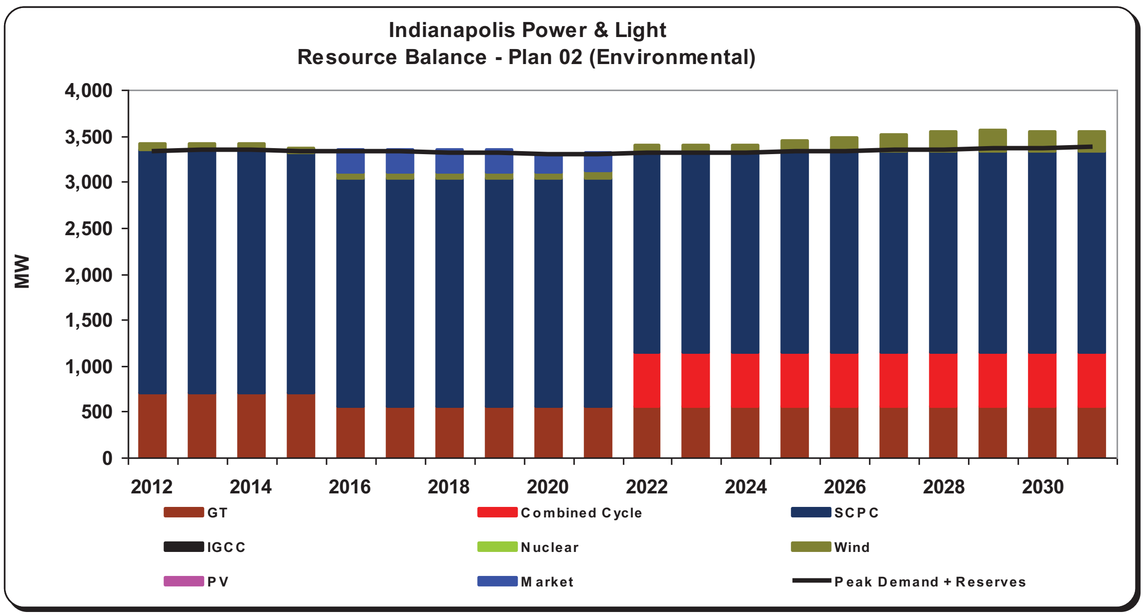
Source: Ventyx

125

Ventyx Environmental Landscape

The capacity expansion results for the Ventyx future Environmental Landscape, including IPL's existing and proposed generation, are shown in Figure 4.5. For this future landscape the Capacity Expansion model identified CCGT generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.5 – Capacity Expansion Results for Ventyx Environmental Landscape



Source: Ventyx

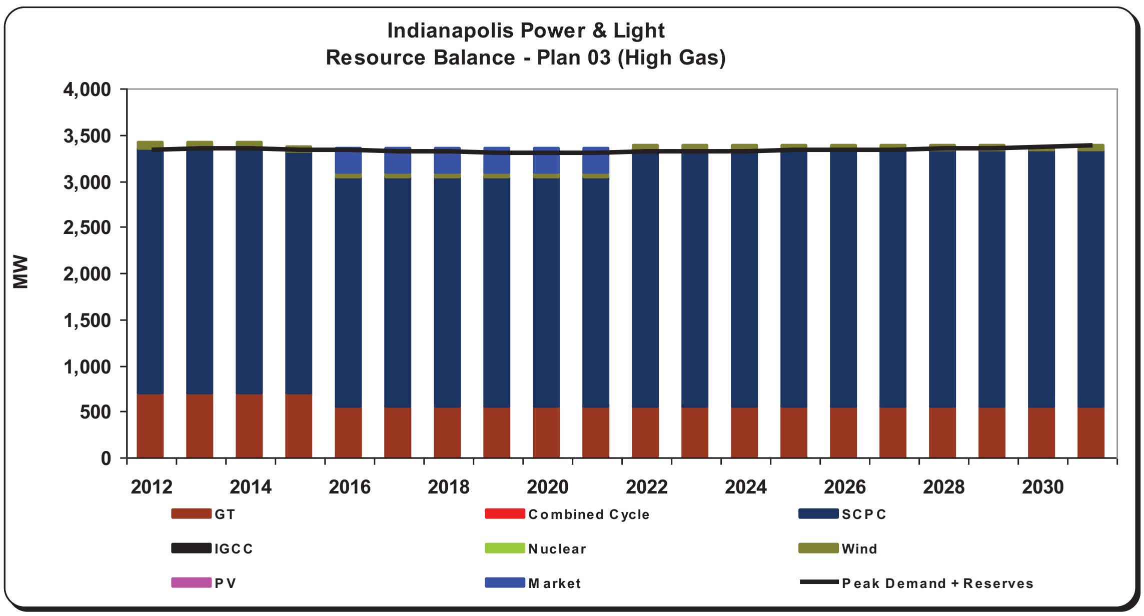
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	-	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	600	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	50	50	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

High Gas Landscape

The capacity expansion results for high natural gas price landscape ("High Gas Landscape"), including IPL's existing and proposed generation, are shown in Figure 4.6. For this future landscape the Capacity Expansion model identified new coal unit generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.6 – Capacity Expansion Results for Ventyx High Gas Landscape



Source: Ventyx

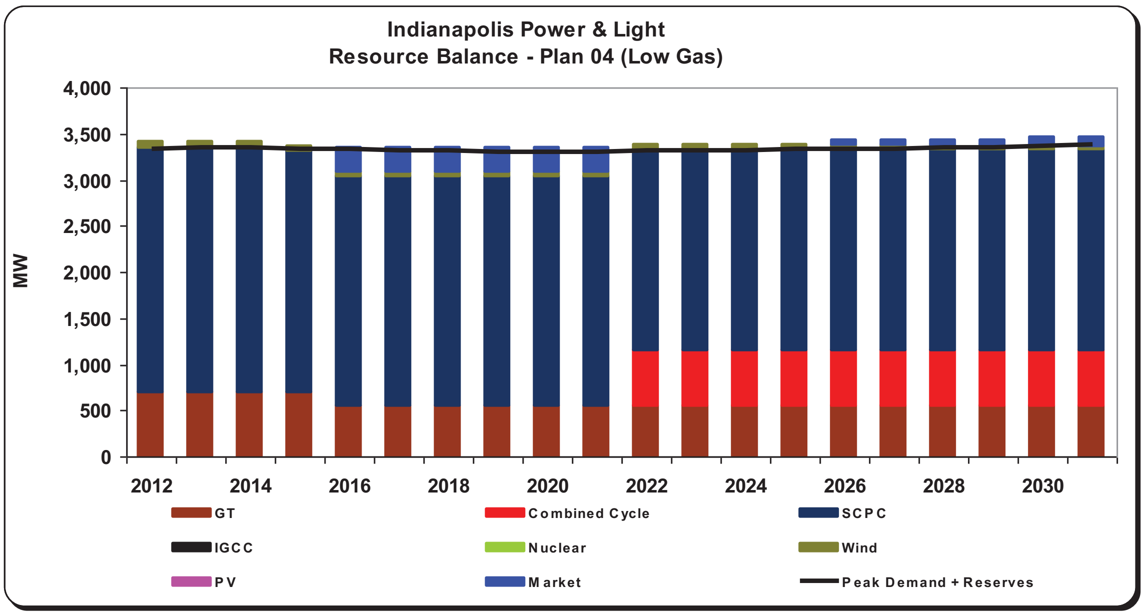
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	600	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	-	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

Low Gas Landscape

The capacity expansion results for the low natural gas price landscape ("Low Gas Landscape"), including IPL's existing and proposed generation, are shown in Figure 4.7. For this future landscape the Capacity Expansion model identified CCGT generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.7 – Capacity Expansion Results for Ventyx Low Gas Landscape



Source: Ventyx

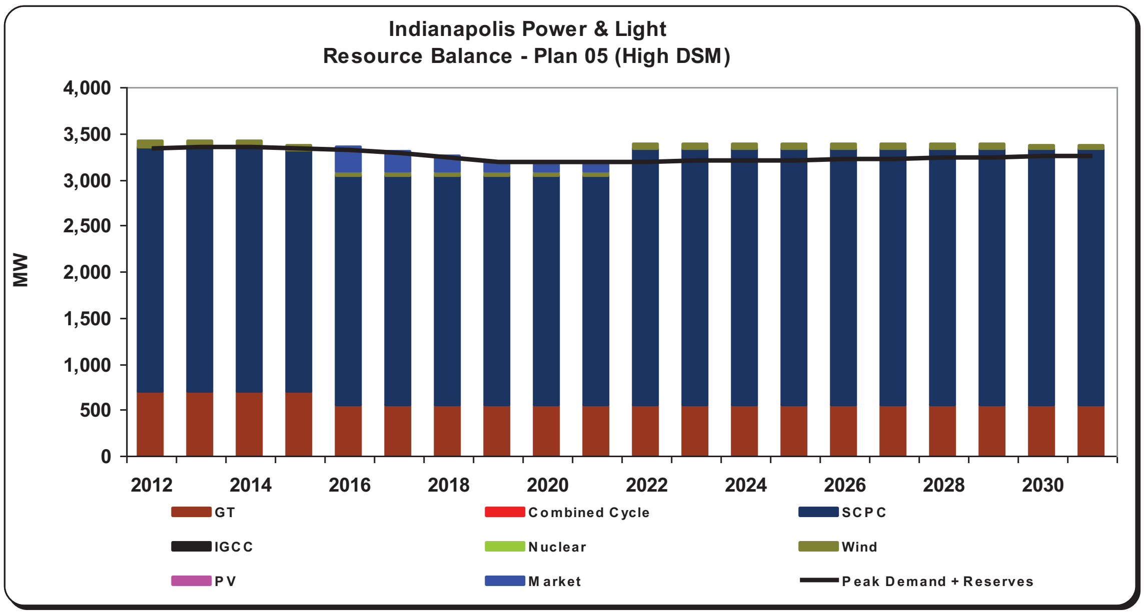
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	-	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	600	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

Low Load Forecast (High DSM) Landscape

The capacity expansion results for the Low Load Forecast Landscape, including IPL's existing and proposed generation, are shown in Figure 4.8. This load scenario is more about resource timing; with the Capacity Expansion model identifying new coal unit generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling, and was not impacted by the lower load forecast. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.8 – Capacity Expansion Results for Ventyx Low Load Forecast (High DSM) Landscape



Source: Ventyx

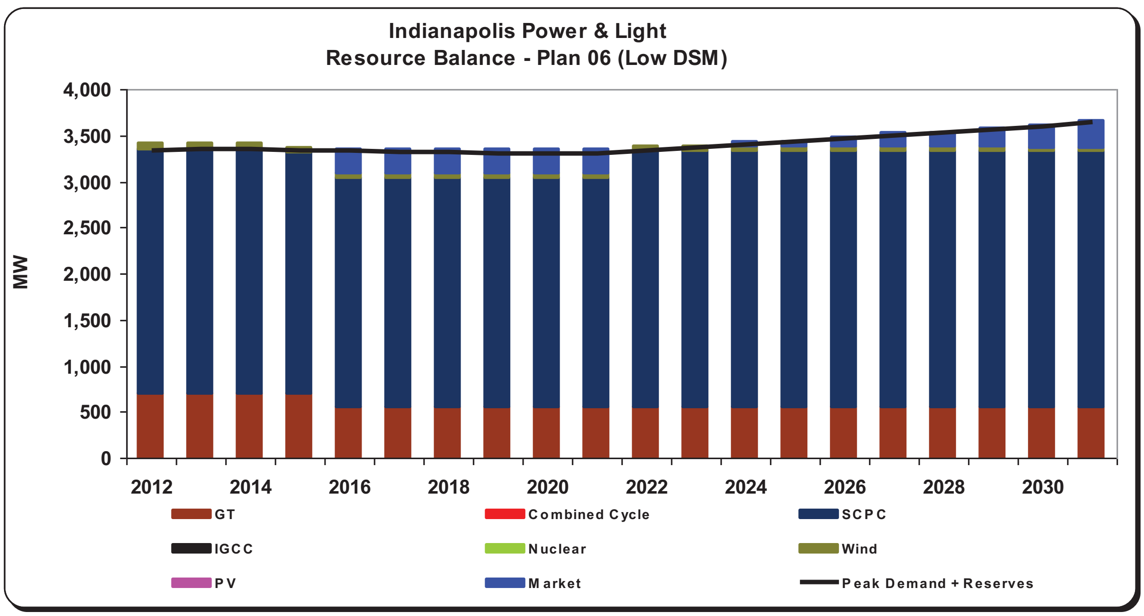
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	600	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	-	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

High Load Forecast (Low DSM) Landscape

The capacity expansion results for the High Load Forecast Landscape, including IPL's existing and proposed generation, are shown in Figure 4.9. This load scenario is more about resource timing, with the Capacity Expansion model identifying new coal unit generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling, and was not impacted by the higher load forecast. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.9 – Capacity Expansion Results for Ventyx High Load (Low DSM) Forecast Landscape



Source: Ventyx

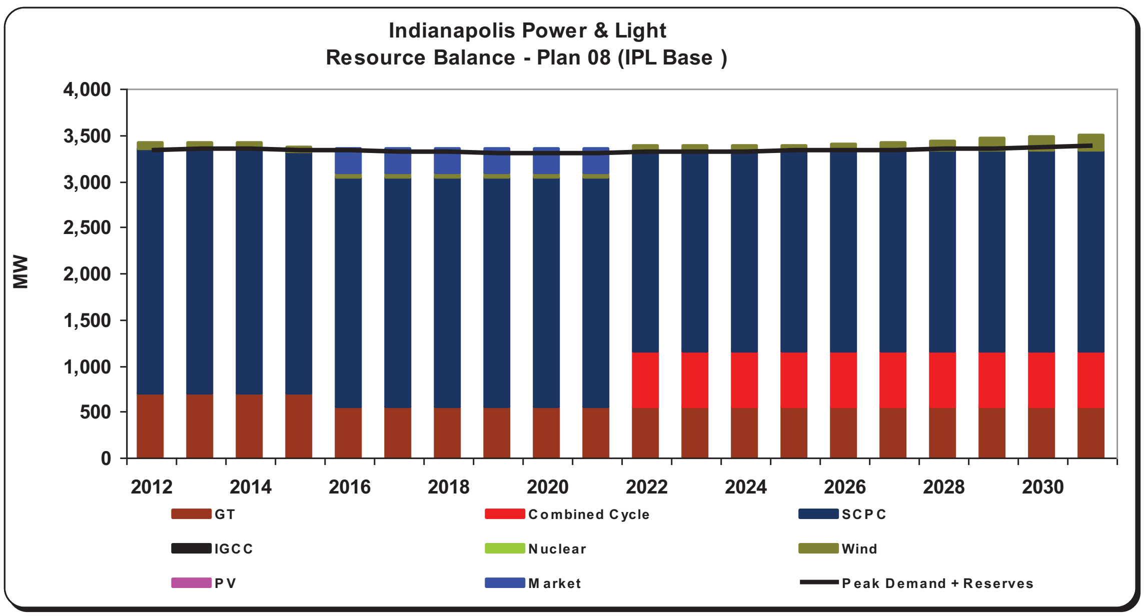
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	600	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	-	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

Moderate Environmental Landscape

The capacity expansion results for the Moderate Environmental Landscape, including IPL's existing and proposed generation, are shown in Figure 4.10. This landscape with deferred and low CO_2 costs represents an alternative base case to Ventyx's Reference Case. For this future landscape the Capacity Expansion model identified CCGT generation with an in-service date of 2022. This timing corresponds to the final phase of IPL small coal unit retirements as identified in 2021 in the modeling, and was not impacted by the higher load forecast. The timing of these retirements has not been established and will change the timing of new planned generation.

Figure 4.10 – Capacity Expansion Results for Ventyx/IPL Moderate Environmental Landscape



Source: Ventyx

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NUCLEAR	-	-	-	-	-	-	-	-	-	-
SCPC	-	-	-	-	-	-	-	-	-	-
IGCC	-	-	-	-	-	-	-	-	-	-
CCGT	-	-	-	-	-	-	-	-	600	-
GT	-	-	-	-	-	-	-	-	-	-
WIND	-	-	-	-	-	-	-	-	-	-
PV	-	-	-	-	-	-	-	-	-	-

Source: Ventyx

The results of the other future landscape capacity expansion simulations are shown in the Ventyx Report, Section 7, Attachment VII.

Landscape Evaluation of Defined Resource Scenarios

The next step incorporated the results of the capacity expansion modeling, along with IPL's view of future drivers and pending legislation, to derive a targeted selection of resource options for landscape scenario evaluation. IPL identified six different resource plans to test across the future landscapes in order to evaluate a range of resource options and combinations of resources. Figure 4.11 shows the six resource plans that were subjected to additional scenario analyses in this IRP. These scenarios were created based on similar resource sizing and consistent resource timing so as to not bias any one technology. In addition, these scenarios also reflect updated end-of-year 2015 small coal-fired retirement date assumptions.

Figure 4.11 – Scenario Resource Plans

Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

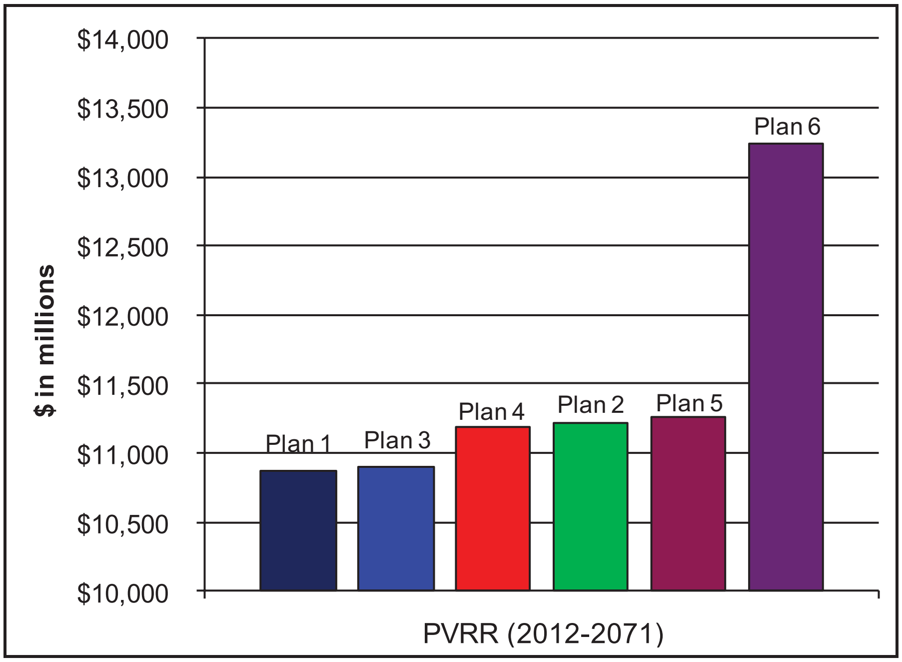
Source: IPL

Future Landscape Evaluation Results

IPL ran each of the resource plans against the future landscapes to better understand the potential ramifications of significantly divergent futures around gas and CO_2 prices. The following section describes the results of these runs. Figures 4.12 through 4.16 show the expected PVRR for the resource plans against Ventyx's future landscapes.

Figure 4.12 – Ventyx Reference Case

PVRR Plan Ranking for the Base Case Future (2012-2071)



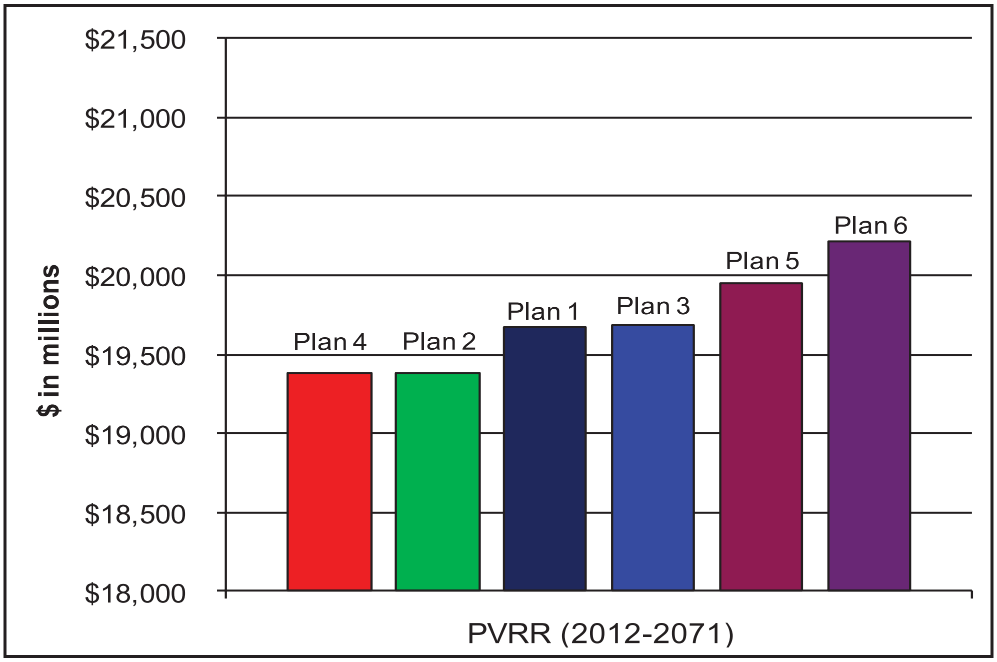
Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

Source: Ventyx

The Ventyx Reference Case results are shown in Figure 4.12. This landscape does not include any GHG legislation (no CO_2 costs) and represents Ventyx's base case assumptions. Plans with CCGT generation (Plans 1 and 3) were the lowest-cost resource plans for this landscape.

Figure 4.13 – Ventyx Environmental Landscape

PVRR Plan Ranking for the Environmental Future (2012-2071)



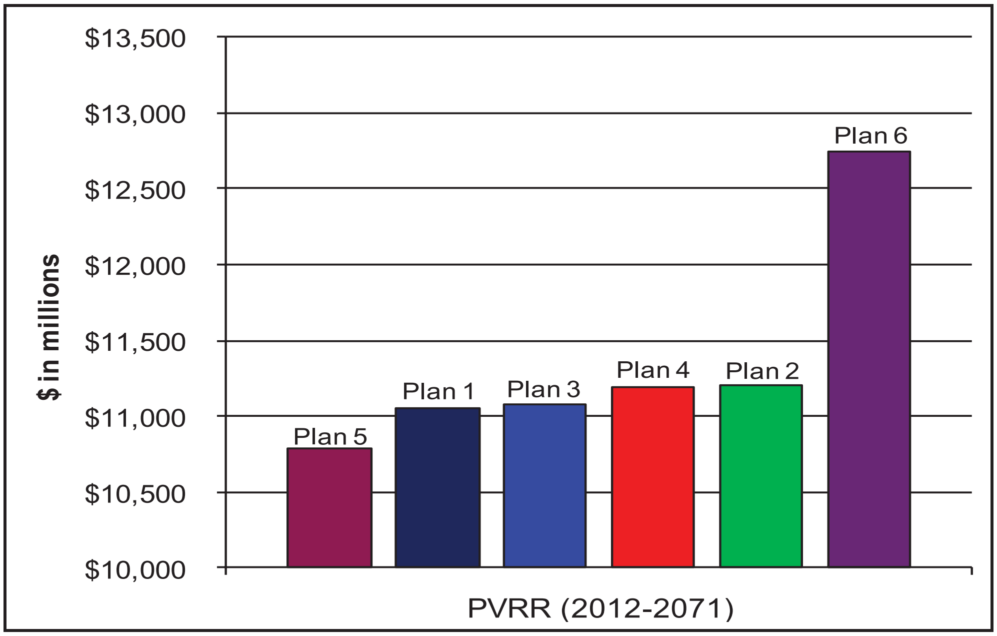
Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

Source: Ventyx

The Ventyx Environmental Landscape results are shown in Figure 4.13. This landscape includes imminent (2015) GHG legislation, with significant CO_2 costs ($62/ton by 2031). Plans with wind generation (Plans 2 and 4) were the lowest-cost resource plans for this landscape, with CCGT besting both coal and nuclear.

Figure 4.14 – Ventyx High Gas Landscape

PVRR Plan Ranking for High Gas Future (2012-2071)



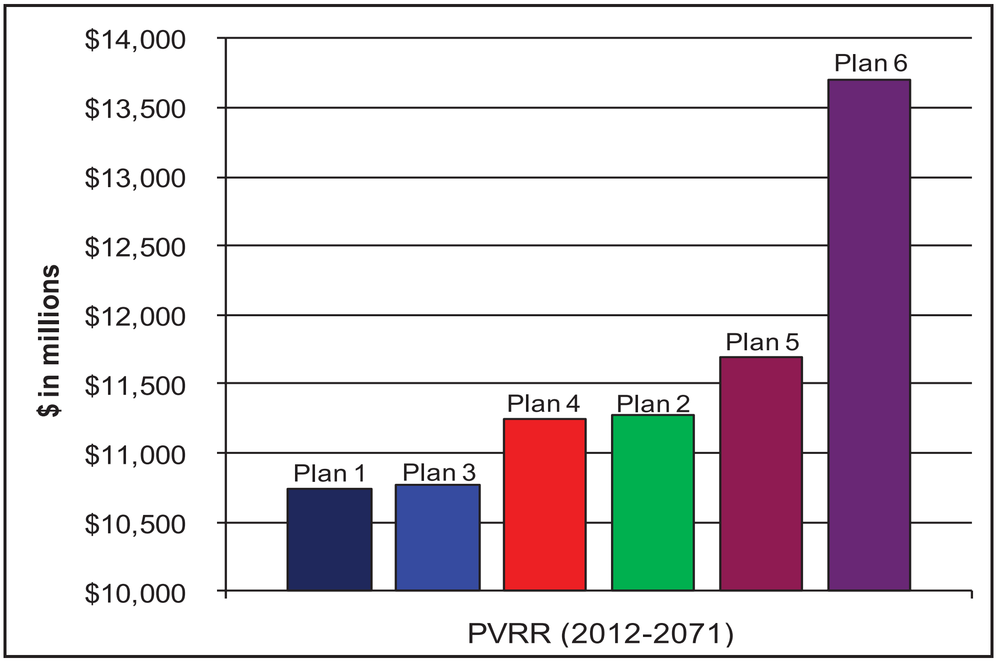
Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

Source: Ventyx

The Ventyx High Natural Gas Landscape results are shown in Figure 4.14. This landscape includes gas prices at the top decile of the gas forecast range. Coal generation (Plan 5) was the lowest-cost resource plan for this landscape, with a CCGT besting both Wind/CT and nuclear.

Figure 4.15 – Ventyx Low Gas Landscape

PVRR Plan Ranking for the Low Gas Future (2012-2071)



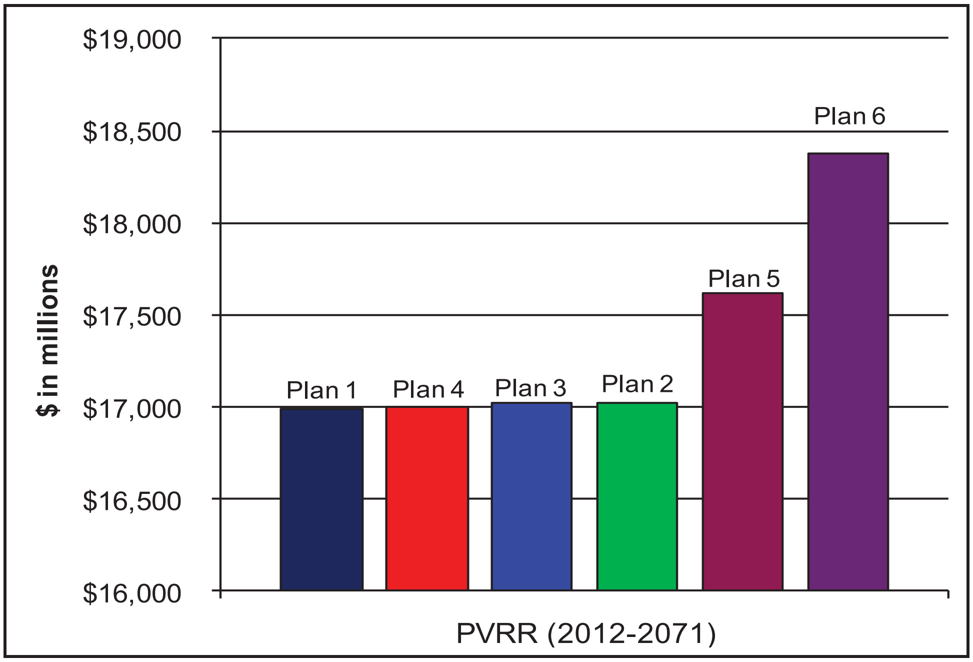
Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

Source: Ventyx

The Ventyx Low Gas Landscape results are shown in Figure 4.15. This landscape includes gas prices at the bottom decile of the gas forecast range and no CO_2 costs. Plans with CCGT generation were the lowest-cost resource plans for this landscape, with Wind/CT besting both coal and nuclear.

Figure 4.16 – Ventyx/IPL– Moderate Environmental Landscape

PVRR Plan Ranking for the Moderate Environmental Future (2012-2071)



Plan 1	600 MW CCGT (2018)
Plan 2	550 MW CT and 500 MW Wind (10% Cap Credit) (2018)
Plan 3	600 MW CCGT (2020)
Plan4	550 MW CT and 500 MW Wind (10% Cap Credit) (2020)
Plan 5	600 MW SCPC (2020)
Plan 6	600 MW Nuclear (2020)

Source: Ventyx

The Moderate Environmental Landscape is a landscape developed between Ventyx's Reference Case, with no CO_2 costs and Ventyx's Environmental Landscape with the assumption of very strong climate change legislation ($62/ton CO_2 by 2031). The Moderate Environmental Landscape results are shown in Figure 4.16. This landscape includes delayed (2021) GHG legislation, with more moderate CO_2 costs ($30/ton by 2031) compared to the Ventyx Environmental Landscape and represents a reasonable planning alternative to the Ventyx Reference Case. Plans with CCGT (Plans 1 and 3) and Wind/CT generation (Plans 2 and 4) were the lowest-cost resource plans for this landscape.

Scenario Evaluation Results Summary

A summary of the results of the future landscapes are presented in Figure 4.17 showing the two lowest-cost (PVRR) plans for each landscape. CCGT dominated the results appearing in the top two resource plans for all landscape scenarios. In addition, the CCGT was the primary resource selected for the Reference Case and Moderate Environmental Landscape. Coal performed well in the High Gas Landscape, but even with high gas prices, CCGT was still in the top two. Wind, firmed up with a CT, appeared in four of the landscapes. Nuclear generation did not appear in any of the top spots in all the landscape evaluations.

Figure 4.17 – Resource Plan Selection Summary

Top Two Generation Resources Identified for Each Future Landscape

Ventyx Reference Case	Ventyx Environmental	Ventyx Low Gas	Ventyx High Gas	Moderate Environmental Landscape
CCGT	Wind/CT	CCGT	COAL	CCGT
Wind/CT	CCGT	Wind/CT	CCGT	Wind/CT

Source: Ventyx

Comparative Annual Costs by Resource Scenario

[170-IAC 4-7-8(8)(B)]

Figure 4.18 provides representative annual revenue requirements for the Ventyx Reference Case for the six resource plans as modeled by Ventyx. The 20 year PVRR of these plans are shown in Figure 4.19 with CCGT showing the lowest 20 year PVRR. Figure 4.20 provides representative annual revenue requirements for the Ventyx Moderate Environmental Landscape for the six resource plans as modeled by Ventyx. The 20 year PVRR of these plans are shown in Figure 4.21 with CCGT showing the lowest 20 year PVRR. A discount rate of 7.56% was used for this modeling. These costs include existing generation production costs, system capacity and power purchase expense, and incremental new resource costs. The annual costs are best used for comparison purposes to access the relative impacts of new resource plans, and are not intended to represent the full revenue requirements of IPL.

Figure 4.18 – Comparative Annual Revenue Requirements by Plan (Reference Case)

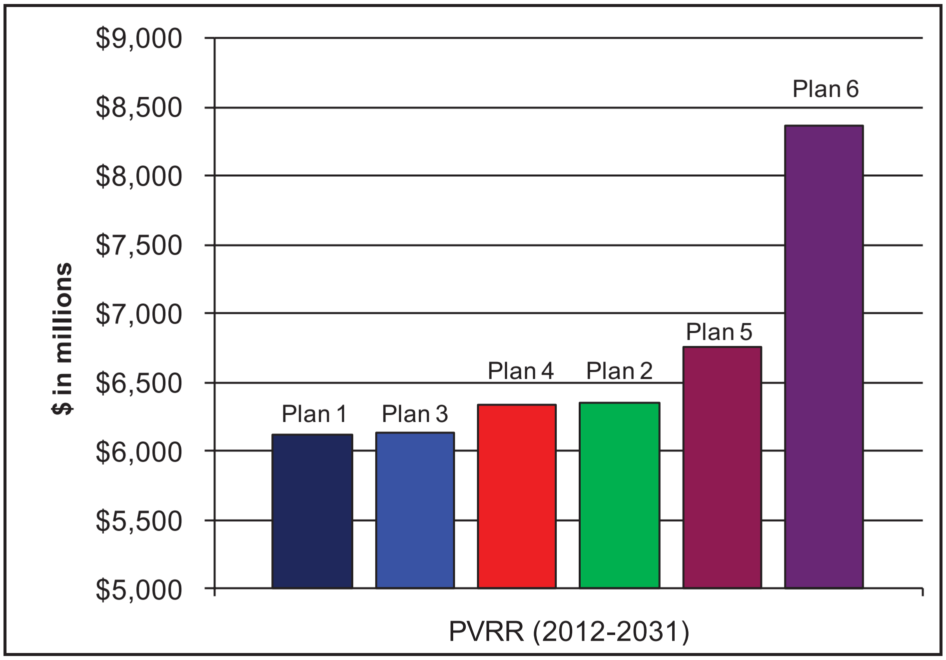
Comparative Annual Costs by Plan (Base)
Incremental Average Annual Revenue Requirements (cents/kWh)

Year	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6
2012	2.30	2.30	2.30	2.30	2.30	2.32
2013	2.30	2.30	2.30	2.30	2.30	2.38
2014	2.50	2.50	2.50	2.50	2.51	2.62
2015	2.62	2.61	2.61	2.61	2.65	2.79
2016	3.34	3.32	3.33	3.32	3.46	3.58
2017	3.48	3.47	3.42	3.41	3.68	3.76
2018	3.09	3.22	3.51	3.49	3.85	3.94
2019	3.88	4.51	3.76	3.74	4.06	4.27
2020	4.09	4.63	3.50	3.61	3.15	3.23
2021	4.29	4.73	4.40	5.04	5.68	9.00
2022	4.45	4.81	4.55	5.10	5.75	8.83
2023	4.66	4.95	4.75	5.19	5.86	8.71
2024	4.86	5.11	4.95	5.28	5.95	8.62
2025	5.08	5.30	5.16	5.43	6.07	8.55
2026	5.25	5.46	5.33	5.58	6.19	8.48
2027	5.52	5.67	5.59	5.80	6.33	8.46
2028	5.70	5.80	5.77	5.96	6.45	8.37
2029	5.96	6.01	6.03	6.14	6.61	8.36
2030	6.26	6.26	6.32	6.37	6.76	8.35
2031	6.72	6.67	6.79	6.77	7.07	8.47

Note: These prices are for modeling comparison purposes, and do not reflect the total revenue requirements of IPL.

Source: Ventyx.

Figure 4.19 – PVRR Plan Ranking for the Reference Case (2012-2031)



Source: Ventyx

Figure 4.20 – Comparative Annual Revenue Requirements by Plan (Moderate Environmental Landscape)

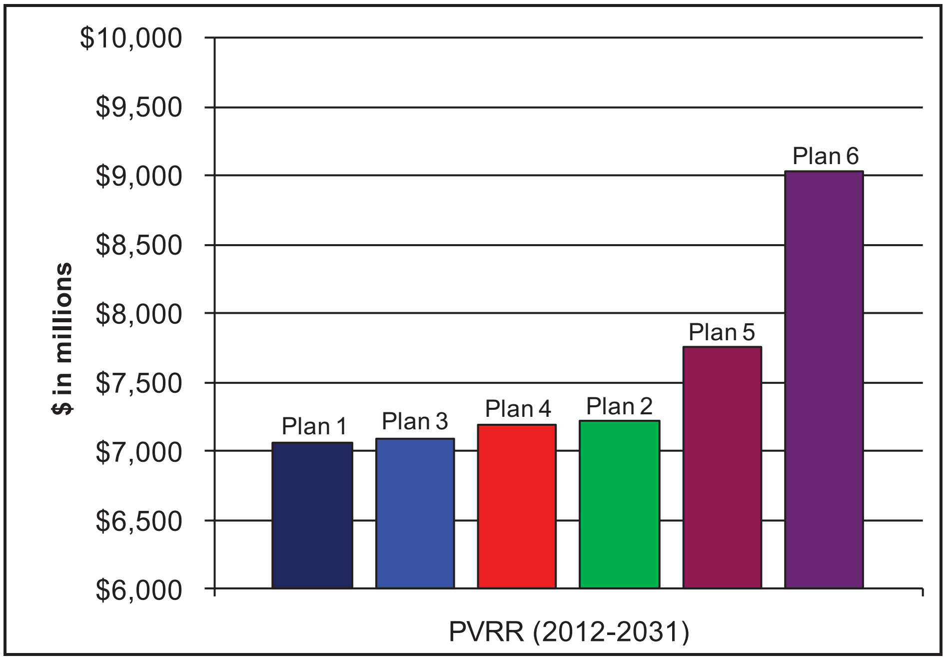
Comparative Annual Costs by Plan (Base)
Incremental Average Annual Revenue Requirements (cents/kWh)

Year	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6
2012	2.29	2.29	2.29	2.29	2.29	2.32
2013	2.29	2.29	2.29	2.29	2.29	2.37
2014	2.49	2.49	2.49	2.49	2.50	2.61
2015	2.61	2.60	2.60	2.60	2.64	2.79
2016	3.34	3.32	3.32	3.32	3.46	3.58
2017	3.48	3.46	3.41	3.40	3.67	3.75
2018	3.08	3.22	3.51	3.49	3.85	3.93
2019	3.87	4.50	3.75	3.74	4.05	4.27
2020	4.09	4.62	3.49	3.60	3.15	3.22
2021	5.18	5.49	5.28	5.80	6.61	9.50
2022	5.42	5.64	5.51	5.93	6.76	9.39
2023	5.72	5.88	5.81	6.12	6.97	9.35
2024	5.99	6.11	6.07	6.28	7.16	9.32
2025	6.29	6.37	6.37	6.50	7.37	9.32
2026	6.76	6.83	6.83	6.96	7.79	9.53
2027	7.30	7.31	7.37	7.44	8.22	9.77
2028	7.79	7.74	7.86	7.89	8.65	9.98
2029	8.35	8.23	8.41	8.37	9.06	10.18
2030	8.83	8.67	8.90	8.77	9.43	10.35
2031	9.63	9.40	9.70	9.50	10.15	10.78

Note: These prices are for modeling comparison purposes, and do not reflect the total revenue requirements of IPL.

Source: Ventyx

Figure 4.21 – PVRR Plan Ranking for the Moderate CO_2 Future (2012-2031)



Source: Ventyx

Results Summary and Resource Selection Overview

The supply resource selection at IPL combines information from both the quantitative part of the evaluation – capacity expansion results and future landscape scenario results, and risk associated with potential legislative and regulatory requirements.

The capacity expansion results which are presented in Figures 4.4 to 4.10 predominantly favor a CCGT. The modeling selected new base load coal-fired generation for the Ventyx Reference Case (with no CO_2 costs) and also for the High Gas Landscape. It selected a CCGT for the Ventyx Environmental Landscape, the Moderate Environmental (CO_2) Landscape, and the Low Gas Landscape. Nuclear did not appear in any of the landscapes, and just 100 MW of wind in the Ventyx Environmental Landscape.

The scenario analysis results are shown in Figure 4.17. Coal-fired generation had the lowest PVRR in one select landscape – with high gas prices and no CO_2 costs, and ranked relatively poor when gas prices were low or moderate, or if CO_2 prices were high or moderate. Wind, firmed by a CT, performed well in Ventyx's Environmental Landscape due to the high and imminent CO_2 cost benefits, but generally finished behind the CCGT.

The CCGT was in the top two selected resources in all five future landscapes. It performs well with and without CO_2 costs, and with low and moderate natural gas prices. Even with high gas prices, the CCGT is only second to coal generation.

From a risk perspective, since IPL's current generation portfolio is dominated by coal, adding additional coal will add additional risk exposure, especially to climate change legislation. Gas-fired generation provides for fuel diversity, in general, and CO_2 risk mitigation in particular. Absent an RES requirement, IPL has sufficient wind generation[9] and potentially applicable DSM to give it a solid base should such a requirement be legislated. Of course, any special situation resource opportunities will need to be evaluated on a case-by-case basis.

From both a minimum revenue requirements perspective and a risk mitigation perspective, a CCGT provides the best generation resource option for IPL's region, and also in particular to IPL's generation portfolio. This strategic direction is supported by quantitative results and is the basis for IPL's Reference Plan.

IPL Reference Plan

[170-IAC 4-7-8(1)] [170-IAC 4-7-8(6)] [170-IAC 4-7-8(10)(A-C)]

IPL's Reference Plan is focused on deriving a low cost, low risk, reliable plan to serve customer load, while complying with all federal, state, and IURC mandates – including IURC mandated DSM targets.

As outlined in Figure 4.1, IPL's resource selection strategy takes a systematic approach including an assessment of existing resources, determination of resource needs, inclusion of all cost-effective and/or required DSM and renewables, and then uses Ventyx Capacity Expansion and scenario analysis modeling of supply options to identify the balance of IPL's resource plan.

The selected IPL Reference Plan includes its five large scrubbed coal-fired units, including all required environmental compliance enhancements, its gas-fired peaking units, recently identified DSM initiatives and long-term targets, recently completed wind purchases[10], and a CCGT initially targeted for 2018. The details of the selected Reference Plan are described below.

Existing Core Base Load Resources

The new and proposed EPA rules, specifically MATS, will have a large impact on IPL's coal fleet. Evaluation shows extensive controls will be required on all IPL coal units for compliance and continued operation.

[9] Ibid.
[10] Ibid.

IPL's resource plan recognizes the value and reliability offered by its existing core base load generation, especially its newest and largest coal-fired units. To keep costs low and provide reliable power to its customers, IPL's long-term resource planning direction builds around its five core coal units (Pete Units 1 through 4, and HSS Unit 7) through the enhanced efficiency, reliability, and reduced emissions of those core units and commitment to meeting all EPA emissions requirements. The new MATS rules IPL will likely require IPL to further control Hg and other specified toxics on its five large scrubbed coal-fired units.

IPL recognizes that its older unscrubbed coal-fired units, subject to multiple EPA rules and approaching the end of their useful life, may no longer be cost effective in serving customer load requirements. These units include EV Units 3, 4, 5, and 6 and HSS Units 5 and 6. Required MATS investment, and future investment risk, in its small six unscrubbed coal-fired units look to be uneconomic. Those units, representing 472 MW of summer rated capacity, will likely be retired, subject to the compliance dates identified when these rules are finalized.

IPL currently has four oil-fired steam units as part of its generating fleet. HSS Units 3 and 4 were placed in-service in 1941 and 1947, respectively, and have a summer rating of 35 MW each. EV Units 1 and 2 were placed in-service in 1949 and 1950, respectively, and have a summer rating of 30 MW each. For IRP modeling purposes it was assumed that these units will be retired at the end of 2015 in conjunction with the EPA HAPs driven shutdown of the smaller IPL coal-fired units at these stations. While retirement of these units is not required for MATS compliance these units have been operating well in excess of their design life and have been experiencing increasing reliability issues in recent years. For planning purposes it seemed reasonable to assume that these units will not operate beyond 2015.

Demand Side Management

[170-IAC 4-7-6(a)(7)]

IPL's resource portfolio will include considerable investment in DSM. IPL's DSM program is comprised of conservation or energy efficiency DSM targeting broader energy reductions, load management or demand response DSM targeting system peaking conditions, and customer based renewables targeting customer-owned renewable installations[11].

The primary driver in developing the amount of energy efficiency DSM resources in the IPL 2011 IRP is the IURC's Generic Order (Cause No. 42693-S1)[12]. This Order requires the jurisdictional electric utilities to submit a series of three discrete three year DSM plans. IPL's first DSM proposal, found in Cause No. 43623, represented a significant

[11] See Section 4B, Demand Side Management, Net Metering and Rate REP for details.

[12] The IURC Order in Cause No. 42963-S1 (dated December 9, 2009) – the Generic Phase II Order – established targets for energy efficiency achievement that are significantly greater than historical energy efficiency efforts in Indiana.

increase in IPL's DSM targets. The Order specified annual energy savings goals based on a percent of weather-normalized average electric sales for prior three years. These targets started at 0.3% in 2010 and ramped up to 2.0% in 2019. For IRP purposes, the DSM levels were considered mandatory, and integration of these load impacts on IPL's base case load forecast was treated as a resource planning requirement. The base case net energy efficiency DSM impact is estimated to be approximately 337 MW of net summer coincident peak demand reduction by 2021. In addition, demand response resources are projected to add another 119 MW of peak load reductions by 2021.

Renewables Generation/Climate Change

[170-IAC 4-7-8(5),(9),(10)] [170-IAC 4-7-6(b)]

Renewables technologies represent a resource that primarily targets potential future requirements for GHG regulation, and specifically any federal or state RES legislation. IPL's resource plan has an available renewables generation component of about 300 MW, secured under two long-term Wind PPAs to meet any future RES requirement. Under the terms of the Wind PPAs, IPL receives all of the energy and Renewable Energy Credits ("RECs") from the two wind farms. The null[13] energy is used to supply the load for IPL customers and, in the absence of any mandatory federal or state RES, IPL is currently selling the associated RECs, but reserves the right to use RECs from the Wind PPAs to meet any future RES requirement. The Wind PPAs were approved by the IURC and if IPL chooses to monetize the RECs that result from the agreements, IPL shall use the revenues to first offset the cost of the Wind PPAs and next to credit IPL customers through its fuel adjustment clause proceedings. When the RECs associated with the production of null energy from the Wind PPAs are sold to a third party, IPL shall not claim that energy as renewable energy on behalf of its retail customers. Absent a clear renewables requirement, no additional renewables resources are planned.

New Generation – Combined Cycle Gas Turbine

[170-IAC 4-7-7(a)]

Upcoming EPA rules – most notably the MATS regulation – will most likely force IPL to shutdown six older coal units by the end of 2015. Four additional oil-fired units also are planned for retirement representing a total 620 MW of summer-rated capacity. IPL is considering several alternatives to replace the retired capacity. One resource option that performed well in the IRP evaluation and under serious consideration is a modern, natural gas-fired CCGT. The IRP evaluation showed that the selection of a CCGT represents a low cost solution that effectively serves multiple and diverse future landscapes that

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[13] The Green-e Dictionary (http://www.green-e.org/learn_dictionary.shtml) defines null power as, "Electricity that is stripped of its attributes and undifferentiated. No specific rights to claim fuel source or environmental impacts are allowed for null electricity. Also referred to as commodity or system electricity."

includes a range of CO_2 and natural gas prices. Additional benefits include fuel diversity to IPL's core coal-fired base load units, especially around climate change cost risks, and reliable natural gas supplies that look to be both abundant and low cost. The CCGT specified will likely be a "F-Class" machine with a low heat-rate and low emissions, sized in the 600 MW range. These and other determinations will be identified in next steps in the Short Term Action Plan.

Power/Capacity Purchases

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(c)(4)] [170-IAC 4-7-8(5),(10)]

The strategy to make some capacity purchases allows IPL to provide a buffer between supply and demand forecast uncertainty and can at times provide for easier supply balancing. IHS CERA[14] and MISO both report they expect capacity to remain in oversupply in the region for next few years, therefore continued low-cost capacity and energy purchases are probable.

IPL had projected the need for less than 200 MW of capacity purchases annually from the power markets over the next several years to supplement its resource portfolio. However, EPA-driven coal retirements may represent a large but brief resource gap directly tied to capacity needs prior to the installation date of new replacement generation. IPL anticipates that, subject to a timely approval process and reasonable construction schedule, new build capacity in the form of a CCGT, per IPL's Reference Case, will be available early 2018. This results in a projected capacity deficit of roughly 600 MW for 2016 and 2017. While IPL has historically relied on the short term capacity markets for up to 300 MW of its capacity requirements, this amount of reliance on short term capacity markets will need additional planning and risk management. As identified in the Short Term Action Plan, IPL will evaluate alternatives within the next two years that reduce this exposure.

Transmission and Distribution

[170-IAC 4-7-4(9)] [170-IAC 4-7-4(13)-(15)] [170-IAC 4-7-6(d)] [170-IAC 4-7-6(a)(6)(B)]

IPL's electric distribution and transmission facilities are designed to provide safe, reliable, and low cost service to IPL customers. IPL transmission plans are based on transmission planning criteria and other considerations. Other considerations include load growth, equipment retirement, decrease in the likelihood of major system events and disturbances, equipment failure or expectation of imminent failure. In addition to the summer peak demand period, which is the most critical for IPL, assessments are performed for a range of demand levels including winter seasonal and other off-peak periods. The specific transmission projects are described in Section 4C, Transmission and Distribution.

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[14] IHS CERA (http://www.ihs.com) provides analysis for country and industry forecasting of the business conditions, economic prospects, and risks in over 200 countries and 170+ industries.

IPL's electric distribution plans are based on various criteria and parameters that are used to determine expansion and replacement requirements. The criteria and parameters include consideration of load growth, equipment load relief, timely equipment replacement due to eminent failure, effects of major system events and application of reliability standards, guides and design criteria. IPL maintains a capacitor program to provide sufficient reactive power ("VAR") to maintain adequate distribution voltage under all probable operating conditions and to economically reduce facility loading. In addition to capacitor installations, remote control capability is provided to allow system operators to meet this objective. IPL is in the process of improving functionality of the automated capacitor bank program as part of its Distribution Automation ("DA") plans as part of its *Smart Energy Project*. IPL has automated its distribution system using a mix of circuit devices and communication systems. IPL plans to deploy additional advanced technologies as part of its active Department of Energy-funded *Smart Energy Project* through 2Q2013. DA will also enhance outage restoration with additional reclosers and advanced relays allowing sections of circuits to be isolated if there is a fault on the system which allows fewer customers to experience a service interruption. The proposed Voltage Reduction ("VR") program may allow IPL to reduce system peak demand during approximately 100 hours per year by 40 MW. The specific distribution projects and descriptions are discussed in Section 4C, Transmission and Distribution.

The Integrated Resource Plan

The IRP presented herein and the selected Reference Plan represents IPL's current view on the future electricity landscape and sensitivities around that landscape, and the resources that will reliably and cost-effectively meet customers' future electricity needs within expected legislative, EPA, and IURC requirements. Resource planning is a continuous process with the IRP representing a key snapshot of the planning horizon. In addition to IRP studies, IPL also monitors for special situational opportunities. IPL will commit to new, prudent, and advantageous resources as the need and benefits of resource implementation dictate.

SECTION 4A. RESOURCE OPTIONS

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(c),(1)] [170-IAC 4-7-7(a)]

World events and trends play a big role in forecasting future resource possibilities. This is particularly true this year with many new regulations being promulgated by EPA. With this changing landscape, IPL has worked diligently to identify, characterize and evaluate a broad selection of demand side, renewable and supply options. These options are discussed in detail below 2010.

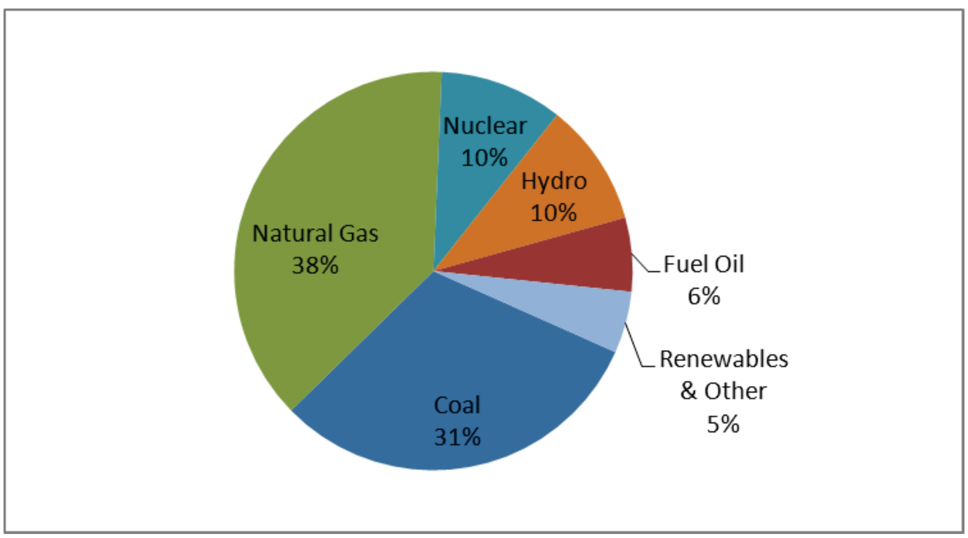
Generation Technology

National Resource Mix[15]

[170-IAC 4-7-5(b)(5)]

The U.S. currently maintains a domestic generation mix dominated by coal and natural-gas as Figures 4A.1 and 4A.2 illustrate. Despite recent natural gas capacity additions, coal still accounted for 31% of domestic installed capacity and 45% of domestic generation in 2009.[16]

Figure 4A.1 – U.S. Generating Capacity by Fuel Type (2009)



Source: EIA

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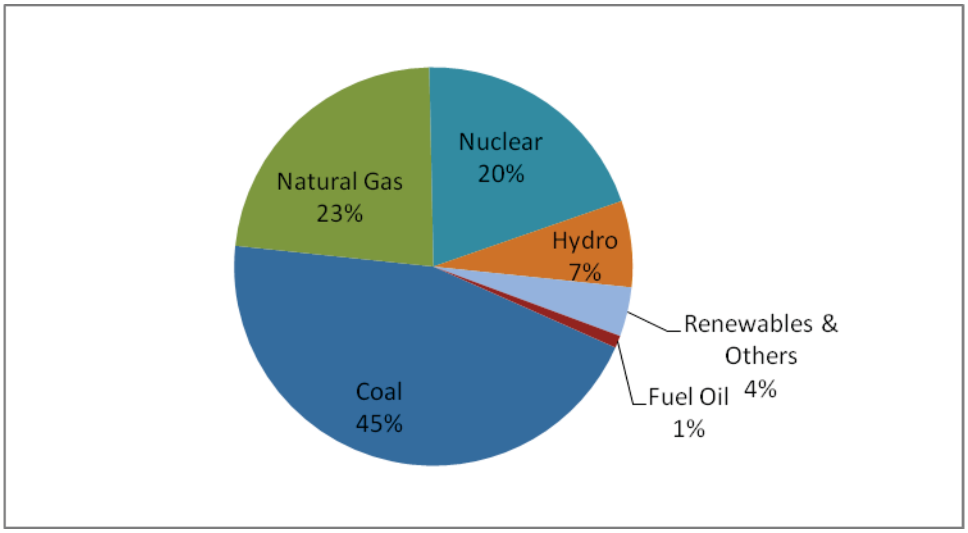
[15] The source for all resource mix comments in this section is *Electricity & Fuel Price Outlook, Midwest Spring 2008*, Ventyx, unless otherwise noted.

[16] http://www.eia.gov/cneaf/electricity

Figure 4A.2 – U.S. Electric Power – Electricity Production (2009)



Source: EIA

MISO Resource Mix

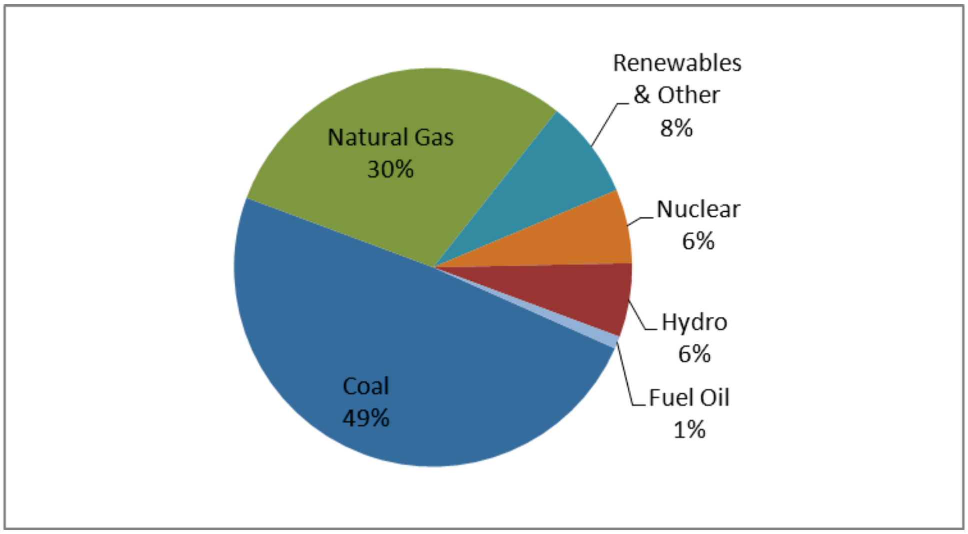
As a member of MISO, and a participant in the energy market for this Regional Transmission Organization ("RTO"), IPL has access to the diverse resources of the 13 states and part of the Province of Manitoba. As shown in Figure 4A.3, MISO relies heavily on coal-fired generating resources. Approximately 49% of its generation capacity is coal-fired. Since coal units are generally base load, coal-fired resources generate an even larger proportion (75%) of total energy generated.

The next largest fuel-type is natural-gas fired generation, which accounts for almost 30% of the generating resources in the Midwest. Because these resources are higher-cost than most of the other resources in MISO, they produce less than 5% of the energy in the region; however, they frequently set the price in the Midwest. Energy production from natural gas is expected to increase within MISO if, as expected due to EPA regulations, a significant portion of the coal fleet is forced into retirement.

Nuclear units provide approximately 6% of the capacity and 14% of the energy in the region; the balance of capacity and energy is provided by renewables (including wind) other, hydroelectric and fuel oil.

The mix of generation is relatively homogeneous across the sub-regions; however, the west sub-region hosts most of the wind resources, while the east has the largest quantity of nuclear resources.

Figure 4A.3 – MISO Generating Capacity by Fuel Type (2010)



Source: Ventyx

Supply Side Options

[170-IAC 4-7-4(8)] [170-IAC 4-7-6(c)(1)-(3)] [170-IAC 4-7-8(8)(A) & (B)]

For planning purposes, IPL selected a group of reference units that represent proven and commercially available technologies, as well as emerging technologies considered viable in the next five to 10 years. The reference units represent two natural gas-fired options, two coal-fired options, and three nuclear/renewables choices.

Natural Gas

- Simple Cycle Combustion Turbine ("CT")
- Combined Cycle Gas Turbine ("CCGT")

Coal

- Supercritical Pulverized Coal ("SCPC")
- Integrated Gasification Combined Cycle ("IGCC")

Nuclear and Renewable Options

- Nuclear
- Wind
- Solar

The technology and size of units selected for capacity additions will depend on a number of factors including, among others, load and energy demand growth and best available technologies at time of construction.

A brief description of each of the technology alternatives currently or potentially available to IPL to meet future capacity needs follows.

Please note that all capital costs provided below are derived from Ventyx assumptions for "overnight costs" plus owner's cost provided by Ventyx. As the name implies, overnight costs represent pricing the costs of a unit as if it could be built in one day. Separate assumptions on commodity and labor-price inflation are included in the Ventyx modeling to adjust these costs to the year a unit is brought online. In addition, Allowance for Funds Used During Construction ("AFUDC") costs is also included in the model runs. The figures shown below do not include either commodity-price and labor-price inflation or AFUDC.

Natural-Gas Alternatives

IPL has evaluated two types of natural gas-fired generation in the IRP analysis. Natural gas-fired units have historically had low dispatch rates in the Midwest due to a competitive installed coal-fired fleet. However, increasing regulation of coal generation coupled with increased discoveries of natural gas supply may lead to a significant increase in natural-gas fired generation in the Midwest. Please note that all capacity numbers represented below are approximate winter outputs.

Shale and the New Gas Supply Paradigm

[170-IAC 4-7-5(b)(3)-(4)]

Natural gas alternatives are increasingly important in the analysis of new supply options for two reasons: first is the significant pressures felt by U.S. utilities to retire existing coal assets and the difficulty in permitting new coal-fired generation. As important, however, is the emergence of shale gas and the significant increase in available U.S. natural gas resources.

Geologists have long known that shale formations contained significant amount of natural gas, the formations are not porous and the gas cannot flow freely when wells are drilled. The breakthrough in commercial drilling in shale formations was combining the practice of horizontal drilling coupled with hydraulic fracturing (the process of using high pressure liquids to create cracks in the shale which allow the gas to flow)[17].

Between 2005 and today, the rate and range of shale gas development expanded in many parts of the county. "In addition to the Barnett, producers began intensively developing plays in the Woodford, north of the Barnett in Texas and Oklahoma; the Fayetteville in

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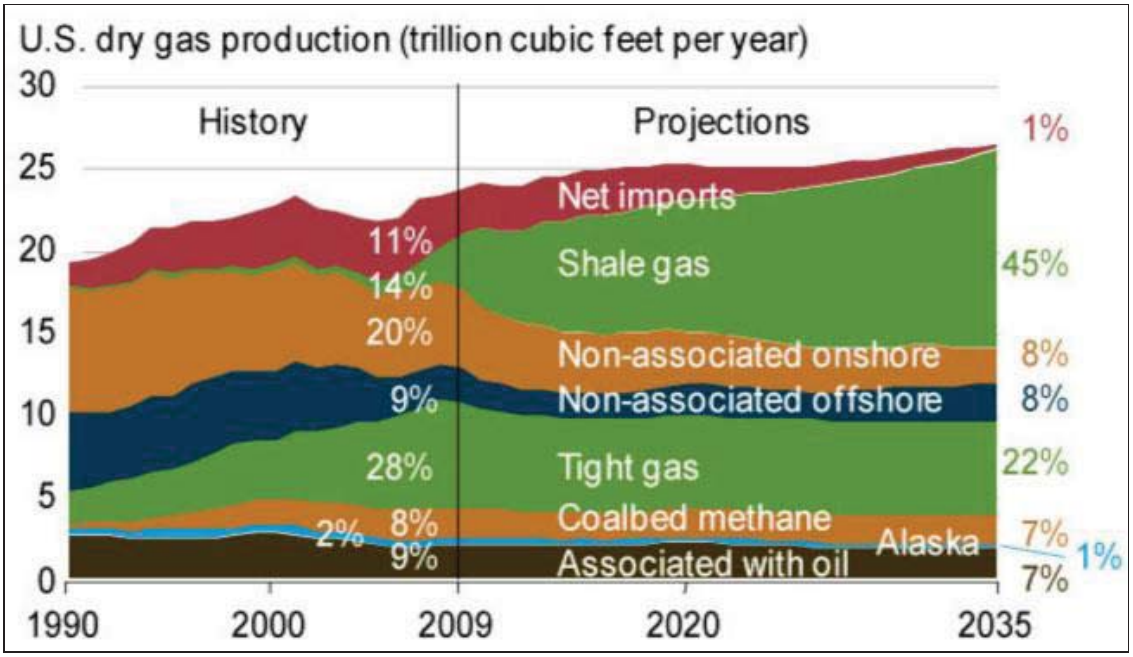
[17] *Task Force on Ensuring Stable Natural Gas Markets*, 2011 Report, Bipartisan Policy Center and American Clean Skies Foundation, pp. 35-36.

Arkansas; and the Haynesville in Louisiana/East Texas. During this time development also began in the Marcellus Shale of the eastern United States. In 2011 the Annual Energy Outlook, the domestic supply picture has changed" as noted below:[18]

Figure 4A.4 – Shale Gas Offsets Declines in Other U.S. Supply to Meet Consumption Growth and Lower Need (2010)



Source: EIA

With traditional domestic U.S. gas drilling, most operations are in relatively unpopulated areas. Shale gas operations include more populated areas, leading to more chance of public opposition and possible water pollution. The natural gas industry and environmental officials have begun paying more attention to these issues and must take the steps necessary to avoid any significant environmental degradation.

Simple-Cycle Combustion Turbine

For purposes of the IRP analysis, IPL assumed the incremental addition of a 180 MW CT in its expansion planning. Conventional frame CTs are a mature technology, widely used for peaking applications. The units are characterized by low capital costs, low non-fuel variable Operation and Maintenance Costs ("O&M"), modular designs and short construction lead times. However, one disadvantage of CTs is the relatively high average heat rate (10,850 Btu per kWh), cost of fuel and resulting high operation costs at higher capacity factors.

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[18] Ibid.

Environmental Characteristics

For purposes of this analysis, the emission rate for the reference CT is expected to be near zero for SO_2, 0.03 lb. per MMBtu for NOx, and 120 lbs. per MMBtu for carbon dioxide ("CO_2").

Capital Costs

The 160 MW CT evaluated by IPL for this IRP is assumed to have an installed cost of [redacted] per kW.

IPL has substantial experience in both the construction and operation of CTs. Recent IPL unit additions include Georgetown Generating Station ("Georgetown") Unit 1 (100 MW) added in 2000 and Harding Street Generating Station ("HSS") CT 6 (183 MW) added in 2002. IPL also purchased Georgetown Unit 4 in 2007 (100 MW). IPL will continue to consider CTs as a generation option due to their flexibility in adding small increments of capacity within a relatively short time frame.

IPL continues to monitor developments in CT technology and will consider CT alternatives in any decision for future capacity additions.

Combined Cycle Gas Turbine

For purposes of the IRP analysis, IPL assumed the incremental addition of a 600 MW CCGT. The typical combined cycle installation consists of gas turbines discharging waste heat into a heat recovery steam generator ("HRSG"). The HRSG supplies steam that is expanded through a steam turbine cycle driving an electric generator. Combined cycle units have the distinct advantage of being the most efficient fossil-fueled process available with average heat rates of approximately 7,050 Btu per kWh. In addition, the units have low pollutant emissions, low water consumption levels, reduced space considerations and modular construction.

Environmental Characteristics

For purposes of this analysis, the emission rate for the reference CCGT is expected to be near zero for SO_2, 0.01 lb. per MMBtu for NOx, and 120 lbs. per MMBtu per CO_2.

Capital Costs

The 600 MW CCGT evaluated by IPL for this IRP is assumed to have an installed cost of [redacted] per kW.

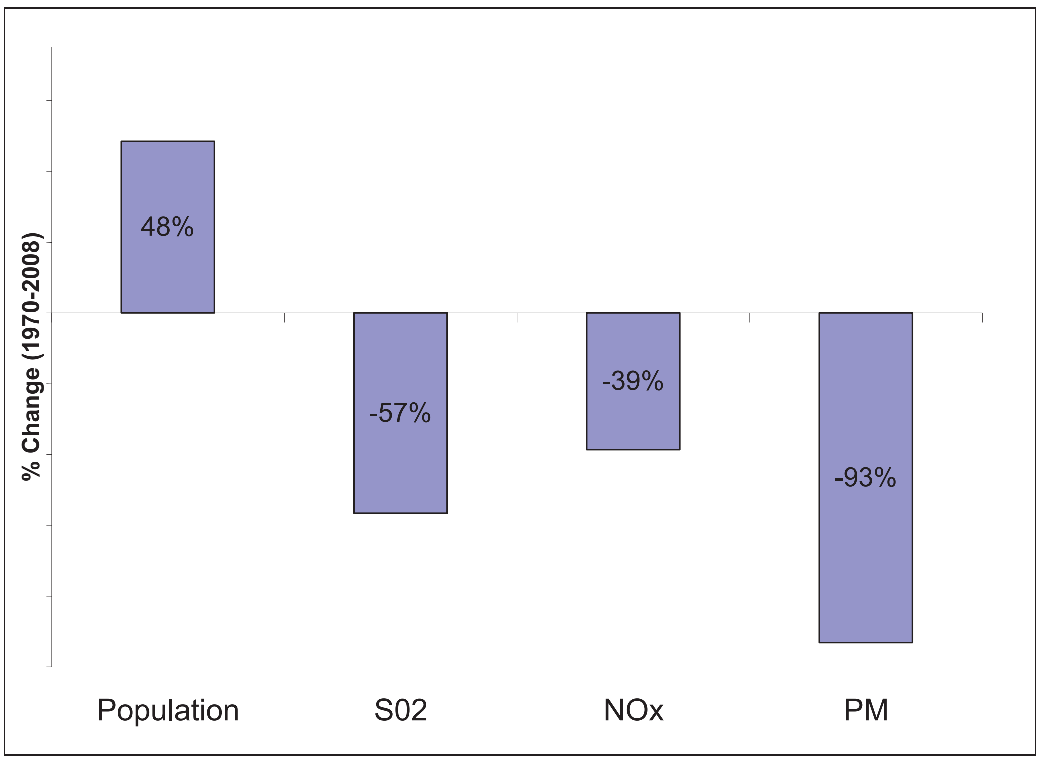
IPL continues to monitor developments in CCGT technology and will consider CCGT alternatives in any decision for future capacity additions.

Solid-Fuel Alternatives

Indiana electric customers have traditionally benefited from coal-fired generation; this technology-abundant low cost fuel resource continues to be financially attractive even with higher costs for air quality control equipment. However, the federal government has been increasingly hostile to coal and has launched a number of initiatives which will make permitting increasingly difficult for coal-fired power generation. As Ventyx notes, "over 11,000 MW of coal-fired projects were either cancelled or indefinitely postponed since April 2009" and "five major coal generators . . . announced plans to retire a significant amount of older coal-fired capacity, totaling nearly 5,400 MW."[19]

Ironically, the coal-fired power industry has done a great job of reducing emissions from generating stations. Despite a growing U.S. population and increased demand for electricity, emissions of the major criteria emissions have been greatly reduced as noted in the chart below.

Figure 4A.5 – National Emission Trends (1970-2008)



Source: EPA as edited by IPL

The abundant supply of low cost coal and the need for base load generation make it problematic to abandon coal in the electricity generation mix. With significant efforts directed towards improving the methods to burn coal economically and with reduced environmental impacts, IPL will continue to monitor developments in solid-fuel

[19] *Ventyx*, pages 1-5.

generation and will consider coal-fired alternatives in any decision for future base load capacity additions.

Supercritical Pulverized Coal

While recent industry attention has focused on the commercialization and construction of IGCC units, pulverized coal ("PC") remains a viable combustion technology option. For purposes of the IRP analysis, IPL evaluated a 600 MW SCPC unit. SCPC units represent a proven technology which was introduced in the U.S. and has been widely deployed in Europe and Asia.

Process Description

Almost any type of coal can be used as the fuel source in a PC boiler. Coal of a uniform consistency is fed into a pulverizer or mill and processed to reach the consistency of a fine powder for combustion in a boiler that produces steam. The steam is then directed to a turbine steam generator to produce electricity.

PC technology has continued to develop over the last couple of decades. Most PC plants in the U.S. have traditionally utilized standard, sub-critical operating conditions. However, since the early 1980s, there have been significant improvements in materials for boilers and steam turbines. SCPC and Ultra SCPC plants are already in use in Japan and Europe and more are expected to be built in the coming decade if issues over permitting can be resolved.

SCPC and Ultra SCPC boilers have received renewed consideration in the U.S. Although pioneered in this country, lower coal costs have typically made it difficult to justify the higher capital cost differences associated with constructing a SCPC boiler versus a sub-critical boiler. Improvements in materials, increasing costs of fuel and SCPC's superior environmental performance explain why SCPC makes sense for new construction.

Environmental Characteristics

Most new SCPC units utilize flue gas desulfurization ("FGD") systems in order to control SO_2 emissions. While significantly cleaner burning, FGDs and other emission control systems such as Selective Catalytic Reduction units ("SCR") have had a significant impact on SCPC unit performance and costs.

Reductions in CO_2 emissions for a PC boiler can only be achieved by increasing the efficiency of the units. Existing power generation plants have efficiencies that range from 25% to 37%, with a fleet average of about 33%. New designs offered today have efficiencies in the range of 38% to 40%. Future designs may be capable of reaching efficiencies approaching 45% to 50% in the next 10 years. Installing a new power plant with an efficiency of 42% rather than 37% reduces CO_2 emissions by about 12%. An advanced Ultra SCPC plant with an efficiency of 49% will have a 25% lower CO_2 emission rate compared to today's 37% efficient plant.

For purposes of this analysis, the emission rate for the reference SCPC is expected to be 0.03 lb. per MMBtu for SO_2, 0.05 lb. per MMBtu for NO_x and 210 lbs. per MMBtu for CO_2.

Capital Costs

The 600 MW SCPC unit evaluated by IPL for this IRP is assumed to have installed costs of [redacted] per kW.

IPL continues to monitor developments in SCPC and Ultra SCPC boiler technology and will consider these alternatives in any decision for future coal-fired capacity additions.

Integrated Gasification Combined Cycle

Process Description

IGCC technology combines coal gasification with high efficiency gas turbine and steam power generation technologies. While there are a number of gasification technologies that differ in many aspects, there are some common characteristics. Feedstock (e.g. coal) is prepared and fed into the gasifier in either dry or slurried form. The feedstock reacts in the gasifier with steam and oxygen at high temperatures and pressure in an oxygen-starved atmosphere. This produces the syngas (made up primarily of carbon monoxide and hydrogen) that is then cleaned and burned in a gas turbine to produce electric power. Heat recovered from the hot turbine's exhaust produces steam that turns a steam turbine generator to produce additional electricity.

Recent trends in environmental legislation and advances in competing technologies have put pressure on other combustion technologies and increased interest in gasification as a viable alternative for power plant development. Prominent among these trends are environmental regulation and fuel diversity. Coal-fired power plants are increasingly being subjected to more stringent emission rates. The IGCC process concentrates pollutant forming impurities and is capable of removing almost all of these impurities from the coal-derived gases.

Challenges to IGCC deployment remain. Despite the IGCC's improved environmental characteristics, the legacy perception of coal as a dirty fuel continues to make plant siting and permitting difficult. The higher capital costs and technology and operating risk associated with IGCC pose even greater impediments. Consequently, only one new IGCC plant is in advanced construction in the U.S. (the Duke-Indiana Edwardsport Plant). However, Southern Company officially broke ground on a new IGCC project in Mississippi in early 2011. Later in 2011, Summit Power Group announced that its Texas Clean Energy Project IGCC will enter into a 25-year power purchase agreement with the country's largest municipally owned natural gas and electric utility, CPS Energy (San Antonio), and thus that project also appears commercially feasible.

Environmental Characteristics

The IGCC technology converting coal into cleaner burning gas has a number of environmental benefits relative to existing traditional PC units, including lower SO_2, NO_x, Hg and CO_2 emissions.[20] Many of these same benefits could be achieved in later generations of SCPC and Ultra SCPC plants. The reference IGCC unit considered qualitatively by IPL does not include any capital costs for carbon capture. Considerable technology development is necessary to achieve carbon capture and sequestration ("CCS"). IPL addresses this challenge in the CCS discussion that follows.

For purposes of this analysis, the emission rate for the reference IGCC is expected to be 0.02 lb. per MMBtu for SO_2, 0.01 lb. per MMBtu for NO_x, and 210 lbs. per MMBtu for CO_2.

Capital Costs

The IGCC project qualitatively evaluated by IPL for this IRP is assumed to have an installed cost of [redacted] per kW.[21]

IPL continues to monitor developments in IGCC technology and will consider IGCC alternatives in any decision for future coal-fired capacity additions.

Nuclear and Renewable Options

Nuclear

With increasing concern about GHG, there has been a renewed interest in additional investment in nuclear generation. While the debate over nuclear plant siting is controversial and the plants are extremely capital intensive, additional electricity production by nuclear power is promoted on the basis of mitigating increases in GHG emissions. Countervailing views on the "nuclear renaissance" are that the technology is too expensive and the accident at the Fukushima Daiichi plant in Japan should make regulators hesitant to approve new reactors.

As Ventyx notes, "Constellation decided to pull out of the Calvert Cliffs expansion project due to the reasons that the federal government's proposed terms and conditions for the guarantee are 'unworkable.' The company also stated that the proposed cost is unreasonably burdensome and would create unacceptable risks and costs for the company . . . In April 2011, NRG announced it is abandoning the South Texas expansion project and writing off its $331 million investment."[22]

Southern Company's Vogtle expansion (units 3 and 4) received $8.3 billion in federal loan guarantees which is an important step in moving that project forward. Because of

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[20] This statement does not consider CCS. Lower heat rates in IGCC plants will result in lower CO_2 emissions as less coal is required for each kWh produced.

[21] Cost does not include any CCS costs.

[22] *Ventyx*, pages 1-4.

cost uncertainly, the utility regulatory commission in Georgia is considering punitive measures if the plant experiences cost overruns.[23]

IPL has chosen to include a nuclear option within this analysis. It is not anticipated that IPL will build a greenfield nuclear plant. Rather, it is assumed that IPL could participate as a minority participant in the development of a new nuclear plant at an existing site if such development could overcome permitting issues. **[170-IAC 4-7-6(c)(4)]**

Environmental Characteristics

For purposes of this analysis, the emission rate for the reference nuclear plant for SO_2, NO_x and CO_2 are expected to be zero.

Capital Costs

The 600 MW portion of a nuclear unit evaluated by IPL for this IRP is assumed to have an installed cost of [redacted] per kW.

IPL continues to monitor developments in nuclear technology and will consider nuclear alternatives in any decision for future capacity additions.

Wind Resources

Recent introduction of large-scale, utility-grade wind turbine generators ("WTG") has made wind energy a commercially viable technology in Indiana and the U.S. Indiana in particular has benefited from the widespread adoption of increasing wind tower heights. The 80 meter turbine height which is common in Benton County can more readily utilize the increased wind speeds found at higher elevations. Likewise, the Midwest is favored with several very good wind basins, allowing generation to be diversified and take advantage of metrological variances.

Wind speeds are important in determining WTG performance. The power available to drive WTG is proportional to the cube of the speed of the wind. In other words, a doubling in wind speed leads to an eight-fold increase in power output.

Higher wind speeds are not only important for generation; they also tend to lower the cost per kWh of the electricity produced. This is because wind parks generally have very high fixed costs (i.e., most of the cost of operating a wind park is the initial capital and financing costs). Spreading this cost over more hours per year reduces the hourly cost of electricity.

Currently, IPL's resource plan has an available renewables generation component of approximately 300 MW of energy secured under two long-term Wind Power Purchase Agreements ("PPAs"). Under the terms of the Wind PPAs, IPL receives all of the energy

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23 *Wall Street Journal, July* 7, 2011, "Georgia Eyes Cost Buffer for Nuclear Plant".

and Renewable Energy Credits ("RECs") from the two wind farms. The null[24] energy is used to supply the load for IPL customers and, in the absence of any mandatory federal or state renewable energy standard ("RES"), IPL is currently selling the associated RECs, but reserves the right to use RECs from the Wind PPAs to meet any future RES requirement. The Wind PPAs were approved by the IURC and if IPL chooses to monetize the RECs that result from the agreements, IPL shall use the revenues to first offset the cost of the Wind PPAs and next to credit IPL customers through its fuel adjustment clause proceedings. When the RECs associated with the production of null energy from the Wind PPAs are sold to a third party, IPL shall not claim that energy as renewable energy on behalf of its retail customers. .

<u>**Environmental Characteristics**</u>

There are no emissions associated with wind energy production.

<u>**Capital Costs**</u>

An Indiana wind park is expected to cost approximately [redacted] per kW of installed capacity for a park with a minimum capacity of 10 MW and capacity factors up to 35%. For sites outside of Indiana, the cost is still approximately [redacted] per kW although there are sites with higher capacity factors in the range of 35% to 45%. For this IRP analysis, 50 MW of Indiana wind capacity was modeled.

Good wind sites are usually located far from the main load centers, and therefore transmission system expansion may be required to connect the load centers with the wind-rich sites. **[170-IAC 4-7-6(a)(6)(B)]**

IPL continues to monitor developments in wind technology and will consider wind alternatives in any decision for future capacity additions.

Solar Resources

The total U.S. solar market grew more than 120% in 2010 – from 349 MW to 782 MW – and included approximately 48,000 photovoltaic ("PV") systems. These were mostly rooftop systems, but there were also a significant number of utility-scale projects, with eight projects greater than 10 MW.[25] Included among the eight was the Copper Mountain PV project near Boulder, CO which is the largest photovoltaic project in the United States at 48 MW. As noted in the Feed-In Tariff section below, IPL saw a 2 MW PV system commissioned in 2011.

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24 The Green-e Dictionary (http://www.green-e.org/learn_dictionary.shtml) defines null power as, "Electricity that is stripped of its attributes and undifferentiated. No specific rights to claim fuel source or environmental impacts are allowed for null electricity. Also referred to as commodity or system electricity."

25 http://www.solarelectricpower.org/

Environmental Characteristics

There are no emissions associated with solar energy production.

Capital Costs

A photovoltaic system is expected to cost approximately [redacted] per kW of installed capacity with a minimum capacity of 10 MW. For this IRP analysis, 10 MW of Indiana photovoltaic was modeled.

IPL continues to monitor developments in PV technology and will consider PV alternatives in any decision for future capacity additions.

Hydroelectric Resources

The use of water-power to generate electricity is one of the oldest generation resources still in use today. In addition, hydroelectric power remains by far the largest source of renewable energy in the world, including North America.[26]

In the IPL 2009 IRP, IPL indicated that the company would undertake due diligence on two hydroelectric projects located near Evansville, Indiana on the Ohio River. IPL undertook this study and consulted with the engineering firm of PB Power to perform a Front End Engineering Design ("FEED") study. In addition, a Request for Proposal ("RFP") was prepared and issued to seven companies involved in the manufacturing and installation of hydroelectric turbine and generation equipment. These companies represent greater than 75% of the total market share for such equipment.

The results of the FEED study and RFP determined that the performance and cost of the projects was higher than the initial estimate used in the 2009 IRP. Although the projects remain viable, an analysis by IPL indicated that wind projects based in Indiana or elsewhere in the Midwest will likely generate more cost effective renewable electricity. Consequently, IPL is no longer considering small hydroelectric energy as part of the group of reference units considered for supply side options.

Distributed Generation, Net Metering and Feed-In Tariff

Distributed Generation

[170-IAC 4-7-4(4)] [170-IAC 4-7-6(b)(2),(5)] [170-IAC 4-7-9(2)]

IPL continues to identify and inventory customers who own distributed generation (in addition to those already identified and contacted for possible participation in IPL's Standard Contract Rider No. 15, Load Displacement) for inclusion in future distribution planning studies.

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[26] *Power Engineering*, June 2009 "Hydroelectricity: The Versatile Renewable," page 32.

Rate REP (Renewable Energy Production)

IPL's Rate REP is a three-year pilot renewable energy feed-in tariff approved by the IURC that went into effect on March 30, 2010. Under Rate REP, limited to 1% of prior year sales, IPL purchases all of the energy produced by customer-sited solar photovoltaic, wind or biomass systems[27]. There are currently 2 MW of wind and PV nameplate capacity under long-term contract. Due to the intermittent nature of these resources, they are not included in IPL's generation planning reserves.

Net Metering

In 2010, IPL received approval from the IURC to expand its Net Metering Rider 9 to include all customers and increased the maximum nameplate rating from 10 kW to 50 kW. IPL currently has seven net metered customers that include one commercial customer and six residential customers. In 2011, the IURC amended 170 IAC 4-4.2 to increase the maximum nameplate rating from 10 kW to 1 MW; in addition, the rule changed from applicable to residential customers and schools only to applicable to any customer. Due to low retail rates and the availability of the Rate REP alternative, it is expected that few, if any, commercial customers will participate in Rider 9 in a tangible manner. Additional residential customers may participate in Rider 9 as a result of the Residential Renewables Incentives DSM Program. This participation will be low volume and will not impact the IRP.

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[27] See Section 4B, Demand Side Management, Rate REP for details.

SECTION 4B. DEMAND SIDE MANAGEMENT

Demand Side Management

[170-IAC 4-7-4(1)] [170-IAC 4-7-5(b)(5)-(6)] [170-IAC 4-7-6(a)(7)] [170-IAC 4-7-6(b)(1)-(9)] [170-IAC 4-7-7(a)-(f)] [170-IAC 4-7-8(10)] [170-IAC 4-7-9(2)]

IPL's demand side management ("DSM") program is comprised of three discrete elements: load management DSM, energy efficiency DSM, and renewables.

The primary driver in developing the amount of energy efficiency DSM resources in the IPL 2011 IRP was the IURC's Generic Order (Cause No. 42693-S1)[28]. While the IURC targets were the primary driver in the development of this current plan, other factors such as increasing customer interest, higher supply-side resource costs and federal environmental rules, were already moving IPL in the direction of having DSM play a significantly greater role in IPL's resource strategy. The IPL DSM proposal found in Cause No. 43623 (as filed in February 2009 and as approved in February 2010) represented a significant increase in IPL DSM efforts, compared to prior DSM levels.

The Generic DSM Order specified annual energy savings goals to achieve this 10 year goal as follows:

Figure 4B.1 – DSM Annual Energy Savings Goals (2010-2019)

Year	Annual electric savings goal (% of weather-normalized average electric sales for prior three years)
2010	0.3%
2011	0.5%
2012	0.7%
2013	0.9%
2014	1.1%
2015	1.3%
2016	1.5%
2017	1.7%
2018	1.9%
2019	2.0%

Source: IURC Generic DSM Order (Cause No. 42693-S1)

[28] The IURC Order in Cause No. 42963-S1 (dated December 9, 2009) – the Generic Phase II Order – established targets for Energy Efficiency achievement that are significantly greater than historical energy efficiency efforts in Indiana.

The impact of these DSM targets is discussed and incorporated in IPL Load Forecast (Section 4D) and incorporated and modeled in the Integration Section (Section 4). This section addresses historical and current DSM initiatives as well as local and national developments that influence IPL's DSM strategy for the future. The development of IPL's proposed 3-Year Demand Side Management Plan ("3-Year DSM Plan")[29], dated October 15, 2010, including the screening methodologies, cost-benefit analysis and proposed programs are described (a copy is included in Section 7, Attachment V, DSM Supporting Documentation).

IPL Historical DSM

[170-IAC 4-7-5(b)(6)

IPL was among the first utilities in Indiana to implement a comprehensive DSM program. IPL has offered DSM on essentially a continuous basis since 1993, as detailed in Figure 4B.2.

IPL's current portfolio of DSM programs was approved in February 2010 in Cause No. 43623. IPL is currently offering all five of the programs that were designated as Core Programs by the IURC in its Generic Order. This comprehensive set of programs provides energy efficiency opportunities for all of IPL customers[30], except customers served at primary voltage (rates PL, PH. HL)[31]. Delivery of the Core Programs will transition from delivery by IPL to the statewide third party administrator ("TPA") on January 2, 2012. **[170-IAC 4-7-6(b)(2)]**

The following programs are being offered to residential customers under approvals received in Cause No. 43623. These residential programs are a combination of both new offerings (as added with the approvals received in Cause No. 43623) and a continuation of prior program offerings successfully offered, in some cases, for several years (i.e., Air Conditioning Load Management ["ACLM"]).

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[29] In Cause No. 43960, IPL has proposed a 3-Year Demand Side Management Plan (dated October 15, 2010) to meet the targets established in the IURC's Generic Order. The 3-Year DSM Plan is referred to as Petitioners Exhibit LHA-3 in this filing.

[30] Customers on these rates are customers that are served at primary voltage. There are approximately 300 customers taking service on these rates. In Cause No. 43960, IPL has requested that these customers be eligible for participation in energy efficiency DSM programs.

[32] While not a named program in IPL's request and approval, the Energy Efficiency Schools – Kits Program was included in the budget for Indirect Costs as requested and approved by the Commission in Cause No. 43623.

Programs for Residential Customers

- **Core Programs**
    1. On-Site Audit with Direct Install Program
    2. Prescriptive Lighting Program
    3. Energy Efficiency Schools – Kits Program
    4. Low and Moderate Income Weatherization Program
- **Core Plus Programs**
    1. Air Conditioning Load Management Program
    2. Energy Assessment Program
    3. New Construction ENERGY STAR® Plus Program
    4. Second Refrigerator Pick-up and Recycling Program
    5. Renewables Incentive Program

Figure 4B.2 – DSM Program History (1993-2011)

Cause No.	Date Approved	Expiration Date	Programs	Authorized Program Expenditures
39672	9/08/1993	12/31/1998 (actual termination date 7/30/1997 and replaced with more cost-effective programs)	• Residential Multi-Family High Efficiency Lighting • Residential High Efficiency Air Conditioner & Heat Pump • Residential Electric Heat Comprehensive • Residential Electric Hot Water Comprehensive • Commercial/Industrial New Construction • Commercial/Industrial Cool Storage • Commercial/Industrial Comprehensive • Commercial/Industrial High Efficiency Lighting • Lost revenue recovery for reduced sales	Up to $16.877 M
40714	7/30/1997	7/30/1999	• Residential Energy Efficiency Comprehensive Program • Residential Duct Installation Program • Small Commercial and Industrial Program • Lost revenues recovery for reduced sales	Up to $8.4 M
41490	8/18/1999	8/18/2000	• Continuation of Single Family Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program (for up to 50 customers) • Lost revenues recovery for reduced sales	$118 K
41650	3/09/2000	3/09/2001	• Continuation of Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program (for up to 150 single-family homes and 1 multi-family complex [100 units]) • No lost revenue recovery for reduced sales	$475 K
42076	10/17/2001	10/17/2003	• Continuation of Single Family Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program (for up to 300 single-family homes and 1 multi-family complex [200 units])	$950 K

Cause No.	Date Approved	Expiration Date	Programs	Authorized Program Expenditures
42639	7/21/2004	7/21/2007	• Continuation of Single Family Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program (for up to 300 single-family homes and 3 multi-family complexes [100 units each]) • Renewable Energy Education Program • Energy Efficiency Education Program • HVAC Program • Extension of IPL's ACLM Program • CPP Pilot Program	Total Budget: $5.25M
"	6/14/2006	7/21/2007	Revisions to Programs Approved in Cause No. 42639: • Continuation of Single Family Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program (for up to 300 single-family homes and 3 multi-family complexes [100 units each])—extended to allow additional implementation providers, 50 additional homes, and one additional multi-family complex • Renewable Energy Education Program • Energy Efficiency Education Program • HVAC Program—lower participation expected • Extension of IPL's ACLM Program • CPP Pilot Program—IPL did not proceed based on Study	[Expenditures re-allocated—No change to total budget] No change No change No change Reduce to $860 K Increase to $2.4M Reduce to $40 K
43252	7/11/2007	6/30/2009 extended on a month to month basis until approvals received in Cause No. 43623	• Continuation of Single Family Income-Qualified Component of the Residential Energy Efficiency Comprehensive Program • Renewable Energy Education Program—extension • Energy Efficiency Education Program—extension • HVAC Program—extension (any funds not spent may be redirected to IPL's ACLM program) • Extension of IPL's ACLM Program—extension • IPL to conduct a Market Potential Study at its cost of $125 K (to be completed NLT 1/15/09) • Any remaining funds from Cause No. 43018 are available for inclusion	Total 2 yr budget: $4.3M

Cause No.	Date Approved	Expiration Date	Programs	Authorized Program Expenditures
43623	2/10/2010	2/9/2013	• Residential On-site Audit with Direct Install (Core) • Residential Prescriptive Lighting (Core) • Energy Efficiency Schools – Kits Program (Core) – extension[32] • Income-Qualified Weatherization (Core) - extension • Residential ACLM Program (Core Plus) – extension • Residential Energy Assessment Program (Core Plus) • Residential New Construction ES Plus (Core Plus) • Residential 2nd Refrigerator Pick-Up (Core Plus) • Res & C&I Renewable Energy Incentives (Core Plus) • Commercial and Industrial ("C&I") Prescriptive (Core) • C&I ACLM (Core Plus) • C&I Custom (Core Plus) • C&I Retro-Commissioning (Core Plus) • C&I New Construction (Core Plus)	Total 3 yr budget: $26.0M
43911	11/4/2010	11/4/2013	• Energy Efficiency Schools Program – Audits (Core)	$560,000
"	Pending	Proposed 3 Year Plan – Term Begins From Date of Order	• Programs are summarized below and presented in detail in Section 7, Attachment V, 3-Year Demand Side Management Plan (dated October 15, 2010).	Total 3 yr budget: $63.1M

Source: Section 7, Attachment V, DSM Supporting Documentation

In addition, IPL proposed the following additional Residential Core Plus Programs in the 3-Year DSM Plan proposed in Cause No. 43960:

- **Proposed Residential Core Plus Programs**
    - Peer Comparison Energy Reports Program
    - Multi-Family Direct Install Program[33]
    - High Efficiency HVAC Rebate

32 While not a named program in IPL's request and approval, the Energy Efficiency Schools – Kits Program was included in the budget for Indirect Costs as requested and approved by the Commission in Cause No. 43623.

33 Because of the significant energy savings opportunity provided by delivering the Multi-Family program IPL worked collaboratively with the Oversight Board to begin funding the Multi-Family Direct Install Program by transferring funds from other Cause No. 43623 approved funds.

The following programs are being offered to Commercial and Industrial ("C&I") customers under approvals received in Cause No. 43623. Prior to this approval IPL had not offered DSM programs to C&I customers since 1999.

Programs for Commercial and Industrial Customers

- **Core Programs**
  1. Prescriptive Program
- **Core Plus Programs**
  1. Air Conditioning Load Management Program
  2. Custom Program[34]
  3. Renewables Incentive Program

As is detailed in IPL's DSM Annual Reports filed with the IURC, IPL DSM programs in total have generated significant demand and energy savings. The most recent IPL DSM Compliance Filing, as filed on July 1, 2011, is provided in Section 7, Attachment VI. This compliance filing demonstrates how IPL is progressing toward meeting the targets established by the IURC.

IPL's ACLM ("CoolCents®") and Income Qualified Weatherization Programs are IPL's longest continually offered DSM programs. The Residential ACLM has been offered since 2003 and represents the largest DSM program in terms of customer participation and peak demand reduction. At the end of August 2011, IPL had deployed approximately 35,000 switches, which is equivalent to about 35 MW of summer peak reduction capability. When the demand savings from IPL's other demand response tariff riders are considered there is approximately 85 MW of total peak demand reduction available to IPL. The Income Qualified Weatherization program has been offered since 1993. Most recently, IPL has delivered this program in combination with American Recovery and Reinvestment Act of 2009 ("ARRA") stimulus funds and in collaboration with Citizens Gas.

Of current offerings, the two most significant DSM programs in terms of energy efficiency savings are the Residential Prescriptive Lighting Program (Core) and the Commercial and Industrial Prescriptive Program (Core). These two programs accounted for 14,844 MWH of achieved savings (76%) for the first five months of 2011, and for the entire year these two programs are expected to contribute over 50% of 2011 savings achievement. The Residential Multi-Family Direct Install Program and the C&I Custom Program (both Core Plus Offerings) are expected to be the next most important contributors to the achievement of 2011 targeted energy savings.

[34] The Custom Program also includes the Retro-Commissioning and the New Construction components. While these programs were specifically named programs in the plan approved in Cause no. 43623, IPL – in collaboration with the Oversight Board - combined the 3 components into one program labeled C&I Custom.

Indiana Developments

Statewide Core Programs Delivered by a Third Party Administrator

[170-IAC 4-7-4(15)] [170-IAC 4-7-6(c)(4)] [170-IAC 4-7-8(4)]

The landscape for DSM in Indiana is influenced by the significant energy efficiency targets established in the IURC Phase II Generic Order. These targets provide the direction for the amount of DSM efforts in the State of Indiana through 2019. The Generic Order also established five Core DSM Programs and identified the mechanism for these Core programs to be delivered.

While the IURC's Generic Order is the dominant factor in shaping DSM developments in Indiana, other factors also contribute to increasing interest in DSM. A confluence of internal and external influences has prompted IPL, and the electric industry as a whole, to make a concerted effort to increase the levels of DSM offerings to its customers. Increasing fuel costs and volatility, a looming build cycle for new generation, environmental concerns and concerns about energy security have caused a renaissance of interest in DSM. IPL is impacted in varying degrees by these factors and as a consequence, prior to issuance of the Generic Order, IPL had already identified and sought to offer additional cost effective DSM programs that are beneficial to IPL customers[35].

The IURC's Generic Order established the Demand Side Management Coordination Committee ("DSMCC") to solicit bids and to select a statewide TPA to deliver the Core Programs on behalf of the jurisdictional electric utilities. After a rigorous process, GoodCents® was selected as TPA by the DSMCC. In July 2011, the IURC approved the contract with GoodCents® and since, the DSMCC and GoodCents® have been working diligently towards delivery of the Core Programs on behalf of the jurisdictional utilities by January 2, 2012. While the TPA-delivered Core Programs will allow utilities to meet the majority of the IURC targets, utilities are also offering Core Plus Programs to achieve the balance of savings.

National Developments

The "renaissance" for energy efficiency continues nationally as well as locally. Data shows that the significant increase in DSM efforts in Indiana is in synch with national developments. According to the most recent State Energy Efficiency Scorecard report from the American Council for an Energy Efficient Economy ("ACEEE")[36], total spending on customer-funded energy efficiency programs has increased from approximately $2.5 billion in 2007 to approximately $4.3 billion in 2009. While Indiana continues to increase spending for energy efficiency programs, its relative ranking remains low but is improving. In 2010, Indiana ranked 31st in terms of utility funded spending for energy efficiency as a percentage of utility revenues. The increased spending by jurisdictional utilities in the next few years to meet the targets established by the Generic Order will improve Indiana's ranking for energy efficiency efforts.

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[35] In Cause No. 43623, filed in February 2029, IPL proposed a significant increase in DSM efforts.

[36] "The 2010 State Energy Efficiency Scorecard", American Council for an Energy-Efficient Economy by Maggie Molina, Max Neubauer, Michael Sciortino, Seth Nowak, Shruti Vaidyanathan, Nate Kaufman, and Anna Chittum, October 2010, page 6. ACEEE reports are based on data provided by utilities in Energy Information Administration reporting – 2006 data was the most recent available at the time of the report.

Federal legislation continues to include provisions that promote energy efficiency and conservation in several ways that will result in significantly better utilization of energy. Perhaps most significant was the injection of more than $11 billion ARRA funds directly into state energy efficiency programs. ARRA (the "stimulus bill") was enacted in February 2009[37]. ARRA includes several additional provisions modifying and expanding the scope of the energy efficiency effort. For example, on-site renewables, including solar photovoltaic ("PV"), hot water systems, small wind systems, and geothermal heat pumps are also eligible for a tax incentive worth 30% of the total cost, without a cap.

While many of the tax provisions of other recent federal legislation to encourage energy efficiency has expired, legislation signed on October 3, 2008, extended the commercial buildings tax deduction to the end of 2013. Tax credits for combined heat and power systems; fuel cell and microturbines, and accelerated depreciation for smart meters and smart systems remain in place.

Perhaps the most significant long-term consequence of ARRA is the impact on building codes. In order for states, including Indiana, to receive the appropriated funds from the ARRA states must adopt more stringent building codes (2009 IECC and ASHRAE 90.1-2007 for commercial). The ARRA also calls for 90% compliance with these higher codes by 2017.

IPL's DSM Strategy

[170-IAC 4-7-4(4)] [170-IAC 4-7-6(c)(4)]

IPL's DSM Strategy is to be in compliance with the energy efficiency targets established by the IURC in the Phase II Generic Order. The 3-Year DSM Plan presented in Cause No. 43960 (filed in October 2010) identifies adequate energy efficiency and provides sufficient funding to allow IPL to meet these energy efficiency targets through the period-ending 2013.

Due to the delay in delivery of the Core Programs by the TPA, the budgets for the Core Programs (to be delivered by GoodCents® beginning in January 2, 2012) will have to be consolidated into a two-year spend from a three-year spend (as was originally proposed).

IPL also expects to continue to propose and deliver additional cost-effective programs as required by the IURC rules for demand side options as discussed further below. The specific programs to be delivered beyond the current three-year planning horizon will be identified and proposed in subsequent IPL three year DSM plans. In total, these extensive DSM efforts will likely allow IPL to delay or avoid construction of generation and transmission assets.

However, IPL will only achieve this significant increase in energy efficiency if there is customer knowledge and acceptance of these programs. IPL's DSM initiatives will only be successful with broad customer participation. Therefore, customer acceptance is the most important element of successful DSM implementation. IPL must continue to ensure that the customer has positive interactions with IPL's many program partners and IPL will continue to carefully choose these partners and monitor their efforts.

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[37] Source: ACEEE Annual Scorecard

The elements of both the Core DSM and Core Plus DSM will:

- Continue to grow IPL's successful demand response program "CoolCents®" by adding commercial customers as eligible participants
- Continue to provide weatherization services for income-qualified customers
- Provide significantly enhanced energy efficiency opportunities with web-based and on-premise energy audits **[170-IAC 4-7-6(b)(2)]**
- Provide energy efficiency kits as well as funds for energy efficiency improvements and refrigerator recycling
- Provide funds for energy efficient new construction for both residential and commercial customers
- Expand residential energy efficiency by adding incentives for high efficiency heating, ventilation, and air conditioning ("HVAC") and a Peer Comparison Energy Report
- Provide energy efficiency programs to include C&I customers by providing prescriptive rebates for lighting, pumps, and motors
- Provide incentives for additional customer-owned renewable energy sources by expanding eligibility for net metering, providing financial incentives for renewable projects to customers and by offering a feed-in-tariff[38]
- Provide customers with near-real time information regarding their energy usage to promote energy behavior changes
- Provide future DSM expansion capabilities that leverage the two-way metering capabilities and advanced grid functionality

IPL Actions

Market Potential Study Completed in 2008; Future DSM Market Analysis

[170-IAC 4-7-4(15)] [170-IAC 4-7-6(b)(2)] [170-IAC 4-7-8(4)]

A Market Potential Study ("MPS") was completed in July 2008. This MPS was performed in cooperation with Citizens Gas to evaluate the technical and economic potential for additional DSM opportunities in the combined utilities' service territories. The collaborative effort included the OUCC working with the consultant, Forefront Economics ("Forefront"). IPL utilized a second consulting firm, Vista Energy Group ("Vista") to further develop the programs which resulted in an expanded set of residential and C&I programs spanning three years. The MPS included a review of best practices of other successful DSM programs and made recommendations based on local information, such as the condition and energy intensity of the housing stock. This data was used as the starting point for DSM program planning and design. The MPS included a recommended action plan with a detailed implementation strategy for joint delivery of appropriate programs and detailed budgets.

The scope of work for the MPS project included the following tasks:

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[38] See Section 4B, Demand Side Management, Net Metering and Rate REP.

- Develop a portfolio of DSM programs for each utility
- Assess the technical, economic, and achievable potential of new and existing electric and gas DSM programs in IPL and Citizens Gas service territories
- Develop a plan with medium-and long-term energy savings goals designed to capture a significant part of the cost-effective potential
- Design electric and gas DSM programs based on best existing practices and customer needs
- Develop program budgets
- Develop implementation strategies
- Develop evaluation strategies
- Provide a strategy for using Indiana-based persons, resources and groups possessing relevant expertise
- Provide detailed and specific reporting to the parties
- Provide cost-effectiveness evaluations of the proposed programs, using the four traditional DSM cost-effectiveness tests: participant cost test ("PT") , rate impact measure ("RIM"), utility cost test ("UCT"), and total resource cost ("TRC") test

The 2008 MPS and the resulting IPL three year DSM plans that were filed in Cause No. 43623 and Cause No. 43960 will serve as a resource in the development of the next IPL three year plan that will cover the period from 2014 to 2016. IPL will also have the benefit of the experience gained in the implementation of a broad set of DSM programs since early 2010 that will also help shape the next three year plan.

IPL's Screening Process and Evaluation

[170-IAC 4-7-4(5)] [170-IAC 4-7-4(16)]

Screening of demand side measures is a multi-step process. Measures are first qualitatively screened and then logically grouped into prospective programs. These programs are then systematically evaluated with the aforementioned cost effectiveness tests. IPL calculates future avoided costs and compares them to projected savings.

DSM Cost Effectiveness

[170-IAC 4-7-7, (a)-(f)]

The cost effectiveness of the DSM programs is built upon avoided supply costs which include capacity and marginal production costs, as well as program design and delivery features. The program success attributes are discussed below:

(a) *Conservation and load management programs that are correlated to or can be applied coincident to the peak demands of the utility*. A strong correlation of DSM to peak load drives proportionately enhanced capacity reductions, along with some level of energy reductions, depending on the specific program. The "peak correlation" attribute is significant to the success of the program because avoided costs are maximized. The type of customer loads targeted will include, for example, ACLM that helps control IPL's system peak.

(b) *Conservation and load management programs with efficient delivery channels*. IPL looks to wisely employ incentives targeted to encourage specific measures through traditional low-cost and effective delivery channels. These channels include the new appliance and the new construction markets, where more efficient appliance or insulation specifications could most cost-effectively be substituted for less efficient ones with minimal incremental material costs. The primary benefit to using these channels is the avoidance of labor-intensive removal and upgrade costs of replacement programs.

As noted previously, IPL will be delivering some programs jointly with Citizens Gas. Using the same contractor and delivering both gas and electric measures in the same visit reduces overhead costs and improves cost-effectiveness by delivering more measures than if the companies delivered the measures separately.

(c) *Conservation and select load management programs with long-life measures*. This will include new construction projects such as insulation, low-e glass, efficient heat pumps, and air conditioners that can last the life of the home in some cases, or nearly 15 years in others. Load management programs that require upfront capital (such as ACLM) also need to be designed for long-life to justify initial costs and balance the DSM portfolio demand and energy savings.

(d) *Conservation programs where government efficiency regulations have yet to happen, and where large efficiency improvements can still be realized*. Starting in 1987 with the National Appliance Energy Conservation Act that established minimum efficiency requirements for 12 types of residential appliances sold in the United States ("U.S.")., the law has been amended several times to include mandates for additional minimum efficiency standards for additional appliances and other electric products. An example of this standards improvement is the setting of new efficiency standards for light bulbs which begins in 2012.

(e) *Conservation and load management programs that have been successfully identified elsewhere*. Simply put, if DSM programs are not cost-effective in high-cost energy states, such as California, New York, or even Illinois, they will not be cost effective in Indiana. Indiana electric customers generally, and IPL customers specifically, benefit from some of the lowest electric prices in the nation. So it can be difficult to develop cost-effective DSM products to offer. IPL studies Midwestern DSM programs, reviews trade magazines, seeks stakeholder input at industry conferences and solicits advice from conservation advocates for potential conservation and load management programs.

(f) *Conservation programs that benefit electric customers who are financially least-likely to be able to participate on their own because of the higher initial costs of such measures.* Income can be a barrier to customers' decisions to participate in energy efficiency and therefore it is appropriate to consider DSM investments targeted to the economically disadvantaged. Over the prior 10 years, IPL has provided weatherization services through its DSM program to several hundred income qualified residential customers, reducing their energy consumption, while improving their comfort and ability to pay their electric bills. Without the IPL program, the majority of these customers would not have been in a position to make these investments in energy efficiency measures.

(g) *Load management programs that take advantage of advances in information technology -- specifically those that allow customers to respond to price signals either manually or via automated systems to economically shift load to off-peak periods, and/or conserve the load entirely.* Information technology capabilities are increasing, while some costs have decreased. IPL monitors this area for cost-effective applications including DSM and demand response measures as time based rate offerings.

Avoided Costs

[170-IAC 4-7-4(1)] [170-IAC 4-7-4(16)] [170-IAC 4-7-4(8)] [170-IAC 4-7-6(a)(6)(D)] [170-IAC 4-7-6(b)(3)] [170-IAC 4-7-8(7)]

The marginal cost of capacity including generation, transmission, distribution, capacity, and the marginal cost of production, including fuel, quantifiable emission costs, and variable operating and maintenance costs are the primary value drivers of the avoided cost benefits associated with a given load reduction.

IPL capacity costs and marginal production costs were fairly flat over the last decade. These costs have risen sharply in the past four years and are expected to trend higher as more environmental restrictions on coal-fired production are implemented. Representative values from the tariff rate Cogeneration Service ("CGS") over the prior years are shown in Figure 4B.3 below:

Figure 4B.3 – Avoided Capacity Costs

Year	Avoided capacity costs ($/kW/Month)	Avoided production costs (Cents/kWh, Off Peak)
1998	2.87	1.53
1999	2.84	1.55
2000	2.91	1.54
2001	2.85	1.82
2002	3.00	1.55
2003	2.94	1.33
2004	2.85	1.42
2005	3.13	1.39
2006	3.08	1.41
2007	3.17	1.62
2008	4.76	2.14
2009	6.18	2.66
2010	6.05	1.93
2011	7.19	2.20

Source: IPL

The following summarizes the avoided costs that were used in the DSM modeling for the 3-Year Plan filed in Cause No. 43960. The avoided cost of capacity was calculated using the construction cost of a simple cycle combustion turbine ("CT") of $600 per kW. Transmission and distribution capacity savings were estimated to be 10% of generation capacity costs and avoided line losses were estimated at 5.4%. Marginal production costs were modeled in each year based on IPL's fuel forecast and other operations and maintenance costs and also included a savings in transmission and distribution losses of 8%. The cost of greenhouse gas ("GHG") emissions was estimated at $6.00 per ton of carbon dioxide ("CO_2") beginning in 2012 and increasing to $18.57 per ton in 2020. Future avoided capacity and production costs are shown in Section 7, Attachment V, Table A.

Evaluation Process

Programs are evaluated using the four traditional cost-effectiveness tests: PT, UCT, TRC and RIM. A general description of the major tests – including the tests' components and objectives is presented in Section 7, Attachment V, Table C, Standard DSM Benefit/Cost Tests.
[170-IAC 4-7-7(b)] [170-IAC 4-7-7(d)]

IPL systematically uses these tests to derive its prospective DSM programs. First, IPL will look for all programs that pass the RIM test which is the most difficult test to pass. This is both a measure of program efficiency and fairness. Any program passing this test represents both an efficient program and one that benefits all other non-participating customers as well.

Next, IPL looks for programs that pass both the TRC and UCT tests. The TRC test addresses whether the delivered DSM measure is truly efficient – although it does not speak to fairness. So while society as a whole may be served, it is the participant that generally derives much of the benefit, while other customers absorb much of the costs. The UCT addresses whether the delivered DSM measure lowers utility costs. While a positive benefit/cost result of the UCT value lowers revenue requirements (measured in dollars), it may not lower customer rates (measured in dollars per kWh, as included in the RIM test).

The TRC and UCT values are considered for any program that does not pass the RIM test. Since programs that do not pass the RIM test tend to raise rates, IPL must balance the desire to promote efficiency with the need to maintain economical rates. Programs that fail the TRC test may still be considered for implementation for reasons of market continuity, market transformation, public education, synergy with other programs, or other reasons that make interruption or termination of a program a problem for future implementation or creates an adverse perception in the marketplace.

Finally, IPL ensures that the screened DSM measures and programs pass the PT test which examines the net benefits to the participants of the program. This process was used in the 2008 MPS and subsequent refinements made to the programs included in the DSM program pending in Cause No. 43623 and 43960.

DSM – Benefit/Cost Test Results

[170-IAC 4-7-7(b)-(f)]

The benefit/cost test results and the Net Present Values ("NPV") of the programs' impact are found in Section 7, Attachment V, 3-Year DSM Plan, Table 4 (page 6). The DSM programs were evaluated using a discount rate of 8.7%.

DSM benefit/cost tests were not performed for the DSM energy efficiency Educational programs. IPL's informational programs form just a part of the customer's knowledge base and when combined with other knowledge-based initiatives (ENERGY STAR®, government information, etc.), and with easy availability of efficiency measures (efficient lighting and appliances in hardware and mass-merchandise stores) ultimately influence the decision process. These program benefits are difficult to quantify, but undoubtedly influence the market and have a place in a comprehensive and cost-effective DSM portfolio such as IPL's.

Forecast Demand and Energy Savings in the 3-Year DSM Plan

[170-IAC 4-7-4(1)] [170-IAC 4-7-6(b)(1),(4-9)]

The following three tables, Figure 4B.4 summarize the program goals (energy and demand impacts) for the (1) 3-Year DSM Plan, (2) Core Programs included in the 3-Year DSM Plan, and (3) Core Plus Programs included in the proposed 3-Year DSM Plan pending in Cause No. 43960. Year 1 program delivery is expected to be approximately coincident with 2012 and so on.

Target demand and energy savings, by program by year, are found in Section 7, Attachment V, 3-Year DSM Plan.

Figure 4B.4 – Total Cumulative Demand and Energy Impacts of Proposed DSM (Core and Core Plus)[39]

Program Year	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative
Year 1	81,513	81,513	26,458	26,458
Year 2	110,369	191,882	32,669	59,127
Year 3	128,970	320,852	35,428	94,555
Total	320,852		94,555	

39 Energy/Demand Impacts shown in 4B.4 do not include savings attributable to Rate REP.

IPL Core Programs

Program Year	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative
Year 1	59,735	59,735	16,086	16,086
Year 2	70,634	130,369	19,262	35,347
Year 3	87,533	217,900	23,849	59,197
Total	217,902		59,197	

IPL Core Plus Program

Program Year	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative
Year 1	21,779	21,779	10,372	10,372
Year 2	39,734	61,513	13,407	23,779
Year 3	41,439	102,952	11,579	35,358
Total	102,952		35,358	

Source: Section 7, Attachment V, 3-Year DSM Plan, pages 3-4

Additional DSM Beyond 2014

The DSM estimates through 2014 contained in the IRP reflect the estimated demand and energy savings for the Core and Core Plus DSM programs for the three years for which approval is being sought in IURC Cause No. 43960.

The impacts of DSM beyond 2014 will depend on the attributes of future programs selected including the load profiles of the measures, program measure duration, and program participation and free riders. In addition, assumptions around how these programs impact IPL's peak demand and reduce capacity needs, as well as whether DSM will remain cost-effective at the levels identified, remain uncertain.

DSM Core and Core Plus Programs – Cause No. 43960

[170-IAC 4-7-6(b)(1, 3-7)]

The proposed Core and Core Plus DSM programs for both residential and C&I customers are described below. See Section 7, Attachment V for the entire 3-Year DSM Plan that was filed in Cause No. 43960. The majority of these programs are currently being offered to IPL customers. Note that IPL's 3-Year DSM Plan was modified as part of the settlement discussions with the OUCC. As part of the settlement, IPL agreed not to offer the Customer Energy Management System Program ("CEMS"), the Smart Appliance Pilot Program and the Consumer Behavior Study. While these programs still remain in the three year plan that is included in Attachment V, IPL does not plan to offer these programs at this time. Also see Section 7, Attachment V, Table D for annual per participant bill savings and other data.

Online Energy Feedback

IPL's goal is to make online energy feedback available for all IPL customers. For energy-only metered customers, daily energy consumption along with a historical view will be displayed on a one-day delay basis through a web-portal. Customers with Advanced Metering Infrastructure ("AMI") meters will be able to see 15-minute interval data on a one-day delay basis in the near future.

Electric Vehicles

[170-IAC 4-7-5(a)(1)-(3)] [170-IAC 4-7-6(b) [170-IAC 4-7-4(2) [170-IAC 4-7-9(2)]

IPL has participated in Project Plug-In, a local collaborative initiative to foster adoption of electric transportation, since 2009. This group of industry and government entities recognizes the economic development opportunities and environmental attributes and energy security benefits afforded by plug-in electric vehicles ("EVs"). IPL is implementing its program to develop integrated charging infrastructure in homes, businesses and public parking facilities, with partial Smart Grid Investment Grant ("SGIG") funding support from the U.S. Department of Energy ("DOE") and the State of Indiana Office of Energy Development. IPL requested recovery of the non-grant funded portion of this project in Cause No. 43960 which is pending IURC action. Approximately 65 of the 200 planned charging stations have been installed. IPL received approval for both a time of use ("TOU") EVX rate for customer premises and a public EVP rate. To date, approximately 35 customers participate in rate EVX and 10 subscribers have utilized the EVP rate public charging locations.

Residential Core Programs[40]

Residential Lighting Program (Core Program 1)

The Residential Lighting Program is an existing IPL program that has been available to IPL customers since 2003. This program delivery is expected to be transitioned to the TPA on or about January 2, 2012. The goal of the Residential Lighting Program is to increase the

[40] Program numbers are consistent with the program numbers identified in the Cause No. 43960 filing.

penetration of high efficiency ENERGY STAR® ("ES") qualified lighting in the homes of IPL residential customers. This program will provide IPL residential customers with the opportunity to purchase energy efficient light bulbs, primarily Compact Fluorescent Lights ("CFLs") at reduced prices at participating area retail stores.

Residential Home Energy Audit Program (Core Program 2)

The goals of the existing Residential Home Energy Audit Program are to produce long-term, cost-effective electric savings in the Residential market sector by helping customers analyze and understand their energy use, recommending appropriate weatherization measures, and facilitating the direct installation of specific low-cost energy saving measures.

This program is designed to generate energy savings for IPL residential customers by providing low-cost energy efficiency measures and improvement recommendations tailored to customer homes. This program delivery is expected to be transitioned to the TPA on or about January 2, 2012.

Residential Low Income Weatherization Program (Core Program 3)

The Residential Low Income Weatherization Program is the continuation of an IPL program that has been available to IPL customers since 1993. This program delivery is expected to be transitioned to the TPA on January 2, 2012. Goals of the Residential Low Income Weatherization Program are to produce long-term energy and demand savings for qualifying low-income residential customers by providing professionally-installed energy efficiency measures and improvements tailored to customers' homes as well as providing education on ways to reduce energy consumption.

Residential Energy Efficient Schools Program – Kits Program (Core Program 4)

The Energy Efficient Schools – Kits - Program is an existing program that achieves cost-effective energy savings by educating students and their families about energy efficiency in their homes. This program delivery is expected to be transitioned to the TPA on January 2, 2012.

Commercial and Industrial Core Programs

Energy Efficient Schools Program – Audit (Core Program 5)

The goal of the existing Energy Efficient Schools – Audits Program is to produce electric savings by providing technical assistance to schools in the form of building energy audits as well as provide access to prescriptive rebate programs. In Cause No. 43911, IPL requested and received approval for delivery of an Energy Efficient Schools – Audits Program. This program delivery is expected to be transitioned to the TPA on January 2, 2012.

Prescriptive Incentive Program (Core Program 6)

C&I Prescriptive Incentive Program is an existing IPL program that has been available to IPL customers since September 2010. This program delivery is expected to be transitioned to the TPA on January 2, 2012. The C&I Prescriptive Program goal is to produce long-term cost-effective electric savings in the C&I market sector. Savings are achieved by offering incentives structured to cover a portion of the customer's incremental cost of installing prescriptive efficiency measures

Residential Core Plus Programs

Residential Energy Assessment Program (Core Plus Program 1)

The Residential Energy Assessment Program is an existing IPL program, launched in July 2010, which educates consumers on their home energy use and identifies potential areas where they can take action to reduce their energy consumption. This program continues to be promoted with a combination of marketing materials directing customers to IPL's website to complete an online audit of their home. The web-based energy audit tool (branded as *Home Energy Inspector*) provides customers with information on: (1) no-or low-cost ways to reduce energy consumption, (2) identifies possible investment opportunities in energy efficiency improvements, and (3) describes how a customer's energy bill is calculated. Armed with this information, customers are better equipped to make informed decisions in managing their consumption and energy costs. Customers that complete the brief energy assessment will be provided an energy efficiency kit at no charge that includes low-cost, easy-to-install energy-saving water fixtures and CFLs for self-installation. **[170-IAC 4-7-6(b)(2)]**

Residential Second Refrigerator Pick-Up and Recycling Program (Core Plus Program 2)

The Second Refrigerator Pick-Up and Recycling Program is an existing program that provides for the removal and disposal of operable but inefficient secondary refrigerator and freezer units. Many households retain these older refrigerator or freezer units in a garage or basement and often do not realize how inefficient they are. This program provides education on the cost of keeping an older, often underutilized unit along with the opportunity to have the unit removed at no cost and recycled in an environmentally-sound manner. This program was introduced to IPL residential customers in May, 2010. In the plan filed in Cause No. 43960, IPL is proposing an expansion of the existing program to provide for the collection of 4,000 refrigerators and freezers per year.

Residential customers with eligible units can schedule a date to have the unit(s) picked-up at no charge and will also receive an incentive payment for each unit. The current incentive the customer receives for allowing the removal of the appliance is $30 per unit. IPL's contractor removes the units and hauls the appliance to a facility where the components, including cooling systems and insulation which are potentially harmful to the environment, can be completely recycled. The process used captures hazardous materials and recycles over 95% of the metal, glass and plastic components.

Residential Room Air Conditioner Pick-Up and Recycling Program (Core Plus Program 3)

The Room Air Conditioner Pick-Up and Recycling Program provides for the removal and disposal of operable but inefficient window/room air conditioner units. This program is intended as an add-on to the Second Refrigerator Pick-Up and Recycling Program, in that a customer who schedules a pick-up of a refrigerator or freezer unit may also relinquish an older, inefficient room air conditioner unit and receive an incentive for both appliances. The proposed incentive for a room air conditioner unit is $20. Air conditioner unit pick-ups will only be scheduled for customers who are also having a refrigerator and/or freezer picked-up on the same visit.

The units will be taken to the recycling facility and decommissioned and dismantled in an environmentally-responsible way. This program will ensure that these older, inefficient units are permanently taken off the electric grid.

Residential Air Conditioning Load Management Program (Core Plus Program 4)

The Residential ACLM Program is a continuation of a program that IPL has offered since 2003. IPL currently has approximately 35,000 customers participating in this program. The program consists of the remote dispatch and control of an ACLM switch installed on participating customers' central cooling units (central air conditioners and heat pumps). The goal of the program is to reduce summer system peak loads. The central cooling units are generally expected to be cycled at a 40% duty cycle strategy using the True Cycle[41] adaptive approach. Key provisions of the program are as follows:

- Enrolled residential customers receive a $5 credit on their bill for the each of the months of June, July, August and September that they participate equaling up to $20 per year. **[170-IAC 4-7-4(1)]**
- IPL's contractor, GoodCents®, installs the switch on the outside of the customer's home near the central cooling equipment; and
- IPL can control the customer's central cooling unit during peak demand periods for the five months of May through September.

IPL utilizes its Automated Meter Reading ("AMR") system to assist in conducting a "metered maintenance" program on its switches as a cost-effective means to identify switches needing to be repaired or replaced.

Residential Renewable Incentives Program (Core Plus Program 5) [170-IAC 4-7-4(4)]

This program was launched in June, 2010 and provides residential customers with an incentive to install a small scale renewable energy project. IPL is providing the Renewable Energy Incentive Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end-user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy-generated as a credit on their next month's IPL bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program, a reservation system has been established. An

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[41] True Cycle is the proprietary term for the logic that the switch vendor Cooper (Cooper acquired Cannon) uses to operate the ACLM during control events that considers uncontrolled air conditioner operation.

Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewable Energy Incentive Program provides incentive payments of up to $4,000 per system as follows:

Figure 4B.5 – Residential Renewable Energy Incentive Program Incentives

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Source: IPL

Residential New Construction ENERGY STAR® Plus New Construction Program (Core Plus Program 6)

The New Construction ENERGY STAR® Plus Program is a continuation of a program that IPL has offered since September 2010. The program is designed to increase the percent of homes built to minimum ENERGY STAR® specifications. It is available to builders of new single family homes and multifamily dwellings of up to 12 attached units. This program is jointly delivered with Citizens Gas. Citizens Gas and IPL share program implementation costs as well as the costs of incentive payments required for the home to achieve an ENERGY STAR® (Home Energy Rating [“HERS”] rating) qualification. Combined delivery by both utilities presents the opportunity for homes to become more efficient than a standalone program. ENERGY STAR® homes have design and construction features that typically make them 20% to 30% more energy efficient than a standard new home.

Builders who choose to participate in the program gain access to cash-back incentives designed to cover approximately 20% of the cost to upgrade and certify each home. In addition, IPL provides rebates for the installation of higher efficiency electrical-mechanical equipment, including the installation of Electronic Commutated Fan (“ECM”) motors on gas furnaces, and upgrades to higher efficiency heat pumps, central air conditioners, and heat pump water heaters.

Residential Multi-Family Program (Core Plus Program 7)

This new program is designed to affect the energy efficiency of rental apartment units through the installation of energy-efficient, high-performance water fixtures (i.e., showerheads and faucet aerators) and CFLs. The program educates tenants about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption.

The program targets multi-family complexes with units that are either all-electric or have natural gas-fueled storage water heaters. In the latter situation, IPL partners with Citizens Gas to jointly deliver and share costs for this program.

This program is available at no charge, which is an important consideration since property owners will not typically have an incentive to make investments that provide energy efficiency benefits to the tenants who pay the utility bills.

The program first targets property-management companies as well as property owners in an effort to secure agreements to treat multiple properties through a single point of contact before targeting owners and managers of single properties.

Residential Peer Comparison Reports Program (Core Plus Program 8)

The Peer Comparison Energy Reports Program is a new program that will utilize behavioral science-based marketing to provide customized energy consumption information to IPL residential households, engage those households in their energy consumption as compared to their peers, and thus drive changes in behavior that result in measurable energy savings.

Selected households will receive a printed and mailed quarterly energy report that combines their energy usage data with demographic and housing data to provide a picture of their energy consumption trends and how those trends compare with similar households. The report will contain customized suggestions for reducing energy consumption, including information about key IPL energy efficiency programs.

By comparing a household's energy use to others, including their "most efficient" neighbors, and showing specific actions that those other households took to save energy, the reports provide both goals and a sense of competition that have shown to produce sustained energy-conservation behaviors.

Residential High Efficiency HVAC Incentives Program (Core Plus Program 9)

The Residential High Efficiency HVAC Incentives Program is a new program that provides a financial reward in the form of a prescriptive rebate for the purchase and installation of high efficiency air conditioner and heat pump systems for IPL customers and HVAC dealers. System efficiency will be as verified through the Air Conditioning, Heating, and Refrigeration Institute ("AHRI"). Incentives will be paid to HVAC dealers and customers for the purchase and installation of high efficiency air conditioners or heat pumps. The program is available to any existing single-family, owner-occupied home served by IPL. The program will be conducted through incentive applications, documented proof of purchase, and AHRI verification of installed equipment completed and submitted by HVAC dealers.

Commercial and Industrial Air Conditioning Load Management Program (Core Program 11)

The C&I ACLM Program is a companion program to the Residential ACLM Program. This program (also branded as CoolCents®) was launched in June 2010 to Rate SS and Rate SL customers. This program provides significant demand savings along with some energy savings to participating customers. Customers who enroll in the program have an ACLM switch installed on their facility cooling equipment. This allows IPL the opportunity to cycle the equipment during times of system peak usage. The switches will be controlled at the same time as the Residential ACLM customer switches. In return for participating, a customer must agree to allow IPL to control 50% of its cooling load and receives an incentive on the basis of net tons of controlled air conditioning load. Customers will receive a $5 credit on their utility bill during the billing months of June, July, August and September for each net ton enrolled. **[170-IAC 4-7-4(1)]**

Commercial and Industrial Renewable Energy Incentives Program (Core Plus Program 12)

[170-IAC 4-7-4(4)]

This program was launched in June, 2010 to Rate SS and Rate SL customers. It provides commercial customers with an incentive to install a small scale renewable energy project. This program is the counterpart to the similar program offered for IPL residential customers. IPL is providing the Renewables Incentives Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end-user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy generated as a credit on their next month's bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program a reservation system has been established. An Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewables Incentives Program provides incentive payments of up to $4,000 per system as follows:

Figure 4B.6 – C&I Renewable Energy Incentive Program Incentives

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Source: IPL

Commercial and Industrial New Construction Program (Core Plus Program 13)

This program was launched in September 2010 to Rate SS and Rate SL customers. IPL expects to market and deliver components of this program, as practical and appropriate, in cooperation with Citizens Gas. The Commercial and Industrial Business Energy Incentives Program targets C&I customers with three distinct program components:

2. C&I Custom
3. C&I Retro-Commissioning; and
4. C&I New Construction

IPL is planning to consolidate these three previously-approved Core Plus Programs into the Business Energy Incentives suite of offerings. The rationale for program consolidation is based largely on the fact that these three programs are new to the marketplace and the proposed spending in each individual program component is relatively small. Program consolidation will provide the flexibility to direct program resources and incentives between the components as customer adoption rates are understood. The consolidation will allow IPL to efficiently and effectively focus its efforts where the best opportunities present themselves. This program consolidation will also clarify IPL's offerings so that customers will understand that any energy efficiency opportunity that doesn't fit the C&I Prescriptive program can likely be addressed under the Business Energy Incentives programs. **[170-IAC 4-7-6(b)(2)]**

Evaluation, Measurement and Verification ("EM&V")

[170-IAC 4-7-4(5)]

Key to assessing demand and energy savings is the evaluation of IPL's DSM programs by an independent third-party. Evaluations of the Core and Core Plus programs will be performed by TecMarket.

Demand Response Developments

In its Order 719, FERC instructed MISO to remove barriers to participation in demand response as part of their Ancillary Services Market ("ASM"). Through its Demand Response Working Group ("DRWG"), in which IPL participates, MISO is working through the attendant issues including, baseline determinations; technical performance requirements, such as communications, measurement, and verification; compensation and the potential conflict with state regulatory authority. The IURC completed an investigation into demand response in Indiana in IURC Cause No. 43566. In response to the IURC's order, IPL filed Standard Contract Rider 23, Market Based Demand Response Rider which was approved by the IURC on March 7, 2011, .Rider 23 provides customers the opportunity to submit bids through IPL to MISO for Emergency Demand Response and DRR Type 1 economic energy. No customers participated on this Rider in 2011. **[170-IAC 4-7-6(b)(2)]**

IPL Load Management DSM (Demand Response) Programs

[170-IAC 4-7-4(4)] [170-IAC 4-7-5(a)(1)-(3)] [170-IAC 4-7-6(b)] [170-IAC 4-7-8(10)]

Load Curtailment/Interruptible Programs

In addition to the energy efficiency DSM programs described above, IPL also has a number of Load Curtailment/Interruptible programs that are offered under its tariff and targeted to C&I customers. During the summer of 2011, IPL had almost 50 MW of demand response programs under contract with C&I customers. This is a decrease as a result of the recent economic downturn from the approximate 70 MW available in 2008, due primarily to the shutdown of facilities that previously participated. In most cases, the incentives offered are adjusted annually to reflect changes in power market conditions. The currently approved programs are described below.

- Standard Contract Rider No. 14 (Interruptible Power). Rider 14, IPL's first interruptible/curtailable rider has been available since the early 1990s. IPL has one customer participating on Rider 14. This customer represented 12.5 MW of interruptible load.
- Standard Contract Rider No. 15 (Load Displacement). The IURC approved this Rider in April 2001. This Rider is available to customers who contract with IPL and agree to operate their generators at IPL's request to displace their own load. Rider 15 contributed approximately 34.9 MW to IPL's 2011 summer load reductions.
- Standard Contract Rider No. 17 (Curtailment Energy). Rider 17 has been available since 1999 for customers who contract with IPL and agree to curtail their load to a Firm Power Level at IPL's request. Rider 17 contributed approximately 2.2 MW to IPL's 2011 summer load reductions.
- Standard Contract Rider No. 18 (Curtailment Energy II). Rider 18 has been available since 2000 for C&I customers who contract with IPL and agree to curtail their load to a Firm Power Level at IPL's request. Each Rider 18 participant selects their own Firm Power Level and the energy price at which they agree to curtail load. No customers participated on this Rider in 2011.
- Special Rate SS Agreements. Several Rate SS (Small Secondary Service) customers with loads that exceed the 75 kW demand typically allowed by that rate, are allowed by the tariff to be served on Rate SS under special agreements. These customers typically have sporadic loads and very low load factors. The total diversified Rate SS Special interruptible load for 2011 was approximately 9.5 MW. Due to notification requirements and other non-conforming issues, these resources are not counted towards IPL's Module E resource requirements at the MISO but are nevertheless valuable to IPL as a measure to prevent load from coming onto the system at critical times.

Customer Owned Renewable Resources Developments

[170-IAC 4-7-4(4)] [170-IAC 4-7-8(10)]

Rate REP (Renewable Energy Production)

Rate REP was approved by the IURC and became effective on March 30, 2010. Rate REP is a performance-based incentive for customers of IPL that authorizes IPL to enter into long-term agreements to purchase power from certain renewable energy facilities at certain rates. Under Rate REP, IPL purchases all of the energy produced by customer-sited solar photovoltaic, wind, or biomass systems and receives all of the Renewable Energy Credits ("RECs). The null[42] energy from the customer-sited systems is used to supply the load for IPL customers and, in the absence of any mandatory federal or state renewable energy standard ("RES"), IPL will most likely sell the associated RECs, but reserves the right to use RECs from Rate REP agreements to

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42 The Green-e Dictionary (http://www.green-e.org/learn_dictionary.shtml) defines null power as, "Electricity that is stripped of its attributes and undifferentiated. No specific rights to claim fuel source or environmental impacts are allowed for null electricity. Also referred to as commodity or system electricity."

meet any future RES requirement.[43] When the RECs associated with the production of null energy produced by customer-sited solar photovoltaic, wind, or biomass systems are sold to a third party, IPL shall not claim that energy as renewable energy on behalf of its retail customers.

IPL has executed and the IURC has approved agreements with two customers for a total nameplate capacity of approximately 1.9 MW (alternating current ["AC"]). A number of other candidate projects are in development. A major change in federal tax incentives applicable to such projects induced a number of non-customers to submit applications for interconnection of stand-alone projects in late 2010 and early 2011. This issue eventually led IPL to file with the IURC for changes to Rate REP to protect the interests of customers in Cause No. 44018 which is pending.

While renewable resources displace a relatively small amount of energy on the IPL system, there has been a significant increase in the number of customers interested in small scale renewable energy resources over the last two years. As part of the Renewable Energy Incentives DSM Program, IPL has issued cash incentives for six small scale renewable energy projects in its service territory. These have been generally small scale projects less than 10 kW in nameplate capacity.

Net Metering

The IURC promulgated changes to 170 IAC 4-4.2 regarding net metering that became effective in 2011. The primary changes were to increase the maximum nameplate capacity allowed to 1 MW and to make net metering available to all customers. IPL's compliance filing to make the required changes to Standard Contract Rider 9, Net Metering for Customers with Renewable Energy Resources was approved by the IURC on October 12, 2011.

While some residential customers have also expressed interest in small scale net-metered renewable energy projects, only a handful of systems have been added. The total number of net-metered IPL residential customers now stands at seven, with approximately 17.5 kW of connected capacity. These customers all have solar PV systems.

A summary of customer-owned alternative energy projects is shown below.

[43] Rate REP was approved by the IURC and if IPL chooses to monetize the RECs that result from the agreements, the revenue requirements of those transactions will be the same as the Wind PPAs (IURC Cause No. 43485).

Figure 4B.7 – Summary of IPL Customer Owned Alternative Energy Projects

Updated to 9/30/2011

	Level	Customers	Solar	Wind (kilowatts)	Total	Year
Misc Net Metered Residential Solar PV	1	7	17.5		22.5	
IPL Funded Schools - Solar PV (4)		4	8.0		8.0	2006
Orchard School - Solar PV		1	2.0		2.0	2006
Schmidt & Assoc - Solar PV Awning		1	3.0		3.0	2007
Time Factory - Wind	2	1		50.0	50.0	2008
Downtown Hilton Garden Inn - Solar PV	2	1	4.0		4.0	2008
Commercial Customer Duke	1	1	3.0		3.0	2009
Stetson Senior Apartments	1	1	5.0		5.0	2009
Indiana State Fair - Wind & Solar PV	1	1	3.0	2.7	5.7	2009
AMPM Convenience Stores - Solar PV	2	11	160.0		160.0	2009
IEAJTC	1	1	3.0	1.2	4.2	2010
Indianapolis DPW	1	1	2.0		2.0	2010
Keep Indianapolis Beautiful - Wind	1	1		3.6	3.6	2010
Indiana Comm Action	1	1	3.0		3.0	2010
Johnson-Melloh	1	1		3.6	3.6	2010
Johnson-Melloh	1		5.0		5.0	2010
Johnson-Melloh	2	1	89.6		89.6	2011
GSA Bean Finance Center	3	1	1,860.0		1860.0	2011
Northside Baptist Church	1	1	3.0		3.0	2011
The Nature Conservancy	1	1		3.5	3.5	2011
Jireh Sports	1	1	1.9		1.9	2011
Ivy Tech	1	1	4.0		4.0	2011
AAA Roofing	1	1	2.0		2.0	2011
Level 1 Connections			59.5			
Level 2 Connections			303.6			
Level 3 Connections			1860			
Total Capacity (kW)			**2179.1**	**64.6**	**284.6**	
Total Number of Customers		**41**	**35**	**6**	**41**	

Source: IPL

SECTION 4C. TRANSMISSION AND DISTRIBUTION

[170-IAC 4-7-4(9)] [170-IAC 4-7-4(13)-(15)] [170-IAC 4-7-6(a)(6)(A)-(B)] [170-IAC 4-7-6(d),(1)-(4)]

Transmission

IPL provides electric power principally to the city of Indianapolis and portions of the surrounding counties. The IPL transmission system includes 345kVand 138kV voltage levels. The 345kV system consists of a 345kV loop around the city of Indianapolis and 345kV transmission lines connecting the IPL service territory to the Petersburg power plant in southwest Indiana. At Petersburg, IPL has 345kV interconnections with American Electric Power (“AEP") and Duke Energy Midwest (“DEM”), and 138kV interconnections with DEM, Hoosier Energy, and Vectren (“SIGE”). In the Indianapolis area, IPL has 345kV interconnections with AEP and DEM and 138kV interconnections with DEM and Hoosier Energy. Autotransformers connect the 345kV network to the underlying IPL 138kV transmission system which is also networked and principally serves load. See Section 7, Attachment I, 2011 FERC Form 715 for a geographic outline of the IPL service territory and the one-line connection diagram showing the IPL facilities.

IPL’s electric transmission facilities are designed to provide safe, reliable, and low cost service to IPL customers. As part of this transmission system assessment process, IPL participates in and reviews the findings of assessments of transmission system performance by regional entities as it applies to the IPL transmission system. In addition to the summer peak demand period which is the most critical for IPL, assessments are performed for a range of demand levels including winter seasonal and other off-peak periods. For each of these conditions, sensitivity cases may be included in the assessment.

IPL transmission plans are based on transmission planning criteria and other considerations. Other considerations include load growth, equipment retirement, decrease in the likelihood of major system events and disturbances, equipment failure or expectation of imminent failure.

Changes to transmission facilities are considered when the transmission planning criteria are exceeded and cannot feasibly be alleviated by sound operating practices. Any recommendations to either modify transmission facilities or adopt certain operating practices must adhere to good engineering practice.

A summary of IPL transmission planning criteria follows. IPL transmission planning criteria are periodically reviewed and revised.

- Limit transmission facility voltages under normal operating conditions to within 5% of nominal voltage, under single contingency outages to 5% below nominal voltage, and under double contingency outages to 10% below nominal voltage. In addition to the above limits, generator plant voltages may also be limited by associated auxiliary system limitations that result in narrower voltage limits.
- Limit thermal loading of transmission facilities under normal operating conditions to within normal limits and under contingency conditions to within emergency limits.

- Maintain stability limits including critical switching times to within acceptable limits for generators, conductors, terminal equipment, loads, and protection equipment for all credible contingencies including three-phase faults, phase- to-ground faults, and the effect of slow fault clearing associated with undesired relay operation or failure of a circuit breaker to open.
- Install and maintain facilities such that three-phase, phase-to-phase, and phase-to-ground fault currents are within equipment withstand and interruption rating limits established by the equipment manufacturer.
- Install and maintain protective relay, control, metering, insulation, and lightning protection equipment to provide for safe, coordinated, reliable, and efficient operation of transmission facilities.
- Install and maintain transmission facilities as per all applicable IURC rules and regulations, ANSI/IEEE standards, National Electrical Safety Code, IPL electric service and meter guidelines, and all other applicable local, state, and federal laws and codes. Guidelines of the National Electric Code may also be incorporated.
- The analysis of any project or transaction involving transmission facilities consists of an analysis of alternatives and may include but is not limited to the following:
    - Initial facility costs and other lifetime costs such as maintenance costs, replacement cost, aesthetics, and reliability.
    - Consideration of transmission losses.
    - Assessment of transmission right-of-way requirements, safety issues, and other potential liabilities.
    - Engineering economic analysis, cost benefit and risk analysis.
- Plan transmission facilities such that generating capacity is not unduly limited or restricted.
- Plan, build, and operate transmission facilities to permit the import of power during generation deficiency conditions (Capacity Benefit Margin).
- Maintain adequate power transfer limits within the criteria specified herein.
- Provide adequate dynamic reactive capacity to support transmission voltages under contingency outage or other abnormal operating conditions.
- Minimize and/or coordinate MVAR exchange between IPL and interconnected systems.
- Generator reactive power output shall be capable of, but not limited to, 95% lag (injecting MVAR) and 95% lead (absorbing MVAR) at the point of interconnection to the transmission system.
- Design transmission substation switching and protection facilities such that the operation of substation switching facilities involved with the outage or restoration of a transmission line emanating from the substation does not also require the switched outage of a second transmission line terminated at the substation. This design criterion does not include breaker failure contingencies.
- Avoid excessive loss of distribution transformer capacity resulting from a double contingency transmission facility outage.
- Coordinate planning studies and analysis with customers to provide reliable service as well as adequate voltage and delivery service capacity for known load additions.
- Consider long-term future system benefits and risks in transmission facility planning studies.

IPL transmission facilities are also planned and coordinated with the flowing reliability criteria.

- The reliability standards of the North American Electric Reliability Council ("NERC") including the Transmission Planning ("TPL") standards and Modeling Data Analysis ("MOD") standards. The NERC reliability standards may be found on the NERC website at http://www.nerc.com.
- The regional reliability standards of the reliability entity Reliability First Corporation ("RFC"). The RFC reliability standards may be found on the RFC website at http://www.rfirst.org.

Assessment Summary

MISO performs annual coordinated seasonal assessments of the transmission system performance for the upcoming summer and winter peaks. As part of the Midwest Transmission Expansion Plan ("MTEP") process, MISO annually assesses transmission system performance on a near-term basis for summer peak periods and from time to time performs near long-term transmission assessments for off-peak periods. These seasonal assessments and MTEP analysis may be found on the MISO website at URL:
http://www.midwestiso.org/page/Expansion+Planning.

RFC also performs annual assessments of transmission system performance for the upcoming summer and winter peak seasons, for near-term and long-term shoulder peak load conditions, and from time to time will perform near long-term transmission assessments for off-peak load conditions. These assessments may be found on the RFC website at URL:
https://www.rfirst.org/reliability/Pages/default.aspx

The IPL assessment of transmission system performance is also performed annually in conjunction with the RFC and MISO assessments. The IPL assessment follows the NERC TPL standards to assess transmission performance in peak near-term and long-term conditions and other sensitivity conditions.

- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows no evidence of system or generator instability.
- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows a few localized thermal violations appearing on IPL lines and transformers resulting primarily from multiple element outages of internal IPL transmission facilities.
- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows transmission voltages in the expected range on IPL facilities.
- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows expected loss of demand that is planned, controlled, small, and localized.
- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows no evidence of curtailed firm transfers.
- IPL transmission performance analysis as evaluated under the NERC TPL reliability standards shows no evidence of area-wide cascading or voltage collapse.

- Applicable operating and mitigation procedures, in conjunction with planned major transmission facility additions and modifications, result in transmission system performance which meets the requirements of the NERC TPL reliability standards.
- The transmission facility outages with the greatest impact on IPL facility loadings are those internal to IPL. Of greatest impact are double-contingency outages on the westside of the service area in an arc stretching from Guion to Rockville to Thompson substations and around the Harding Street Generating Station ("HSS").
- The transmission facility outages with the greatest impact on IPL area voltages are those in neighboring utilities. In particular, these are the AEP Rockport-Jefferson 765kV line and the CIN Cayuga-Nucor 345kV line. IPL will continue to review the impact on voltage resulting from these facility outages, and will monitor available reactive resources to help mitigate this impact and for general voltage support.
- The most critical generating unit-out affecting the IPL area is HSS Unit 7. This is due to its size, its immediate proximity to the local IPL area load, and that IPL generating units at Petersburg are over 100 miles from the IPL service area making it difficult for them to have a large impact on local area voltages.

Individually and combined, these transmission performance assessments demonstrate that IPL meets the system performance requirements of NERC TPL-001, TPL-002, TPL-003, and TPL-004. From these transmission performance assessments, the IPL transmission system is expected to perform reliably and with continuity over the long term to meet the needs of its customers and the demands placed upon it.

- NERC TPL-001: System performance under normal (no contingency) conditions (Category A)
- NERC TPL-002: System performance following loss of a single bulk electric system element (Category B)
- NERC TPL-003: System performance following loss of two or more bulk electric system elements (Category C)
- NERC TPL-004: System performance following extreme events resulting in the loss of two or more bulk electric system elements (Category D)

IPL continuously seeks to upgrade its ability to model the transmission system and to more accurately forecast its performance. This includes review of available computer software, data collection techniques, equipment capabilities and parameters, and developments in industry and academia. It also includes information sharing with neighboring transmission owners and regional transmission organizations.

Based on its own individual efforts, as well as in concert with others, IPL constantly works to ensure that its transmission system will continue to reliably, safely, efficiently, and economically meet the needs of its customers.

IPL's FERC Form 715 was submitted by MISO and is attached to provide additional documentation of the IPL's planning and reliability criteria.

For the forecast period, IPL currently plans to add or modify the following transmission facilities: **[170-IAC 4-7-6(d), (1-4)]**

- **NERC Alert: Consideration of Actual Field Conditions in Determination of Facility Ratings**
  Establish and document the operating line rating 345kV and 138kV transmission lines. This project will take place 2011-2014 and is estimated to cost $6 million. These projects are not expected to be eligible for cost sharing based on the MISO tariff.
- **Petersburg 345/138kV Autotransformer Replacements**
  This project will meet NERC reliability standards and address the degraded transformer internal condition which was identified during testing. It is scheduled to be in-service in 2012 with engineering work commenced in 2010. This project includes replacement of the two existing autotransformers with 300 MVA units, a new 345 kV breaker and some bus modifications. This project is estimated to cost $17 million and is eligible for MISO cost sharing.
- **Transmission Plans for New Generation Options**
  New transmission and substation projects are being studied for the installation of potential new IPL generation at different locations, meeting NERC reliability standards. These projects are based on transmission studies performed for generation connected to the 345 kV or 138 kV systems. A connection to the 345 kV system may include a 345/138 kV autotransformer and associated substation facilities in addition to a 345 kV transmission line with estimated costs in the range of $80 million. A connection to the 138 kV system includes minor additions to substation facilities and a 138 kV transmission line with estimated costs in the range of $21 million. The expected eligibility for MISO cost sharing has not been determined for these projects.
- **Transmission Plans for Generation Retirements**
  New transmission and substation projects may be needed for the planned retirement of IPL generation connected to the IPL 138 kV system to ensure deliverability of power into the IPL load zone. These projects will improve power import capability from the 345 kV system to load centers on the 138 kV system. There are various projects being evaluated including the installation of new 345 kV breakers, autotransformers and reactive support from 138 kV capacitor banks or other dynamic sources. Other projects may include upgrade of the rating of various transmission lines. The estimated cost of these new projects is in the range of $18 million. The expected eligibility for MISO cost sharing has not been determined for these projects.

Transmission Expansion Cost Sharing

[170-IAC 4-7-4(15)] [170-IAC 4-7-8(9)]

The methodology for the socialization of transmission expansion costs has been one of the significant drivers of uncertainty in the past several years. MISO and the transmission owners began development of a methodology for the sharing of costs for reliability projects in 1994, and shortly thereafter launched into development of a methodology for the sharing of costs of projects deemed to be “economic.” Economic projects are those projects that are not needed to meet NERC criteria for reliability but for which there may be an economic benefit. In 2010, MISO filed and FERC accepted a cost sharing methodology for transmission projects built to meet the renewable mandates of states within the footprint. These projects are called Multi-Value Projects (“MVP”). The costs of these projects are socialized across the footprint regardless of the need of load. Included in the MVP filing was a renaming of "Economic" projects; they are now called "Market Efficiency projects".

FERC Order 1000

Subsequent to its MVP Order, on July 21, 2011, the Federal Energy Regulatory Commission ("FERC") issued Order 1000. This Order is designed to compel planning to meet "public policy" as MISO did in their MVP filing. The Order also compels determination of costs sharing methodologies between RTOs, as well as entities outside of RTOs. Order No. 1000 is intended to apply to new transmission facilities. The requirements of Order No. 1000 will apply to the evaluation or reevaluation of any transmission facility that occurs after the effective date of the public utility transmission provider's filing adopting the reforms required by Order No. 1000. FERC directed public utility transmission providers to explain in their compliance filings how they will determine which facilities will be subject to the requirements of Order No. 1000. Based upon an initial summary of FERC's open meeting on Thursday, July 21, 2011, and staff comments, Order No. 1000 establishes the following:

- **Three Requirements for Transmission Planning**
    1. Each public utility transmission provider must participate in a regional transmission planning process, which produces a single regional transmission plan and satisfies the principles under Order No. 890;
    2. Each transmission planning process at the local and regional level must consider transmission needs driven by federal or state laws or regulations; and
    3. Public utility transmission providers in neighboring transmission planning regions must coordinate concerning more efficient or cost-effective solutions.
- **Three Requirements for Transmission Cost Allocation**
    1. Each public utility transmission provider must participate in a regional transmission planning process, which has a regional cost allocation method for new transmission facilities that satisfies six regional cost allocation principles;
    2. Public utility transmission providers in neighboring planning regions must have a common interregional cost allocation method for new interregional transmission facilities, which satisfies six regional cost allocation principles; and
    3. Participant funding of new transmission facilities is permitted but not as part of the regional or interregional cost allocation method.
- **Federal Rights of First Refusal Must be Removed From FERC-Approved Tariffs and Agreements Subject to Four Limitations**
    1. The requirement will not apply to a transmission facility not selected in a regional transmission plan for purposes of cost allocation;
    2. The requirement will not apply to upgrades to transmission facilities (i.e., tower change-outs or reconductoring);
    3. The rule will allow, but not require, competitive bidding to solicit transmission projects or developers; and
    4. Nothing in this requirement impacts state or local laws concerning construction of transmission facilities, including siting or permitting.

- **Additional requirement**
    - Each public utility transmission provider must add a tariff provision that requires the provider to reevaluate the regional transmission plan to determine if alternative solutions need to be evaluated when there is a delay in the development of a transmission facility. Such alternative solutions can include those proposed by the incumbent.

Distribution

[170-IAC 4-7-4(13)] [170-IAC 4-7-5(b)(4)-(7)] [170-IAC 4-7-6(a)(6)(B)] [170-IAC 4-7-6(b)] [170-IAC 4-7-8(9),(10)]

IPL's Electric Distribution System Plans are based on various criteria and parameters that are used to determine expansion and replacement requirements. The criteria and parameters include consideration of load growth, equipment load relief, timely equipment replacement due to possible failure, effects of major system events and application of reliability standards, guides and design criteria.

The distribution construction projects are based on the results of IPL's small area load studies. Grid area data, such as historical data, land use statistics, and demographic customer data, provide the basis for long-range demand projections. These projections are modified for the short-term on the basis of known customer additions and recent historical substation load growth, since the grid area data cannot predict short-term deviations from long-term statistical trends. Distribution substations additions or improvements are scheduled when projected area loads cannot be served from existing substations, or if existing substation facilities reach their design limits. Circuit construction is scheduled to utilize newly installed substation capacity, to provide relief to circuits projected to exceed design capacity or to improve reliability or operational performance. Short-term operating remedies are used to delay construction only with the agreement of the Distribution Operations Department.

A 4.16 kV to 13.2 kV conversion plan consists of the replacement of critical transformers and the conversion of radial circuits where 13.2 kV sources are available to avoid overloads on critical substations. This plan is formulated to avoid the failure of adjacent substations that may lead to a cascading outage event. Any equipment with remaining life that is removed due to conversion is used to provide adequate capacity to the remaining 4.16 kV loads, to provide spare units to cover unforeseen transformer or switchgear failures, and to permit the retirement of equipment which has outlived its useful life and cannot provide reliable service. The conversion schedule is developed to complete the proposed plan with minimum capital expenditures and to maintain system continuity.

Industrial substation expansion is scheduled to provide capacity for known industrial load additions and to relieve existing or anticipated overloaded facilities. Several customers, either by internal policy or government regulations, may be required to maintain 100% emergency capacity, and the company's additional investment is recovered through excess facility agreements. IPL's policy is to provide such service to certain public service customers, such as hospitals and communications facilities provided the customer meets specific engineering design criteria.

IPL maintains a capacitor program to provide sufficient reactive power ("VAR") to maintain adequate distribution voltage under all probable operating conditions and to economically reduce facility loading. In addition to capacitor installations, remote control capability is provided to allow system operators to meet this objective.

IPL is in the process of improving functionality of the automated capacitor bank program as part of its Distribution Automation ("DA") plans as part of its *Smart Energy Project*, funded in part through an U.S. Department of Energy ("DOE") Smart Grid Investment Grant ("SGIG").

Smart Grid Initiative

IPL has automated its distribution system using a mix of circuit devices and communication systems:

- Supervisory Control and Data Acquisition ("SCADA") in 95% of its distribution substations
- Automated controls in 83% of its switched capacitor banks, 50% with two-way communications and 33% with one-way communications
- 56 automatic distribution line switches
- 95% of its down-line reclosers (system reliability protective devices) upgraded with microprocessor-based programmable remote controls, 50% with remote operation capability

IPL is in the process of deploying additional advanced technologies as part of its active DOE-funded *Smart Energy Project* through Q2 2013 to accomplish the following functions:

- Strategically utilize advanced technologies to automate distribution equipment
- Build upon equipment and systems which are in place to minimize undepreciated assets and minimize costs
- Utilize the Advanced Metering Infrastructure ("AMI") for approximately 10,000 customers to integrate interactive system outage and voltage information

Planned DA deployments include automation of the Central Business District ("CBD") network in downtown Indianapolis by implementing SCADA and communicating fault indicators on the network. A Distribution SCADA or dSCADA system will be implemented on the radial distribution network throughout the service territory to complement the initiatives itemized below.

- Upgrading distribution feeder relays to microprocessor based devices
- Automating a Voltage Reduction ("VR") program through the deployment of smart microprocessor Transformer Load-Tap Changer ("LTC") controllers and upgrading capacitor controls from one-way to two-way functionality

- Installing additional reclosers with two-way communication to reduce customer exposure to outages
- Implementing dSCADA software interface to integrate automated devices
- Integrating the Central Business District assets into the existing SCADA system and adding automated fault detection devices

IPL is using common AMI communication for the AMI and DA systems to form a robust foundation for additional deployment of "advanced technology" components.

Distribution Automation Benefits

DA will also enhance outage restoration with the additional reclosers and advanced relays allowing sections of circuits to be isolated if there is a fault on the system which allows fewer customers to experience a service interruption. In addition, self-healing may occur to back-feed sections of circuits. Circuits may also be operated more efficiently with interactive information received from devices with two-way communication equipment.

The proposed VR program may allow IPL to reduce system peak demand by up to 40 MW during approximately 100 peak hours per year. This voltage reduction through interactive operations monitoring on the 13.2 kV distribution system is planned through multiple circuit devices, two-way communications, and a distribution SCADA control software system. Essentially, IPL will operate the system at slightly lower voltages at the substation bus but still within industry standard limits. Real time voltage reading from two-way communicating capacitor controls and meters will be collected to verify compliance with service requirements. IPL may also avoid purchasing power from the market during those times when demand and prices are highest. System testing is planned in the second half of 2012 to finalize business practices for 2013 operations within the context of the MISO market.

Engineering estimates of DA reliability impacts indicate a reduction in the Mandatory Average Interruption Frequency Index ("MAIFI") of 18% and the System Average Interruption Frequency Index ("SAIFI") of 11%. These may result in customer business savings from decreased service interruptions.

Link to Metering Systems

IPL was one of the first utilities in the country to deploy an Automatic Meter Reading ("AMR") system for virtually all of its energy-only metered customers. This AMR system which is contracted through 2017, allows IPL to continue to automatically read meters and provide one-day delayed energy information to these energy-only customers. Since the AMR system operates well as designed, IPL initiated AMI to capture its demand meters which are still manually read. The DA devices shared common communication networks with AMI. This phased approach to AMI deployment is prudent. IPL will monitor the effectiveness of both systems to assess future metering assets.

Future DA expansion plans may be developed based upon the success of the equipment upgrades planned in the next several years. Deployment of additional equipment or tighter integration of existing systems may occur.

Cyber Security and Interoperability Standards

IPL recognizes interoperability and strong cyber security practices are essential to advanced technology deployment. IPL employs specific cyber security business practices and procedures and is working closely with vendors to assure that current and proposed Smart Grid standards and procedures are employed. IPL has a dedicated staff including a Certified Information Systems Security Professional ("CISSP") to ensure that cyber security is maintained at each stage of system deployment. IPL Enterprise Information Services ("EIS") tests and updates its security plan to mitigate any foreseen threats to key infrastructure components. IPL monitors and protects its network on a 24/7 basis with intrusion prevention systems to identify any malicious activity targeting or originating from corporate assets, including outside attempts to gain access to the system. Alarms are received based on the "threat" and the corresponding instructions from the notification protocol. IPL generates quarterly reports and maintains the ability to run ad hoc reports at any time.

IPL completed a risk assessment which aligns with recently published recommendations from the National Institute of Standards and Technology[44] ("NIST") and is in the process of implementing mitigation measures.

IPL's externally-facing network and servers are monitored continually and any baseline changes produce a high priority alert notification to EIS Operations and EIS Security, as per the notification protocol. Solid change control practices as well as non-repudiation and data validation are part of the daily routine at IPL.

IPL's existing Energy Control System ("ECS") complies with NERC standards for cyber security. Proposed implementations affect equipment and circuits below the voltage and capacity thresholds of the Critical Infrastructure Protection ("CIP") requirements. IPL will continue to comply with future requirements.

The key factors determining how well a system supports, adopts and implements emerging smart grid standards include secure upgradability, flexibility and scalability. Upgradability ensures that any enhancements to the security (and other functional) capabilities are deployable to every end-point in the field without risk of sabotage. Flexibility refers to the ease of implementing the changes in design and controls. It applies to both hardware and software even though hardware is typically far less flexible than software. And finally, scalability refers to the ability to modify existing and planned end-points within a reasonable time and cost. While many of the smart grid standards are in various stages of development, IPL recognizes their importance and sought input during the vendor evaluation/due diligence and implementation processes.

IPL assesses the ability of smart grid vendors through a thorough questionnaire and interview process where it maps risks and mitigation plans. These include verification that a potential vendor has a Business Continuation Policy and system replication in place in the event of a

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[44] This document is available at: http://www.nist.gov/public_affairs/releases/upload/smartgrid_interoperability_final.pdf

major disaster at any host site and recommendations for IPL to manage systems; that reasonable Change Management processes are in place; and that IPL can audit their systems at any time during business hours at the host site.

IPL also seeks vendors who could commit to physical equipment security and utilize open protocols and standards to support interoperable system components wherever possible. Vendor participation in the ongoing NIST smart grid standards process is also viewed as a plus. While some customization is required to interface to legacy systems, IPL prefers vendors that utilize standards-based security features of application servers versus proprietary methods to quickly adapt through configuration to new requirements as they unfold and become adopted standards.

The smart grid system is being designed with security best practices incorporated from an architectural standpoint to facilitate security from the beginning of a project. Implementation of security best practices at each system junction point ensures authenticity and reliability of data transport.

IPL is fully aware of all infrastructure functionality. No functionality will be installed without IPL's approval.

Risk Mitigation

IPL recognizes the dynamic nature of current industry smart grid developments and will continue to report and mitigate risks associated with IPL's *Smart Energy Project* through education standards, active engagement in regulatory proceedings, and monthly communication internally and with the DOE. IPL participates in industry initiatives and interacts with the SGIG recipients through DOE sponsored webinars and conferences to stay abreast of best practices. IPL is willing to discuss its cyber security plans and implementation strategies in more detail with IURC staff upon request.

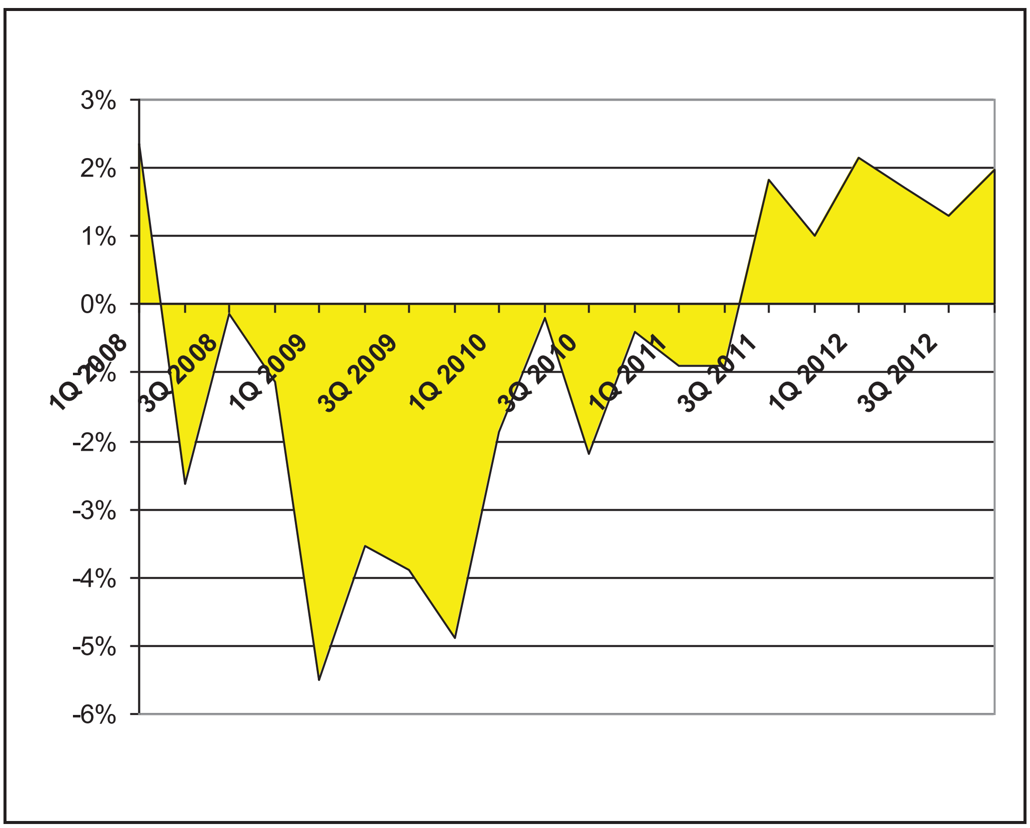
SECTION 4D. MARKET TRENDS AND FORECASTS

[170-IAC 4-7-4(1)-(2)] [170-IAC 4-7-4(5)-(6)] [170-IAC 4-7-5, (a)(3)-(b)(7)]

Load Forecast Overview Short-Term

Economic conditions have stabilized in IPL's service territory since the conclusion of the recession and it is expected that the recovery in total energy sales will follow a "U-shaped" pattern in which an economic contraction is followed by a flat bottom phase, followed by an economic recovery. After the contracting energy demand exhibited during the recession, quarter-over-quarter growth in the past year has remained flat to slightly negative (Figure 4D.1). In addition, IPL's forecasting models, which will be discussed later, depict impending energy sales growth including demand side management ("DSM") with a compound annual growth rate ("CAGR") over the next three years of 0.73%. This growth rate is then forecast to slow down after the initial recovery phase.

Figure 4D.1 – Year-Over-Year Change in Weather Normalized kWH Sales



Source: IPL

Load Forecast Overview Long-Term

[170-IAC 4-7-5(a)(6)] [170-IAC 4-7-8(6)]

IPL's long-term load forecast shows that growth will be determined by DSM load impacts as much as, if not more than, econometric variables. IPL's base case load and energy forecast is shown in Figure 4D.2. This forecast is based on econometric modeling of IPL's gross internal demand ("GID") load and energy forecast plus incorporation of IURC energy efficiency DSM targets. Assumptions around DSM program free riders, program duration/degradation, and coincident peak load reductions were used to calculate a total internal demand ("TID") forecast. The estimated net energy efficiency DSM impact on the load and energy forecast by 2021 is 1,169 GWH (337 MW). These assumptions and corresponding forecast impacts could vary considerably as specifics of the DSM programs beyond the next three years have yet to be determined. IPL assumes 0-20% free-ridership and 10% program life/degradation for this base case assumption. To capture this uncertainty in Ventyx's IRP modeling, IPL selected three forecast scenarios modeled around differing load and energy forecasts, driven largely by assumptions around net DSM program impacts: 1) High Load, 2) Reference Case, and 3) Low Load. These three forecast scenarios frame IPL's base case forecast, with the Reference Case being the case that best matches IPL's latest base case assumptions. For reference, IPL's base case with net DSM impacts represents a peak load forecast growth at 0.26% CAGR with 3,124 MW of net internal demand ("NID") by 2031. IPL's forecast range, as modeled by Ventyx in the Capacity Expansion module, ranged from -0.11% CAGR (2,858 MW) for the Low Load forecast to 0.47% CAGR (3,188 MW) for the High Load forecast by 2031. The impact of this forecast uncertainty on the expansion plan modeling is discussed in Section 4, Integration. Sales forecasts by rate and IPL peak forecast, for the first 10 years, may be found in Section 7, Attachment VIII, Folder B.

Figure 4D.2 – Energy Sales and Peak Forecasts
Net of Energy Efficiency DSM [170-IAC 4-7-5(a)(6)]

Year	Energy Sales (MWh)	% Change	Peak TID (MW)	% Change
2011	14,234,574		2,966	
2012	14,411,743	1.24%	3,032	2.19%
2013	14,395,944	-0.11%	3,044	0.40%
2014	14,546,173	1.04%	3,069	0.83%
2015	14,661,418	0.79%	3,063	-0.19%
2016	14,747,393	0.59%	3,053	-0.35%
2017	14,717,830	-0.20%	3,049	-0.13%
2018	14,707,924	-0.07%	3,042	-0.23%
2019	14,691,933	-0.11%	3,035	-0.24%
2020	14,697,433	0.04%	3,030	-0.16%
2021	14,656,622	-0.28%	3,026	-0.11%
2022	14,712,322	0.38%	3,026	-0.01%
2023	14,773,577	0.42%	3,029	0.08%
2024	14,840,622	0.45%	3,034	0.17%
2025	14,913,536	0.49%	3,041	0.25%
2026	14,992,270	0.53%	3,051	0.32%
2027	15,076,687	0.56%	3,062	0.38%
2028	15,166,596	0.60%	3,076	0.44%
2029	15,261,775	0.63%	3,091	0.49%
2030	15,361,984	0.66%	3,107	0.54%
2031	15,466,982	0.68%	3,124	0.55%

Source: IPL

Energy Sales Forecast

[IAC-170 4-7-5(a)(4)-(5)] [170-IAC 4-7-5(a)(8)] [170-IAC 4-7-6(b)(8)]

IPL's forecasting effort is based on statistically adjusted end-use econometric modeling and takes into account factors including:

- DSM
- Economic variables
- Energy efficiency standards
- New technology penetration
- Weather

IPL employs an econometric model that also makes use of some end-use impacts in order to accommodate efficiency measures, appliance saturation, and new technology penetration, such as electric vehicles. This methodology was developed for IPL by Itron, Inc. ("Itron"), a consulting firm that assisted IPL with past retail energy forecasts. Additional detail with respect to this end-use technique may be found in Section 7, Attachment VIII, Folder A. Estimates of appliance saturation and efficiency are obtained from the U.S. Energy Information

Administration ("EIA"), a statistical information agency of the U.S. Department of Energy ("DOE"). EIA information is modified by Itron to better reflect appliance saturation and end-use efficiency impacts within IPL's jurisdictional territory. IPL's forecast also includes the effects of its incremental DSM plan and customer adoption of plug-in hybrid electric vehicles ("PHEV") and electric vehicles.

IPL evaluated the relative merits of its current forecasting methodology and those of comprehensive end-use models. End-use models require forecasting additions for each end-use project and are therefore more cumbersome and subjective. IPL's attempts at producing superior end-use models merely validate IPL's preference for using the hybrid econometric model through Itron.

Load research data is a tool used by the IPL Forecasting group. In 2008, IPL transitioned to a new load research system purchased from Itron[45] This system provides more flexibility and additional analysis capabilities. To further enhance load research systems, IPL is currently installing an Advanced Metering Infrastructure ("AMI") communication system in its service territory. As part of the AMI deployment, all customers with a metered demand component to their bill (approximately 6,400) and approximately 4,000 energy-only metered customers will receive AMI meters. These meters will provide 15-minute interval data which will be used in future energy-only and demand metered load research analysis. **[170-IAC 4-7-4(2)] [170-IAC 4-7-6(b)(5)]**

IPL's retail sales forecast is the summation of individual rate class forecasts. The bulk of IPL's econometric models is multi-regression in nature and is generated for each major rate class of IPL's retail customers. The models require monthly inputs and provide monthly outputs, thereby allowing for a true monthly sales forecast rather than one which parses quarterly or annual data. The sales forecasting effort is accomplished using models that are based on billing cycle sales. Simulation models are then created to convert billing cycle information into a calendar month format. This allows for modeling actual information without exposure to unbilled estimation that is integral with a calendar month approach. An overview of IPL's current forecast, both sales and peaks, are expressed in Figure 4D.2. The "% Change" column is an indication of year-over-year growth.

The models that support the base level forecast are developed as either average-use models by rate or aggregated-sales models by rate. The homogeneity of the residential rate class allows for the use of average-use techniques. A forecast of the number of customers and the average-use of an individual customer is generated for each residential rate. IPL's Commercial and Industrial ("C&I") customers are more heterogeneous and an aggregated-sales by rate methodology has been found to be superior. Average-use models have been tested for these larger customers; however, the load variation of these customers makes an average-use approach statistically untenable.

The 2011 Sales Forecast, for years 2012 and beyond, provided in Section 7, Attachment VIII, Folder B, is IPL's base level forecast from which a range of landscape scenarios are created. Alternative peak and energy forecasts are developed as a part of the Ventyx modeling framework

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45 www.Itron.com

and are more fully described in Section 4, Integration, Resource Screening and Evaluation. **[170-IAC 4-7-4(6)]**

Economic drivers, one of the independent variables, are respecified for each iteration of the forecast. Econometric forecasts modeling software is typically limited to one or two economic drivers per modeling run. The inclusion of more drivers generally causes a collinearity problem which degrades the predictive power of the model. The economic drivers used in IPL's most current forecast are as follows:

- **Residential Economic Drivers**
  - Total Households Marion County – to predict number of customers
  - Real Household Income Marion County - to predict average kWh use
  - Household Size Marion County – to predict average kWh use

- **Small C&I Economic Drivers**
  - Non-Manufacturing Output – to predict rate SS kWh requirement
  - Non-Manufacturing Output – to predict rate SH kWh requirement

- **Large C&I Economic Drivers**
  - Indianapolis Total Employment – to predict rate SL kWh requirement
  - Indianapolis Total Output – to predict rate PL kWh requirement
  - Indianapolis Manufacturing Output – to predict rate PH, & HL kWh requirement
  - Indianapolis Manufacturing Employment – to predict rate PH, & HL kWh requirement

Moody's Economy.com supplies the economic drivers used by IPL. These are provided on a local, Metropolitan Statistical Area ("MSA"), statewide, and national basis. IPL's models are generally better using local specified drivers than ones that are broader in scope. A compilation of the drivers used, as well as others provided by Moody's Economy.com can be found in Section 7, Attachment VIII, Folder C. As previously mentioned, the driver sets used are unique to the current forecast effort. Past or future forecasts may be specified using a different set of drivers that are statistically superior at different points in time. IPL's models are created with a 10-year horizon for internal purposes and then inflated at an average rate of 0.412% for the subsequent 10 years. Summer and winter peaks are also inflated at this rate to keep load factors correlated.

Historic weather and customer information are also important drivers of IPL's retail forecast models. The weather information is obtained from the National Oceanic and Atmospheric Administration ("NOAA") and includes heating degree days ("HDD") and cooling degree days ("CDD"), both actual and normal. The customer information applied in IPL's retail forecasts (customer counts by rate, kWh sales by rate, and billing day information) are all acquired from confidential IPL customer records. Input data sets used in the modeling effort may be found in Section 7, Attachment VIII, Folder D. Folder D is further segmented down to three classes of customers: residential, small C&I, and large C&I. Data found in Folder E includes customer counts by rate, sales history by rate, billing day information, weather information, economic variables, variable transformations by class, models output as well as statistical evaluation of each model.

Peak Forecast

[170-IAC 4-7-4(5)] [170-IAC 4-7-4(15)]

As a member of MISO, IPL supplies monthly forecasts in response to MISO's emphasis on balancing monthly peak supply and demand. To meet this requirement, IPL develops three separate peak forecasts: one for monthly peaks, one for summer peak, and one for winter peak. In order to avoid a dilution effect that results from peaks being split-up between July and August in any given summer (as well as a corresponding effect in winter months), IPL integrates the three forecasts by placing the summer peak value in July and the winter peak value in January. The months of June, August, December, and February are then escalated from the monthly model to values that were consistent with the peaking months. Finally, the results from the monthly model are used to define the remaining months of each year. IPL's peak models reflect the GID. Adjustments are then made for incremental projections of energy efficiency DSM initiatives to create the TID.

The variables that are available for model specification are the same ones used for the sales forecast. U.S. Gross Domestic Product ("GDP") was the economic variable used in the TID models. Weather data is hourly temperature and humidity data from NOAA. Specification of the models, including all history, incorporated driver variables, and output may be found in Section 7, Attachment VIII, Folder E. Summer and winter peak predictions are highlighted in Figure 4D.2 above and the monthly forecast of peaks is available in Section 7, Attachment VIII, Folder F.

Model Performance and Analysis

[IAC-170 4-7-4(5)] [170-IAC 4-7-5(a)(7)]

IPL continually evaluates forecast model performance. Model evaluation takes place when the model is created, on a monthly basis, as a variance analysis, when actual results are reported and final, and after-the-fact comparison at year-end.

During forecast development a number of models are analyzed at the rate level. The adjusted R-squared statistic, Mean Absolute Percent Error ("MAPE"), the Durbin-Watson statistic, and reasonableness of each model to IPL are statistically evaluated. The IPL Forecasting group targets adjusted R-squared values better than 90%; this is accomplished in nearly all cases. Further, MAPE needs to be less than 2% and the Durbin-Watson statistic is targeted around 2.0. IPL considers independent variables with T-statistics of at least 2.0 acceptable. This judgment is somewhat subjective and dependent upon the implied importance of the variable. The other statistical measures considered are discussed in Section 7, Attachment VIII, Folder F.

"In Sample Testing" is another methodology that IPL uses to gauge model performance. This methodology involves withholding a year of history from the model and then assessing how well the model is able to predict previous historic results.

Occasionally, a model that performs well from a statistical standpoint may not seem reasonable when further inspected. Excessive specification of independent variables is one cause of this situation. The investigation of rates of change between recent history and model-generated predictions can identify models that are statistically valid yet unreasonable. When disagreement between a model and common sense inspection arises, additional investigation and/or specification is required. (Recent history must be weather-corrected to allow for meaningful comparisons.) Models of individual rates, after undergoing comprehensive review, are summed to create a proposed forecast. The proposed forecast is then evaluated against aggregated weather-adjusted history as a final test before the forecast is recommended.

IPL uses different methodologies to obtain weather-normalized energy sales and demand. Energy sales are normalized to NOAA's 30-year normal HDDs and CDDs. Demand is normalized to the historical average of the peak producing weather conditions. One method of obtaining weather-corrected energy sales or demand is to re-run the models as simulations with normal weather substituted for actual weather. The difference between predicted energy sales or demand (actual weather) and simulated energy sales or demand (normal weather) is the amount the actual energy sales or demand should be adjusted to give normalized energy sales or demand. Another method is to take the difference between actual weather and normal weather and multiply it by an appropriate weather coefficient for the given conditions. This adjustment is the amount the actual energy sales or demand should be adjusted by to give normalized energy sales or demand. One way to obtain the weather coefficient is to analyze the current daily response to weather. In effect, this allows behavior changes that may exist compared to more historical approaches in long-term models.

Evaluation of the variance of energy sales and peak demand is looked at each month after weather adjustments have been completed. IPL's forecasting staff uses this information to consider model performance. As long as monthly variance moves reasonably with current "knowns" like economic factors and/or weather, a conditional approval supports the forecast. However, should variance move contrary to "knowns," investigation of possible bias and other elements are undertaken. A similar determination, but with greater detail is made at year-end. Actual and weather-adjusted results are compared to the forecasted values generated each of the previous five years. This is done with respect to energy sales at the class level, namely residential, small C&I, and large C&I. Summer peak and winter peak, both actual and weather-adjusted, are reviewed in similar fashion. The published document that is used for year-end forecast analysis is titled "Forecast Error Analysis" and may be found in Section 7, Attachment VIII, Folder H.

Historically, two statistical metrics have been used to determine overall forecast performance after the fact – Mean Percent Error ("MPE") and MAPE; with MAPE the more stringent of the two. MPE allows for algebraic cancellation of errors and therefore the error range is "artificially" narrowed. MAPE is computed regardless of algebraic sign and consequently indicates the true range of error terms. Two interesting comparisons that gauge IPL's forecasting ability are those that compare weather-adjusted annual GWH sales and weather-adjusted summer peak to their respective forecasts. IPL's one-year-out energy forecast, as measured by MAPE, is on average, within 1.2% of weather-adjusted sales. The summer MAPE peak forecast averages 1.3%. IPL targets an one-year forecast error of less than 2%. Occasionally, rapidly changing external conditions, such as the current recession, can cause fluctuations that exceed 2%. However, reviewing re-forecasts on a quarterly basis will allow IPL to make both tactical adjustments in the short-term and initiate additional scenario analyses in the long term. Figures 4D.3 and 4D.4 highlight IPL's overall retail energy sales and summer peak demands forecast performance, respectively, for the last 10 years. The remainder of the forecast error analyses, at the class level, may be found in the previously mentioned Section 7, Attachment VIII, Folder H.

Figure 4D.3 – Forecast Error Analysis: Energy Sales [170-IAC 4-7-5(a)(7)]

ANNUAL "INDIANAPOLIS ONLY" GWH SALES
Adjusted & Forecasted

		Forecast Made:				
For	Adjusted Sales *	One Year Ago	Two Years Ago	Three Years Ago	Four Years Ago	Five Years Ago
2001	14,365.304	14,571.573 1.4%	14,544.618 1.2%	14,512.091 1.0%	14,517.739 1.1%	14,078.673 -2.0%
2002	14,197.882	14,580.161 2.7%	14,848.593 4.6%	14,985.365 5.5%	14,917.100 5.1%	14,862.490 4.7%
2003	14,543.920	14,561.734 0.1%	15,077.845 3.7%	15,143.833 4.1%	15,385.066 5.8%	15,346.251 5.5%
2004	14,759.085	14,588.136 -1.2%	14,767.804 0.1%	15,327.185 3.8%	15,446.414 4.7%	15,756.329 6.8%
2005	14,928.377	14,917.100 -0.1%	14,809.058 -0.8%	14,966.217 0.3%	15,620.768 4.6%	15,752.324 5.5%
2006	14,959.551	15,221.281 1.7%	15,164.506 1.4%	14,996.604 0.2%	15,153.834 1.3%	15,938.745 6.5%
2007	14,971.610	15,255.687 1.9%	15,452.281 3.2%	15,408.373 2.9%	15,157.356 1.2%	15,364.855 2.6%
2008	14,956.362	15,264.979 2.1%	15,427.470 3.1%	15,702.410 5.0%	15,620.741 4.4%	15,334.846 2.5%
2009	14,296.266	15,208.790 6.4%	15,472.539 8.2%	15,612.025 9.2%	15,932.337 11.4%	15,838.873 10.8%
2010	14,120.637	14,287.148 1.2%	15,356.932 8.8%	15,702.517 11.2%	15,817.438 12.0%	16,173.497 14.5%

Mean % Error	0.3%	0.8%	1.2%	2.0%	2.7%
Mean Absolute % Error	1.3%	2.5%	3.0%	3.8%	4.6%

Source: IPL

Figure 4D.4 – Forecast Error Analysis: Summer Peak Demands

SUMMER PEAK DEMANDS
Adjusted & Forecasted

		Forecast Made:									
For	Adjusted Peak Demand	One Year Ago	Two Years Ago	Three Years Ago	Four Years Ago	Five Years Ago	Six Years Ago	Seven Years Ago	Eight Years Ago	Nine Years Ago	Ten Years Ago
2001	3012	3043	3030	2994	2985	2993	2954	2934	2996	2968	3027
		1.0%	0.6%	-0.6%	-0.9%	-0.6%	-1.9%	-2.6%	-0.5%	-1.5%	0.5%
2002	2993	3146	3094	3080	3047	3035	3046	2994	2969	3039	3013
		5.1%	3.4%	2.9%	1.8%	1.4%	1.8%	0.0%	-0.8%	1.5%	0.7%
2003	3023	3061	3202	3144	3129	3102	3091	3101	3035	3038	3081
		1.3%	5.9%	4.0%	3.5%	2.6%	2.2%	2.6%	0.4%	0.5%	1.9%
2004	3085	3042	3106	3260	3195	3179	3156	3146	3160	3078	3079
		-1.4%	0.7%	5.7%	3.6%	3.0%	2.3%	2.0%	2.4%	-0.2%	-0.2%
2005	3108	3167	3088	3149	3318	3245	3227	3211	3202	3223	3120
		1.9%	-0.6%	1.3%	6.8%	4.4%	3.8%	3.3%	3.0%	3.7%	0.4%
2006	3165	3110	3203	3132	3191	3376	3297	3275	3267	3259	3288
		-1.7%	1.2%	-1.0%	0.8%	6.7%	4.2%	3.5%	3.2%	3.0%	3.9%
2007	3177	3195	3156	3243	3173	3233	3430	3348	3322	3322	3319
		0.6%	-0.7%	2.1%	-0.1%	1.8%	8.0%	5.4%	4.6%	4.6%	4.5%
2008	3153	3197	3231	3190	3264	3215	3277	3483	3402	3370	3379
		1.4%	2.5%	1.2%	3.5%	2.0%	3.9%	10.5%	7.9%	6.9%	7.2%
2009	2902	3218	3236	3293	3236	3313	3257	3321	3536	3457	3419
		10.9%	11.5%	13.5%	11.5%	14.2%	12.2%	14.4%	21.8%	19.1%	17.8%
2010	2886	3117	3253	3274	3343	3281	3354	3300	3364	3590	3514
		8.0%	12.7%	13.4%	15.8%	13.7%	16.2%	14.3%	16.6%	24.4%	21.8%

Mean % Error	0.9%	1.0%	1.0%	1.2%	1.3%	1.4%	1.4%	1.6%	1.8%	1.6%
MAPE	1.9%	2.4%	2.8%	3.1%	3.6%	3.9%	4.0%	4.2%	4.1%	3.9%

Source: IPL

Fuel Forecasts

[170-IAC 4-7-4(7)]

IPL Fuel Planning

IPL procures and manages a reliable supply of fuel for its generating units at the lowest long term cost reasonably possible, consistent with maintaining low long-term busbar cost and compliance with all environmental requirements and/or guidelines.

IPL seeks competitive prices for coal through the use of the solicitation and negotiation process. Fuel is purchased considering all material factors, including, but not limited to, (a) availability of supply from qualified suppliers, (b) current inventory levels, (c) forecast of fuel usage, (d) market conditions and other factors affecting price and availability, and (e) existing and anticipated environmental standards. IPL prepares long-term projections of fuel purchased/sold, annual inventory levels, quality and delivered cost for each plant.

IPL maintains inventory at levels sufficient to ensure service reliability, to provide flexibility in responding to known and anticipated changes in conditions, and to avoid risks due to unforeseen circumstances. Inventory targets are established based upon forecasted usage, deliverability and quality of the required fuel to each unit, the position of the unit in the dispatch order, risk of market supply-demand imbalance, and the ability to conduct quick market transactions. The general level of inventory throughout the year is adjusted to meet anticipated conditions (i.e., summer/winter peak load, transportation outages, unit outages, fuel unloading system outages, etc.).

The source for fuel forecasts used in the IPL 2011 IRP modeling is based on Ventyx's "Midwest Spring 2011 Power Reference Case, Electricity and Fuel Outlook". These fuel forecasts also appear in Ventyx's "Integrated Resource Plan Modeling Summary", dated August 17, 2011 (see Section 7, Attachment VII).

Ventyx Fuel Price Forecasting and Methodology

Natural Gas and Oil

Natural gas ("NG") monthly prices used in the IRP modeling are based on annual prices (see Figure 4D.5). Figure 4D.6 reflects the seasonality associated with NG prices, i.e., higher in the winter months and lower in the summer months. More detail around the Ventyx methodology can be found in their full report (Section 7, Attachment VII). To forecast No.2 Oil, Ventyx uses a technique similar to NG, where representative current NYMEX[46] pricing is blended to their internal forward view.

[46] New York Mercantile Exchange.

Figure 4D.5 – Natural Gas Price Forecast (Constant 2011$/MMBtu)

Year	Base Case
2011	[redacted]
2012	[redacted]
2013	[redacted]
2014	[redacted]
2015	[redacted]
2016	[redacted]
2017	[redacted]
2018	[redacted]
2019	[redacted]
2020	[redacted]
2021	[redacted]
2022	[redacted]
2023	[redacted]
2024	[redacted]
2025	[redacted]
2026	[redacted]
2027	[redacted]
2028	[redacted]
2029	[redacted]
2030	[redacted]

SOURCE: Ventyx

Figure 4D.6 – Natural Gas Forecast, Constant 2011$/MMBtu

[redacted]

SOURCE: Ventyx

IPL Natural Gas Markets Outlook

The emergence of shale gas into the United States ("U.S") NG supply has sparked a sort of renaissance in domestic NG markets. As little as five years ago, the outlook for U.S. NG production was rather bleak. Reserves in conventional wells had peaked and begun to decline in early 2001 with little expectation for a reversal. This prompted the massive global investments (totaling $80 billion) in liquefaction, piping, and regasification infrastructure that was expected to be necessary to allow the U.S. to import large quantities of Liquefied Natural Gas ("LNG") needed to meet its energy demand. Improvements in extraction technologies in 2009 brought the marginal costs of production for shale gas from over $8/MMBtu down to $3-$4/MMBtu. Suddenly, massive reserves of NG that had been priced out of the market became among the cheapest to extract, drastically changing the US NG supply picture. These sentiments are echoed in the following excerpt from an October 2010 publication from the American Oil & Gas Reporter:

"Analysts who not long ago envisioned a future that was all about tight supplies and high development costs to tap the remaining resource base–shales included–have radically adjusted their views on the market. Imported liquefied natural gas, which was supposed to be the main growth component to U.S. supply in the coming decades, has been completely overwhelmed by domestic shale plays. Because of its economics and high productivity, shale gas is now the big growth component and LNG imports have become essentially superfluous to U.S. supply. This scenario was unimaginable only a few years ago, and underscores the unprecedented paradigm shift that has occurred in the marketplace."

A September 2010 report by IHS CERA[47] builds upon these ideas by asserting that in addition to the price structure and long-term outlook changes that the emergence of shale gas has brought, it also constitutes a structural shift in NG markets in which supplies will be more dexterous as well as more plentiful. An excerpt follows:

"A prevalent anxiety among users of natural gas concerns the possibility of supply shocks that could lead to high and protracted price increases. But the advent of shale gas, together with expansion of liquefied natural gas regasification and natural gas storage capacity, has added a major new shock absorber to the system—an abundant supply source that can respond relatively quickly to changes in demand. The natural gas market will now have a more complete set of mechanisms to help keep the market in balance, although short-term event-driven volatility will not be eliminated."

Thus, the developments in the shale gas markets, dubbed by American Oil & Gas Reporter as a "'just-in-time' manufacturing model applied to natural gas production," have created structural changes in NG markets that hold promise for long-term price stability and for significant growth in the use of NG for power generation.

Coal

Ventyx believes that overall coal commodity price growth will be slow over the next three to five years as power generators respond to a tightening emissions regulatory environment, low NG

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[47] IHS CERA (http://www.ihs.com) provides analysis for country and industry forecasting of the business conditions, economic prospects, and risks in over 200 countries and 170+ industries.

prices, and a slow economic recovery. However, power generators' actions to reduce exposure to potentially volatile Central Appalachian coal supply will support prices for Illinois Basin coal used by IPL.

Ventyx's forecast for coal-fired power shows annual demand growth of 1.8% through 2014. Growth slowly declines through the end of the decade as lower overall power load growth and higher projected coal-fired retirements offsets the amount of capacity that is currently under construction. In addition, continued competition from NG, combined with state policies encouraging renewables is expected to continue to displace coal in some regions.

While coal production costs are expected to continue to increase as input prices increase modestly, the major driving force for increased costs are the declining economic quality of coal reserves. Muted demand growth in the near-term combined with adequate production capacity are expected to keep prices from increasing dramatically in the near-term and likely moderate price growth in the long term. For the period 2010 to 2015, Ventyx forecasts average mine prices remaining essentially unchanged in real terms with increasing demand for Illinois Basin coal pushing prices in this area up faster than average. Ventyx's Basin FOB[48] coal price forecast is shown below in Figure 4D.7 and was used in the development of Ventyx forward power prices. More detail around the Ventyx Coal Sub-Module can be found in the Ventyx full report (Section 7, Attachment VII). The source for all IPL coal is the Illinois Basin. A forecast of average annual fuel costs by IPL generating unit is found in Figure 4D.8.

[48] Free on-board ("FOB")" indicates delivery costs are incorporated into the prices as shown.

Figure 4D.7 – U.S Basin FOB Mine Price Forecast (2011$)

[redacted]

Source: Ventyx.

Figure 4D.8 – IPL Average Annual Fuel Forecast per Generating Unit
[170-IAC 4-7-6(a)(3)]

IPL Coal Price Forecast ($/MMBtu)				
Year	Pete	HSS7	Eagle Valley	HSS 5&6
2012	[redacted]	[redacted]	[redacted]	[redacted]
2013	[redacted]	[redacted]	[redacted]	[redacted]
2014	[redacted]	[redacted]	[redacted]	[redacted]
2015	[redacted]	[redacted]	[redacted]	[redacted]
2016	[redacted]	[redacted]	[redacted]	[redacted]
2017	[redacted]	[redacted]	[redacted]	[redacted]
2018	[redacted]	[redacted]	[redacted]	[redacted]
2019	[redacted]	[redacted]	[redacted]	[redacted]
2020	[redacted]	[redacted]	[redacted]	[redacted]
2021	[redacted]	[redacted]	[redacted]	[redacted]
2022	[redacted]	[redacted]	[redacted]	[redacted]
2023	[redacted]	[redacted]	[redacted]	[redacted]
2024	[redacted]	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]	[redacted]
2031	[redacted]	[redacted]	[redacted]	[redacted]

Source: IPL

Nuclear

Ventyx assumes that contract uranium prices will trend up over the next few years then stabilize. The resulting uranium price forecast rises to $0.98/MMBtu by 2018 followed by stable prices until 2027. Price increases for 2028 and beyond are approximately 1.5% per year. Figure 4D.9 summarizes this fuel forecast. This forecast was used in Ventyx generation modeling; IPL has no nuclear units.

Market Transactions
[170-IAC 4-7-6(a)(5)]

IPL offers all of its generating resources into the MISO energy market and IPL's load is bid into the MISO energy market. Therefore, IPL has no scheduled power import and export transactions, neither firm nor non-firm.

Figure 4D.9 – Nuclear Fuel Cost

	Uranium	Conversion	Enrichment	Fabrication	Waste Management	Final Cost
2012	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2013	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2014	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2015	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2016	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2017	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2018	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2019	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2020	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2021	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2022	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2023	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2024	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2025	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2026	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2027	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2028	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2029	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2030	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2031	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

SOURCE: Ventyx

SECTION 5. SHORT-TERM ACTION PLAN

[170-IAC 4-7-9, (1)-(5)]

The short-term action plan identifies the initial steps toward IPL's longer-term resource strategy. The focus of the IPL 2011 IRP action plan is centered around developing cost-effective DSM programs to meet aggressive IURC energy efficiency requirements, to comply with strict new EPA rules that will likely force early retirements of small coal-fired units, and to begin the process of replacing that capacity with new generation, most likely a CCGT.

Existing Generation

The new and proposed EPA rules, specifically the Mercury and Air Toxics rule ("MATS"), will have a large impact on IPL's coal fleet. Initial evaluation shows extensive controls will be required on all IPL's coal units for compliance and continued operation.

IPL's resource plan recognizes the value and reliability offered by its five newest and largest coal-fired units. Investments in additional emission controls on these units continue to be cost-effective and necessary over the next three to four years.

Conversely, current investment and future investment risk in IPL's small six unscrubbed coal-fired units are uneconomic. These units are approaching 60 years of age and nearing the end of their useful lives. Compliance with a multitude of new EPA rules cannot economically justify additional investment; and therefore, MATS effectively determines the timing of discontinued operation. Those units will likely be mothballed or retired in coordination with the dates identified when these rules become finalized. Currently, per the proposed rule, IPL anticipates retirements by 2016.

IPL currently has four oil-fired steam units as part of its generating fleet. HSS Units 3 and 4 were placed in-service in 1941 and 1947, respectively, and have a summer rating of 35MW each. EV Units 1 and 2 were placed in-service in 1949 and 1950, respectively, and have a summer rating of 30 MW each. For IRP modeling purposes it was assumed that these units will be retired at the end of 2015 in conjunction with the EPA MATS driven retirement of the smaller IPL coal-fired units at these stations. While retirement of these units is not required for MACT compliance these units have been operating well in excess of their design life and have been experiencing reliability issues in recent years. For planning purposes it seemed reasonable to assume that these units will not operate beyond 2015.

Unlike gas turbines, these oil-fired units require a long lead time for start-up. They are seldom called on for dispatch into the MISO market. IPL is currently in the process of assessing the viability of continued operation of these units in the near-term. Faced with the costs required to ensure reliable operation of these generating resources, IPL may elect to deactivate some or all of these units between now and 2015. If deactivation is chosen, IPL will follow the required MISO process and elect the mothball classification to preserve the option of returning these units to service if economically justified.

Environmental

IPL's short-term action plan focuses on compliance with the changing environmental landscape and maintaining the viability of IPL's base load generating units.

EPA proposed a hazardous air pollutant rule in March 2011. IPL is developing a plan to meet the new EPA regulations which are scheduled to be finalized under court order by November 2011. In July 2011, IPL engaged Sargent & Lundy to perform a detailed analysis of the proposed rule's impact on IPL's generating units. The landscape may change timelines but the course appears to have been set for utilities and will likely lead to the following:

- Retirement of IPL's six smaller unscrubbed coal-fired units by the end of 2015
- Retrofit of emission controls to remove mercury and other air toxics on IPL's five large scrubbed coal-fired units
    - Pete Units 1 and 2 – full baghouse plus activated carbon injection ("ACI") and dry sorbent injection ("DSI")
    - Pete Units 3 and 4 – polishing baghouse plus electrostatic precipitator ("ESP") upgrade and ACI and DSI
    - HSS Unit 7 – full baghouse and ACI

To date, only one of those EPA rules is in final form: the Cross State Air pollution Rule ("CSAPR"). IPL will meet the requirements of CSAPR by successfully operating existing control equipment while finalizing construction of its Pete Unit 4 scrubber upgrade, reducing the dispatch of coal-fired units, burning low sulfur coal on its unscrubbed units, and purchasing allowances as needed.

Review of the impact of new water and waste regulations is currently ongoing as these regulations are still being developed. IPL will continue to evaluate its compliance options as the requirements become more defined. This IRP represents no additional technology investments or Operation and Maintenance ("O&M") costs associated with potential new water and waste regulations.

Demand Side Management

The IPL short-term action plan for demand side management ("DSM") is to develop and execute a plan to meet the energy efficiency targets established by the IURC in the Phase II Generic Order in Cause No. 42693 (Order dated December 9, 2009). In order to meet these targets, IPL will have to achieve cumulative gross energy efficiency savings of approximately 504,000 MWH through the end of 2014.

These energy efficiency targets will be met by a combination of Core Programs – delivered by statewide third party administrator ("TPA") – and Core Plus Programs delivered by IPL. The delivery of the Core Programs is expected to transition from IPL to the TPA beginning January 2, 2012.

IPL is currently delivering several DSM programs (both Core and Core Plus) under approvals received in Cause No. 43623 (Order dated February 10, 2010). These programs include the following:

<u>Programs for Residential Customers</u>

Core Programs

On-Site Audit with Direct Install Program

Prescriptive Lighting Program

Energy Efficiency Schools – Kits Program

Low and Moderate Income Weatherization Program

Core Plus Programs

Air Conditioning Load Management (ACLM) Program

Energy Assessment Program

New Construction ENERGY STAR® Plus Program

Second Refrigerator Pick-up and Recycling Program

Renewables Incentive Program

<u>Programs for C&I Customers</u>

Core Programs

Prescriptive Program

Core Plus Programs

Air Conditioning Load Management (ACLM) Program

Custom Program[49]

Renewables Incentive Program

IPL filed a new three year plan in October 2010 (Cause No. 43960) in order to have sufficient spending authority to fund the energy efficiency efforts established by the IURC. This three year plan was intended to cover the period from 2011 through 2013, however, approval is still pending. In addition to a request for increased spending this

[49] The Custom Program also includes the Retro-Commissioning and the New Construction components. While these programs were specifically named programs in the plan approved in Cause no. 43623, IPL – in collaboration with the Oversight Board - combined the three components into one program labeled C&I Custom.

three-year plan includes the following additional DSM programs for residential customers:

- Peer Comparison Energy Reports Program
- Multi- Family Direct Install Program[50]
- High Efficiency HVAC Rebate

If approved, these additional DSM programs will broaden IPL's offerings, capturing energy efficiency opportunities and assisting in accomplishment of the energy efficiency targets. **[170-IAC 4-7-6(b)(2)]**

IURC's Generic Order in Cause No. 42693, requires the jurisdictional electric utilities to submit a series of three discrete three year DSM plans. The next set of three year DSM plans for achievement of the IURC targets for the period from 2014 to 2016 will be filed in 2012. In its next three year plan, IPL will identify the specific programs that will be offered to achieve the IURC's targets for this period. IPL will rely on the experience gained and the results achieved in the delivery of the current set of DSM programs to influence this subsequent three year plan. The development of the subsequent three year plan will also be accomplished in consultation with the IPL Oversight Board.

New Generation Resources

EPA's environmental rules resulting in the premature retirements of IPL's small coal-fired units adds further urgency to the selection and implementation of new generation resources. IPL is considering several alternatives to replace this capacity. The analysis to-date suggests that the preferred option is likely to be a modern, natural gas-fired combined cycle gas turbine ("CCGT") power plant. The results of Ventyx's resource modeling and selection identified CCGT as the least-cost supply resource, and based on costs and risks, including fuel diversity, IPL's Reference Case included a CCGT.

The CCGT specified will likely be a "F-Class" machine with a low heat-rate and low emissions, sized in the 600 MW range. F-Class turbines are being evaluated since they represent the best balance between advanced, low heat-rate and low emitting prime movers and large-scale deployment in the United States and worldwide. Air quality systems for the new plant will likely include: (1) dry low NOx burners, (2) an SCR and (3) an oxidation catalyst; in addition, cooling towers will be included. Given both the advantage for generation close to load and uncertainty about proposed changes at MISO concerning resource adequacy, IPL is evaluating sites within or adjacent to its service territory, and is exploring opportunities for supply of natural gas to these sites.

The company has also begun an engineering study to further analyze air-permitting issues and develop a more detailed cost-estimate. As part of this estimating process, IPL will

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50 Because of the significant energy savings opportunity provided by delivering the Multi-Family program IPL worked collaboratively with the Oversight Board to begin funding the Multi-Family Direct Install Program by transferring funds from other Cause No. 43623 approved funds.

seek budgetary bids for all major equipment for a CCGT costing greater than $1 million, including combustion and steam turbines. IPL will work to identify and engage supply vendors - including GE, Siemens and Mitsubishi Heavy Industries.

Capacity Needs (2012-2017)

For the period 2012 to 2015 IPL projects to meet its capacity requirements through short-term capacity purchases of 100 to 200 MW. As shown in this IRP, the new EPA environmental regulations are assumed to trigger the retirement of IPL's small coal-fired units by the end of 2015. IPL assumed that under a timely approval and reasonable construction schedule, new build capacity in the form of a CCGT will be available in 2018. This results in a projected capacity deficit of about 600 MW for 2016 and 2017. While IPL has historically relied on the short-term capacity markets for up to 300 MW of its capacity requirements, this amount of reliance on short-term capacity markets will require additional planning and risk management. IPL will evaluate alternatives within the next two years that reduce this exposure including:

- Reducing new build construction timeline, including potential for phased construction to add gas turbines earlier, followed by heat recovery steam generator ("HRSG") if CCGT construction is pursued
- Executing capacity Power Purchase Agreement three to four years in advance of 2016-2017 need
- Purchasing existing capacity resources
- Converting small coal units from coal-fired to gas-fired
- Continued operation of oil-fired steam units
- Other viable alternatives to address the capacity deficit
- Lobbying for extension of EPA compliance dates

IPL anticipates Certificate of Public Convenience and Necessity ("CPCN") filings to the IURC for one or more of the above alternatives within the next two years to address its customer's capacity needs for 2016 and beyond.

Transmission

[170-IAC 4-7-4(9)] [170-IAC 4-7-4(13), (15)]

IPL's has studied and is evaluating the need for transmission and substation projects for retirement of generation connected to the IPL 138 kV system to ensure deliverability of power into the IPL load zone. These projects will improve power import capability from the 345 kV system to load centers on the 138 kV system. There are various projects being evaluated including the installation of new 345 kV breakers, autotransformers and reactive support from 138 kV capacitor banks or other dynamic sources. Other projects may include upgrade of the rating of various transmission lines.

Distribution

[170-IAC 4-7-4(13), (15)]

IPL has completed approximately half of its distribution automation ("DA") and Advanced Metering Infrastructure ("AMI") plans funded in part by a Smart Grid Investment Grant ("SGIG") awarded in 2009 by the U.S. Department of Energy ("DOE") as part of the American Recovery and Reinvestment Act of 2009 ("ARRA") stimulus funding. IPL is in the process of upgrading reclosers, Transformer Load-Tap Changer ("LTC") controls, capacitor bank controls, fault indicators in the Central Business District and installing a new distribution Supervisory Control and Data Acquisition ("SCADA") system to integrate functionality over a three-year period. Approximately 10,000 AMI meters have been installed as well. These assets will be utilized as part of a voltage reduction program to reduce demand by up to 40 MW during peak conditions. **[170-IAC 4-7-4(15)]**

Financing

[170-IAC 4-7-8(8)(E)]

IPL's existing restricted and unrestricted cash balances, short-term investments, cash generated from operating activities and borrowing capacity on its committed credit facility are currently adequate and are anticipated to be adequate on a long-term basis to meet anticipated operating expenses, interest expense on outstanding indebtedness, recurring capital expenditures, and to pay shareholder dividends. From time-to-time, the company relies on access to capital markets as a source of liquidity for capital requirements not satisfied by operating cash flows.

SECTION 6. ACRONYMS

Acronym	Reference
3-Year DSM Plan	IPL 3-Year Demand Side Management Plan, dated October 15, 2010; approved by the IURC February 2011
AC	Alternating current
ACEEE	American Council for an Energy Efficient Economy
ACESA	American Clean Energy and Security Act of 2009
ACI	Activated carbon injection
ACLM	Air-Conditioning Load Management
AEP	American Electric Power
AFUDC	Allowance for Funds Used During Construction
AG	Indiana Office of the Attorney General
AHRI	Air Conditioning, Heating & Refrigeration Institute
AMI	Advanced Metering Infrastructure
AMR	Automatic Meter Reading
ARRA	American Recovery and Reinvestment Act of 2009
ASM	Ancillary Services Market
ATC	Available Transmission Capability
BA	Balancing Authority
BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
BPJ	Best Professional Judgment
BTA	Best technology available
C&I	Commercial and industrial
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CAGR	Compound annual growth rate
CAIR	Clean Air Interstate Rule
CAMR	Clean Air Mercury Rule
CBD	Central Business District
CCGT	Combined cycle gas turbine
CCOFA	Closed-Coupled Overfire Air
CCR	Coal Combustion Residuals
CCS	Carbon capture and sequestration
CCT	Clean coal technology
CDD	Cooling degree days
CEM	Customer Energy Management System Program
CESQG	Conditionally exempt small quantity generator

Acronym	**Reference**
CFL	Compact Fluorescent Light
CGS	Cogeneration Service
CIP	Critical Infrastructure Protection
CISSP	Certified Information Systems Security Protocol
CO_2	Carbon dioxide
CoolCents®	IPL's ACLM
CPCN	Certificate of Public Convenience and Necessity
CSAPR	Cross State Air Pollution Rule
CT	Combustion turbine
CWA	Clean Water Act
DA	Distribution Automation
D.C.	District of Columbia
DEM	Duke Energy Midwest
DOE	U.S. Department of Energy
DRWG	Demand Response Working Group
dSCADA	Distribution SCADA
DSI	Dry sorbent injection
DSM	Demand Side Management
DSMCC	Demand Side Management Coordination Committee
ECM	Electronic Commutated Fan
ECS	Energy Control System
EFORd	Equivalent Forced Outage Rate demand
EIA	U.S. Energy Information Administration
EIS	Enterprise Information Services
ELG	National effluent limitation guidelines
EM&V	Evaluation, Measurement and Verification
EPA	U.S. Environmental Protection Agency
ES	ENERGY STAR®
ESP	Electrostatic precipitator
EV	Eagle Valley Generating Station
FAC	Fuel Adjustment Clause
FEED	Front End Engineering Design
FERC	Federal Energy Regulatory Commission
FGD	Flue Gas Desulfurization
FOB	Free On-Board
Forefront	Forefront Economics
Fracking	Hydraulic fracturing
GDP	Gross Domestic Product
Georgetown	Georgetown Generating Station

Acronym	Reference
GHG	Greenhouse gas
GID	Gross internal demand
HAPs	National emission standard for hazardous air pollutants; EPA's proposed mercury and air toxics standard
HDD	Heating degree days
HERS	ENERGY STAR® Home Energy Rater Index
Hg	Mercury
HRSG	Heat recovery steam generator
HSS	Harding Street Generating Station
HVAC	Heating, ventilation and air-conditioning
IDEM	Indiana Department of Environmental Management
IEA	Indiana Energy Association
IEEE	Institute of Electrical and Electronics Engineers
ICAP	Installed Capacity
IGCC	Integrated Gasification Combined Cycle
IPL	Indianapolis Power & Light Company
IRP	Integrated Resource Plan
Itron	Itron, Inc.
IURC	Indiana Utility Regulatory Commission
JCSP	Joint Coordinated System Plan
LAER	Lowest Achievable Emission Rate
LNB	Low NO_x Burner
LNG	Liquid natural gas
LOLE	Loss of Load Expectation
LQG	Large quantity generator
LSE	Load Serving Entity
LTC	Transformer Load-Tap Changer
MACT	Maximum Achievable Control Technology
MAIFI	Mandatory Average Interruption Frequency Index
MAPE	Mean Absolute Percent Error
MATS	Mercury and Air Toxics Standard
MGD	Million gallons per day
MISO	Midwest Independent Transmission System Operator, Inc.
MOD	Transmission Planning Standards, part of NERC Reliability Standards
MOPR	Minimum Offer Price Requirements
MPE	Mean Percent Error
MPP	Multi-Pollutant Plan
MPS	Market Potential Study
MSA	Metropolitan Statistical Area

Acronym	Reference
MTEP	MISO Transmission Expansion Plan
MVA	Mega Volt Amplifier
MVP	Multi-Value Projects
NAAQS	National Ambient Air Quality Standard
NERC	North American Electric Reliability Corporation
NG	Mercury
NID	Net internal demand
NIST	National Institute of Standards and Technology
NN	Neural Net
NOAA	National Oceanic and Atmospheric Administration
NO_x	Nitrogen oxide
NPDES	National Pollution Discharge Elimination System
NPV	Net Present Value
NYMEX	New York Mercantile Exchange
O&M	Operation and Maintenance costs
OUCC	Office of Utility Consumer Counselor
PC	Pulverized coal
Pete	Petersburg Generating Station
PHEV	Plug-In hybrid electric vehicle
PJM	PJM RTO; "PJM Interconnection"
$PM_{2.5}$	Particulate matter less than 2.5 microns
PPA	Power Purchase Agreement
PRM_{UCAP}	Planning Reserve Margin on UCAP
PT	Participant cost test
PV	Photovoltaic
PVRR	Present value of revenue requirements
Rate EVP	IPL Tariff: Experimental Service for Electric Vehicles Charging on Public Premises
Rate EVX	IPL Tariff: Experimental Time of Use Service for Electric Vehicles Charging on Customer Premises
Rate REP	IPL Tariff: Renewable Energy Production
Rate SS	IPL Tariff: Small Secondary Service
RCRA	Resource Conservation and Recovery Act
REC	Renewable Energy Credit
RES	Renewable Energy Standards
RFC	Reliability *First* Corporation
RFP	Request For Proposal
RIM	Ratepayer impact measurement
RTO	Regional Transmission Organization

Acronym	Reference
SAIFI	System Average Interruption Frequency Index
SCADA	Supervisory Control and Data Acquisition
SCPC	Supercritical Pulverized Coal
SCR	Selective Catalytic Reduction
SGIG	Smart Grid Investment Grant
SIGE	Vectren
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur dioxide
SOFA	Separated Overfire Air
SQG	Small quantity generator
TBEL	Technology based effluent limits
TID	Total internal demand
TOU	Time of use
TPA	Third Party Administrator
TPL	Transmission Planning Standards, part of NERC Reliability Standards
TRC	Total resource cost
TVA	Tennessee Valley Authority
U.S.	United States
UCAP	Unforced Capacity
UCT	Utility cost test
Ultra SCPC	Ultra Supercritical Pulverized Coal
VAR	Reactive Power
Vista	Vista Energy Group
Utility MACT	Utility Maximum Achievable Control Technology, also commonly referred to within the industry as the national emission standard for hazardous air pollutants ("HAPs"); EPA's proposed mercury and air toxics standard
VR	Voltage Reduction
WQBEL	Water quality based effluent limits
WTG	Wind turbine generators

MidwestISO
Energizing the Heartland

March 31, 2011

Federal Energy Regulatory Commission
Secretary of the Commission
Form No. 715
888 First Street, NE
Washington, D.C. 20426

RE: FERC-715 - Annual Transmission Planning and Evaluation Report

Dear Secretary Bose:

Pursuant to Sections 213(b), 307(a) and 311 of the Federal Power Act and 18 CFR § 141.300 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, enclosed for filing is the FERC Form 715 Response for Transmission Owning Members of the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") that elected to have a regional filing of their FERC Form 715 response. A listing of those Transmitting Utilities for which this data is supplied is included as Attachment #1.[1] A summary of the information submitted in compliance with Part 1 through Part 6, Appendix A of Form 715 is included as Attachment #2.

This filing, submitted via FERC eFiling, contains Critical Energy Infrastructure Information ("CEII"). Thus, this filing is made pursuant to the Commission's regulations 18 CFR § 388.112(b)(2)(ii) (A) and contains the following:

1) The electronic media of all six parts of Form 715 with all pages marked "Critical Energy Infrastructure Information - Do Not Release;" and

2) A cover letter with two Attachments identifying the Respondents and a summary of the filing content with all pages marked "Critical Infrastructure Information - Do Not Release."

REDACTED

[1] The responding Transmitting Utilities are now Transmission Owners of the Midwest ISO, and therefore, the Midwest ISO will now be filing FERC Form 715 on their behalf.

Contains Critical Energy Infrastructure Information - Do Not Release

FERC Form 715

Midwest ISO West Region - April 1, 2011

Part 1: Identification and Certification	
Transmitting Utility Name	**Indianapolis Power & Light Company**
Transmitting Utility Mailing Address	**1230 W Morris St.** **Indianapolis, IN 46221-1710**
Contact Person Name	**Michael L Holtsclaw**
Contact Person Title	**Director, Power Delivery**
Contact Person Telephone Number	**317-261-6557**
Contact Person Facsimile Number	**317-630-5739**
*The signature below of the authorized official of the Transmitting Utility certifies the accuracy of the information submitted and authorizes the Midwest ISO to consent to release of this filing to third parties pursuant to FERC CEII disclosure policy subject to any exceptions noted in row 21 of this form.**	
None	
Certifying Official Signature	Michael L Holtsclaw
Certifying Official Name (please print)	**Michael L Holtsclaw**
Certifying Official Title	**Director, Power Delivery**
Part 2:	
Respondent authorizes the Midwest ISO to submit powerflow information in respondent's behalf. Regional contact information is as follows:	[redacted]
Regional Organization	
Mailing Address	
Contact Person	
Contact Person Title	
Contact Person Telephone Number	
Contact Person Facsimile Number	
Power Flow Cases Available (2009 Midwest ISO MTEP Models)	
[redacted]	
Respondent authorizes the Midwest ISO to submit its system representation that exists in the Midwest ISO MTEP models	[redacted]
Respondent authorizes the Midwest ISO to submit its system representation that exists in the Midwest ISO MTEP models and will submit additional powerflow information	

Respondent does not authorize the Midwest ISO to submit its system representation that exists in the Midwest ISO MTEP models and will submit its own powerflow information	[redacted]
Respondent authorizes the Midwest ISO to submit a data dictionary referencing power flow bus names with long English names and EIA plant codes	
Part 3: Transmitting Utility Map and Diagrams	
Respondent authorizes the Midwest ISO to submit a regional bulk transmission Planning map of the Midwest ISO central region that includes the respondent's region	[redacted]
Respondent authorizes the Midwest ISO to submit the respondent's transmission Planning maps that have been provided to the Midwest ISO	
Respondent will submit additional maps	
Part 4: Transmission Planning Reliability Criteria**	
Respondent employs NERC Transmission Planning Standards TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0. FAC-014 and PRC-023 are also applicable to RC or TP. RTO and RRO, State, and MISO Member (Local) planning criteria are used in addition. Midwest ISO will submit applicable criteria following FERC instructions.	Yes X No
Respondent will submit criteria in addition to that submitted by Midwest ISO.	Yes No X
Respondent will submit its own criteria	Yes No X
Part 5: Transmission Planning Assessment Practices**	
Respondent employs the Midwest ISO Transmission Planning Assessment Practices, and authorizes the Midwest ISO to submit the business practices document in respondent's behalf	Yes X No
Respondent will submit practices in addition those of the Midwest ISO	Yes No X
Respondent will submit its own assessment practices	Yes No X
Part 6: Evaluation of Transmission System Performance	
Respondent cities the Annual MISO MTEP report, including Appendices A, B, C, D1, D2, D3, D4 and D5 as a satisfactory evaluation of the performance of its portion of the transmission system, and authorizes the Midwest ISO to submit this report in respondent's behalf.	[redacted]
Respondent will submit its own evaluation	

* FERC CEII disclosure policy: Upon notification of a third party request to FERC for disclosure of this filing and subject to satisfaction of all other appropriate FERC CEII disclosure requirements, the Midwest ISO is authorized to and will consent to such disclosure.

** It may be appropriate for a respondent to check off more than one box for Parts 4 and 5.

Transmission Planning Criteria
February 15, 2011

Indianapolis Power & Light Company's electric transmission facilities are designed to provide safe, reliable, and low cost service to IPL customers. IPL transmission facilities are planned using the IPL transmission planning reliability criteria in conjunction with the reliability standards of the North American Electric Reliability Council (NERC) including the Transmission Planning (TPL) standards and Modeling Data Analysis (MOD) standards. The NERC reliability standards may be found on the NERC website at http://www.nerc.com. IPL transmission facilities are also planned using the regional reliability standards of the reliability entity Reliability First Corporation (RFC). The RFC reliability standards may be found on the RFC website at http://www.rfirst.org. IPL transmission facilities are also planned as part of an effort to coordinate the development of the greater regional transmission system with neighboring systems and other member companies of the Midwest Independent System Operator (MISO). The MISO regional planning efforts may be found on the MISO website at http://www.midwestiso.org.

IPL transmission plans are based on transmission planning criteria and other considerations. Other considerations include load growth, equipment retirement, decrease in the likelihood of major system events and disturbances, equipment failure or expectation of imminent failure.

Changes to transmission facilities are considered when the transmission planning criteria are exceeded and cannot feasibly be alleviated by sound operating practices. Any recommendations to either modify transmission facilities or adopt certain operating practices must adhere to good engineering practice and sensible business judgment.

A summary of IPL transmission planning criteria follows. IPL transmission planning criteria are periodically reviewed and revised, and are subject to change with applicable notice.

1) Limit transmission facility voltages under normal operating conditions to within 5% of nominal voltage, under single contingency outages to 5% below nominal voltage, and under double contingency outages to 10% below nominal voltage. In addition to the above limits, generator plant voltages may also be limited by associated auxiliary system limitations that result in narrower voltage limits.

2) Limit thermal loading of transmission facilities under normal operating conditions to within normal limits and under contingency conditions to within emergency limits.

Transmission Planning Criteria
February 15, 2011

3) Maintain stability limits including critical switching times to within acceptable limits for generators, conductors, terminal equipment, loads, and protection equipment for all credible contingencies including three-phase faults, phase- to-ground faults, and the effect of slow fault clearing associated with undesired relay operation or failure of a circuit breaker to open.

4) Install and maintain facilities such that three-phase, phase- to-phase, and phase-to-ground fault currents are within equipment withstand and interruption rating limits established by the equipment manufacturer.

5) Install and maintain protective relay, control, metering, insulation, and lightning protection equipment to provide for safe, coordinated, reliable, and efficient operation of transmission facilities.

6) Install and maintain transmission facilities as per all applicable Indiana Utility Regulatory Commission rules and regulations, ANSI/IEEE standards, National Electrical Safety Code, IPL electric service and meter guidelines, and all other applicable local, state, and federal laws and codes. Guidelines of the National Electric Code may also be incorporated.

7) The analysis of any project or transaction involving transmission facilities consists of an analysis of alternatives and may include but is not limited to the following:

   a) Initial facility costs and other lifetime costs such as maintenance costs, replacement cost, aesthetics, and reliability.

   b) Consideration of transmission losses.

   c) Assessment of transmission right-of-way requirements, safety issues, and other potential liabilities.

   d) Engineering economic analysis, cost benefit and risk analysis.

Transmission Planning Criteria
February 15, 2011

8) Plan transmission facilities such that generating capacity is not unduly limited or restricted.

9) Plan, build, and operate transmission facilities to permit the import of power during generation deficiency conditions. (Capacity Benefit Margin)

10) Maintain adequate power transfer limits within the criteria specified herein.

11) Provide adequate dynamic reactive capacity to support transmission voltages under contingency outage or other abnormal operating conditions.

12) Minimize and/or coordinate MVAR exchange between IPL and interconnected systems.

13) Generator reactive power output shall be capable of, but not limited to, 95% lag (injecting MVAR) and 95% lead (absorbing MVAR) at the point of interconnection to the transmission system.

14) Design transmission substation switching and protection facilities such that the operation of substation switching facilities involved with the outage or restoration of a transmission line emanating from the substation does not also require the switched outage of a second transmission line terminated at the substation. This design criterion does not include breaker failure contingencies.

15) Avoid excessive loss of distribution transformer capacity resulting from a double contingency transmission facility outage.

16) Coordinate planning studies and analysis with customers to provide reliable service as well as adequate voltage and delivery service capacity for known load additions.

17) Consider long term future system benefits and risks in transmission facility planning studies.

FERC FORM 715 Part 5

Transmission Planning Assessment Practices
February 15, 2011

Indianapolis Power & Light Company employs the Midwest ISO Transmission Planning Assessment Practices, which may be found at the following link:

BPM 020 - Transmission Planning

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
01/01/2010	$ 17.21	$ 14.86	$ 13.91	$ 17.64	$ 18.40	$ 19.17	$ 18.92	$ 17.90	$ 18.61	$ 21.92	$ 21.38	$ 20.06	$ 18.54	$ 18.21	$ 12.75	$ 11.63	$ 24.31	$ 33.42	$ 37.20	$ 15.43	$ 36.47	$ 37.15	$ 33.49	$ 21.15
01/02/2010	20.02	26.61	27.36	26.75	28.07	20.20	16.12	15.94	11.17	11.66	14.55	15.15	15.35	15.60	15.76	16.00	15.89	17.11	20.27	19.55	33.19	31.09	22.23	$ 23.40
01/03/2010	23.31	23.44	23.43	23.14	23.37	20.18	23.21	19.56	20.47	24.58	34.60	34.65	34.90	34.71	34.73	34.59	34.65	34.77	35.24	35.19	35.40	35.22	24.68	$ 30.04
01/04/2010	28.97	15.20	14.81	24.77	28.51	35.37	35.11	27.51	23.51	28.25	29.68	23.83	23.19	23.18	29.56	33.17	30.79	31.95	34.86	34.65	34.33	35.41	34.28	$ 32.95
01/05/2010	25.54	26.77	25.80	23.18	37.53	37.86	122.31	196.48	111.28	39.52	36.33	35.46	35.21	35.50	32.31	32.65	33.81	31.28	31.48	30.80	30.63	29.58	30.74	$ 32.20
01/06/2010	32.31	30.43	32.84	30.74	31.07	22.57	31.64	32.04	32.97	34.70	41.05	38.83	36.66	30.61	28.58	33.34	19.08	16.81	32.76	30.83	32.81	37.97	40.08	$ 33.85
01/07/2010	20.73	14.06	13.76	14.01	14.57	20.62	24.43	26.77	21.60	15.66	19.86	30.84	32.86	25.12	22.67	21.70	20.88	23.78	21.91	20.57	21.33	20.88	25.43	$ 23.45
01/08/2010	17.92	14.39	13.69	13.92	14.39	14.62	17.58	20.68	27.44	20.67	20.98	29.06	29.35	31.28	31.62	31.78	31.96	32.13	31.77	24.98	24.30	20.94	22.82	$ 16.68
01/09/2010	15.11	20.05	26.27	26.84	26.88	26.35	30.09	30.21	30.59	31.86	29.81	20.66	20.40	31.92	30.65	29.77	31.47	32.35	35.87	31.20	23.28	26.61	30.36	$ 31.47
01/10/2010	26.79	30.32	27.82	27.61	27.32	28.60	27.80	28.58	30.21	24.22	29.61	30.84	29.62	29.17	25.01	20.90	24.02	25.92	28.54	28.72	28.47	28.26	28.76	$ 26.60
01/11/2010	19.86	26.42	27.66	31.61	25.91	23.84	48.58	78.91	79.75	97.33	38.02	40.41	37.54	35.74	35.15	36.03	36.51	37.67	37.45	37.63	39.33	37.12	35.13	$ 31.34
01/12/2010	26.97	25.64	25.48	25.54	25.93	29.01	57.97	84.01	84.14	42.88	34.45	36.32	35.10	35.59	36.58	34.35	37.03	36.39	35.14	34.22	36.45	35.18	34.21	$ 33.70
01/13/2010	29.63	24.96	32.26	31.80	34.13	35.38	36.38	36.98	37.42	33.27	33.32	31.72	33.41	33.25	36.72	33.72	34.39	36.68	37.09	32.76	32.32	32.89	34.35	$ 28.01
01/14/2010	20.10	13.69	23.54	26.12	26.42	26.64	27.36	26.58	26.86	27.23	27.85	28.39	27.43	26.54	28.37	28.49	28.52	28.35	17.43	15.07	14.86	13.82	11.29	$ 13.77
01/15/2010	15.19	12.21	9.19	11.03	11.12	11.25	11.43	11.68	11.74	11.74	16.75	27.52	30.17	29.52	31.51	31.77	27.71	23.36	31.00	32.01	32.34	32.45	32.34	$ 31.09
01/16/2010	28.77	29.95	30.19	30.46	31.86	26.41	22.48	24.10	25.45	23.74	22.67	22.07	21.54	23.62	31.96	31.23	31.43	29.90	25.49	14.24	13.20	12.95	16.83	$ 22.20
01/17/2010	11.50	11.15	11.14	11.13	11.15	11.31	21.35	31.53	33.12	32.65	32.51	32.46	36.11	34.13	32.57	32.50	32.90	32.41	33.67	32.84	33.98	33.55	33.19	$ 20.07
01/18/2010	11.38	11.14	11.12	11.21	11.33	11.70	23.69	33.69	36.13	35.34	34.46	33.45	34.37	34.08	35.74	35.25	34.79	34.86	33.43	32.24	33.03	32.29	31.96	$ 31.34
01/19/2010	32.29	25.98	21.43	22.54	23.38	23.09	31.77	33.55	30.30	29.95	26.77	17.30	26.35	28.29	22.58	34.23	34.08	34.51	35.15	35.11	34.24	33.88	29.55	$ 16.18
01/20/2010	14.38	13.81	13.68	12.88	10.76	11.51	13.03	13.37	13.23	13.29	13.65	14.23	14.79	17.82	20.00	21.30	21.58	23.92	26.11	29.73	29.12	28.08	20.82	$ 19.82
01/21/2010	15.59	18.08	21.15	23.51	23.42	28.10	29.80	31.47	31.88	31.93	31.47	32.77	33.29	33.77	34.87	33.56	32.16	31.73	33.35	31.41	31.12	31.24	27.75	$ 17.85
01/22/2010	11.73	11.17	14.94	15.97	16.19	16.85	21.35	28.21	31.60	31.85	32.34	32.34	32.17	31.98	32.26	25.12	24.19	29.62	31.62	31.86	31.81	31.97	30.96	$ 23.01
01/23/2010	19.16	19.99	20.57	21.91	21.24	22.62	24.21	25.36	27.69	26.89	27.51	24.23	25.11	24.13	27.32	28.23	25.22	29.90	30.46	31.86	29.30	28.52	19.54	$ 14.41
01/24/2010	12.33	14.81	11.74	12.51	12.56	13.74	13.00	13.27	13.25	14.34	20.72	23.33	25.09	23.92	28.12	29.02	23.48	25.83	28.28	17.66	17.70	18.11	18.65	$ 14.83
01/25/2010	11.33	11.15	11.21	11.17	12.49	13.79	11.39	14.24	28.05	30.91	31.55	33.23	35.22	34.28	35.98	34.30	34.43	33.50	35.62	35.03	35.22	32.16	32.83	$ 20.08
01/26/2010	11.17	11.26	11.23	11.22	11.53	20.49	28.53	28.68	31.19	32.87	30.89	31.28	34.73	35.75	32.85	35.92	34.80	33.73	34.77	34.73	35.21	33.57	25.43	$ 14.82
01/27/2010	13.64	13.60	13.57	13.60	14.05	15.02	25.04	23.11	21.39	22.39	22.13	26.39	25.47	25.49	23.51	22.22	23.32	25.23	27.02	21.66	22.39	22.04	22.81	$ 22.26
01/28/2010	21.87	20.85	21.31	20.70	20.57	23.55	21.96	22.54	27.77	29.61	29.68	29.41	29.22	29.70	29.25	29.31	29.15	29.32	29.25	28.41	28.96	29.26	28.08	$ 27.48
01/29/2010	31.93	31.54	31.80	28.18	23.96	22.85	25.78	26.57	33.03	32.49	31.49	30.52	30.22	31.67	34.77	34.80	31.41	30.44	28.87	27.73	22.21	22.83	24.48	$ 16.97
01/30/2010	11.41	11.21	11.14	11.14	11.21	11.29	13.46	27.61	28.69	31.84	25.96	28.96	29.25	27.26	18.25	27.88	28.83	23.81	25.37	29.34	27.26	26.20	23.47	$ 24.69
01/31/2010	18.25	16.43	16.45	16.50	21.45	20.92	21.64	29.68	24.82	24.69	24.65	24.72	28.10	23.94	23.83	22.71	21.13	20.79	25.49	24.28	26.74	26.44	26.97	$ 23.71

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

02/01/2010	16.84	13.88	13.92	20.44	21.29	19.85	21.90	28.09	30.09	31.44	31.48	30.65	24.82	35.47	31.29	29.96	26.57	25.94	27.21	29.46	30.37	27.87	17.31	$ 11.48
02/02/2010	11.28	11.10	11.10	11.07	11.24	11.48	23.82	28.98	31.40	29.66	25.76	28.12	31.95	31.25	29.90	31.55	23.35	25.71	23.12	21.15	26.18	31.96	22.35	$ 14.92
02/03/2010	11.28	11.16	11.11	11.10	11.09	11.22	11.44	14.56	21.85	34.36	38.25	37.77	29.46	22.96	25.50	30.82	28.30	27.71	29.03	30.65	23.25	13.60	11.73	$ 11.86
02/04/2010	11.76	11.63	11.50	11.37	11.24	11.11	10.35	10.33	11.03	11.01	11.04	11.06	11.27	11.25	11.28	11.43	11.41	11.47	11.53	11.62	15.93	21.14	22.06	$ 19.88
02/05/2010	18.46	18.14	18.36	18.40	19.31	25.64	25.59	25.39	23.29	24.18	28.47	28.19	22.88	22.73	23.95	24.47	30.84	28.12	23.70	22.56	28.27	31.99	31.97	$ 26.06
02/06/2010	13.91	11.18	11.13	11.15	11.15	11.45	11.47	11.39	12.15	21.98	30.97	31.06	33.30	33.98	32.67	31.42	30.29	19.51	23.29	29.81	29.84	29.80	29.74	$ 22.43
02/07/2010	12.17	11.17	11.11	11.09	11.07	11.51	11.25	11.31	14.73	22.60	27.68	29.73	31.13	30.26	27.44	23.23	20.30	18.17	19.26	21.84	27.29	29.83	29.90	$ 24.21
02/08/2010	12.78	11.19	11.18	11.20	11.46	12.15	20.72	30.14	30.97	31.38	31.03	31.71	35.65	36.57	33.66	33.89	34.44	32.77	32.84	36.27	37.76	36.14	34.97	$ 29.57
02/09/2010	13.19	11.18	11.16	11.15	11.15	11.24	11.46	18.91	33.30	34.19	47.90	40.18	33.53	33.44	34.98	35.15	33.65	32.81	33.67	33.58	33.75	33.45	31.20	$ 23.32
02/10/2010	17.23	14.36	11.52	11.93	15.07	16.24	19.50	27.02	32.70	35.02	35.84	36.43	36.43	35.09	35.61	36.70	34.71	33.15	15.81	16.65	22.54	26.55	26.18	$ 26.50
02/11/2010	26.48	26.35	26.27	26.23	26.37	25.52	25.37	23.79	27.05	22.31	16.75	17.46	17.54	22.92	24.10	27.20	27.48	27.35	23.11	18.76	19.13	19.80	23.12	$ 30.12
02/12/2010	17.94	16.88	16.59	16.78	16.88	17.17	23.57	28.59	30.06	28.00	27.31	23.44	18.52	16.85	15.90	15.41	22.39	27.40	26.92	28.48	28.64	28.46	28.65	$ 26.68
02/13/2010	21.19	20.84	21.06	25.17	22.06	21.12	24.73	23.51	23.51	24.50	25.62	29.32	29.46	28.83	28.06	29.42	26.27	23.78	25.73	29.30	29.70	29.13	25.19	$ 24.70
02/14/2010	23.48	23.35	23.19	23.30	22.70	21.07	21.29	16.87	17.03	20.83	28.16	23.32	11.14	11.10	11.11	11.16	11.08	10.27	11.03	11.12	11.15	11.30	11.43	$ 11.55
02/15/2010	11.76	13.68	13.86	14.15	13.92	13.37	13.96	13.46	14.07	13.81	27.18	32.66	29.18	17.85	20.69	10.64	12.74	23.16	28.64	28.91	29.47	30.33	28.28	$ 27.94
02/16/2010	27.64	27.43	26.92	27.51	27.68	27.16	27.39	28.63	29.36	30.09	29.66	29.31	29.33	28.61	28.48	29.58	29.49	26.64	23.69	27.26	31.45	31.43	31.02	$ 19.63
02/17/2010	11.60	11.52	11.35	11.29	11.32	12.30	18.90	17.88	19.96	27.56	30.56	31.81	32.50	33.15	33.28	22.61	8.52	10.63	8.75	10.71	11.29	11.35	11.45	$ 11.53
02/18/2010	11.53	11.37	11.38	11.38	11.38	11.35	11.57	26.05	31.61	32.70	33.37	32.71	30.62	30.22	30.05	28.78	28.57	24.03	26.42	29.86	30.34	31.29	26.38	$ 18.10
02/19/2010	12.14	11.25	11.76	11.25	11.42	22.31	14.71	11.18	11.23	11.27	11.18	11.19	11.27	11.98	19.94	22.91	21.97	15.41	21.36	24.34	21.20	19.88	20.11	$ 19.49
02/20/2010	11.78	11.19	11.17	11.20	11.24	11.22	11.22	11.19	11.21	11.29	11.16	12.00	11.62	11.16	11.16	11.15	11.14	11.14	11.15	11.15	11.23	17.49	19.94	$ 20.46
02/21/2010	19.33	19.12	22.51	22.95	20.69	22.87	21.51	24.82	24.05	21.57	19.51	18.17	17.80	17.44	17.43	19.53	22.67	23.45	24.62	25.93	23.14	24.88	23.20	$ 19.06
02/22/2010	14.75	15.12	14.83	16.08	18.29	19.98	24.01	27.61	30.68	28.90	26.31	21.16	20.35	29.21	32.37	22.11	24.26	24.21	25.57	20.80	15.89	11.11	11.00	$ 11.03
02/23/2010	11.05	11.05	11.05	11.05	11.05	11.07	11.13	11.33	12.99	11.67	11.68	11.48	13.46	11.43	11.91	19.71	22.85	25.84	31.91	30.26	32.03	32.42	32.62	$ 31.93
02/24/2010	31.46	20.29	11.12	12.08	16.50	27.64	16.46	13.14	15.49	16.42	14.02	11.33	11.43	11.39	11.35	11.54	16.14	23.48	26.25	26.20	26.54	17.03	11.37	$ 11.34
02/25/2010	11.45	12.59	10.93	11.16	11.17	12.05	12.21	12.65	18.43	15.97	18.09	26.09	26.39	26.07	24.27	25.91	26.88	27.44	25.41	26.39	27.40	27.15	24.96	$ 25.44
02/26/2010	20.60	22.71	19.94	18.99	17.58	19.15	22.48	28.17	34.59	35.11	35.59	28.01	27.52	30.63	26.65	25.01	22.30	25.23	21.09	17.42	21.55	30.77	33.31	$ 30.36
02/27/2010	16.54	13.15	11.32	11.31	11.30	11.38	21.77	11.49	14.09	29.33	31.07	35.40	36.16	24.03	26.29	27.56	29.28	18.52	16.10	26.80	35.42	33.63	25.77	$ 17.22
02/28/2010	14.62	13.01	15.45	23.35	26.86	27.67	28.20	25.48	23.54	11.11	11.49	11.18	11.34	11.44	17.78	25.04	26.65	27.51	27.04	30.04	33.56	33.15	27.20	$ 27.09

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

03/01/2010	26.41	24.69	23.73	24.86	23.52	26.00	26.08	33.64	25.59	20.35	23.24	13.26	15.73	15.18	15.03	11.29	38.69	36.93	34.62	35.19	29.13	15.85	11.36	$ 11.34
03/02/2010	11.31	12.68	12.17	12.04	11.04	11.10	11.93	24.31	25.93	26.03	24.10	23.56	29.75	30.45	31.29	146.87	114.50	45.58	34.37	35.42	35.06	35.56	35.30	$ 34.05
03/03/2010	31.27	33.31	33.33	31.34	30.74	28.03	29.15	34.12	33.31	29.67	20.88	20.89	20.86	22.55	27.43	33.87	34.42	34.10	28.02	21.34	15.75	15.19	15.07	$ 12.30
03/04/2010	11.24	11.15	11.14	11.27	11.34	12.02	15.51	16.08	16.57	16.72	16.60	17.42	21.60	26.44	26.70	63.58	77.70	30.74	20.38	27.68	31.94	24.32	12.73	$ 11.61
03/05/2010	12.48	11.66	11.44	11.39	11.77	17.47	28.23	29.90	29.90	28.15	26.84	17.19	15.81	15.59	15.93	17.10	22.72	24.00	21.29	18.93	13.71	12.78	14.50	$ 25.95
03/06/2010	24.85	25.30	26.63	26.94	26.93	28.00	29.15	30.15	28.33	28.82	29.86	28.73	28.18	27.31	25.49	24.43	26.25	25.46	27.65	26.77	28.67	29.95	19.16	$ 11.23
03/07/2010	13.17	13.21	13.04	13.05	11.90	13.89	16.28	12.65	12.51	11.54	16.64	23.21	23.78	23.76	23.01	20.81	27.56	23.62	27.00	32.09	38.40	32.22	31.49	$ 19.26
03/08/2010	18.09	14.76	13.61	13.61	13.70	19.30	20.21	25.19	29.66	24.28	26.62	25.35	26.43	27.85	23.60	28.79	29.28	24.99	28.01	28.94	28.97	33.13	29.55	$ 15.97
03/09/2010	11.38	11.08	11.06	11.09	15.09	26.27	27.04	27.43	27.12	32.00	20.57	29.41	20.62	21.93	19.32	23.55	26.98	27.21	25.18	24.85	25.08	19.65	21.51	$ 11.91
03/10/2010	11.24	11.13	11.10	11.10	11.17	11.21	11.43	21.38	36.13	30.92	29.97	28.10	26.94	26.85	26.82	29.88	28.56	34.45	37.41	29.18	29.30	29.26	28.18	$ 26.89
03/11/2010	26.19	15.03	11.29	11.30	11.35	11.54	12.93	12.29	19.33	17.67	17.89	62.59	32.34	28.86	32.80	23.21	24.41	29.31	29.62	29.96	29.76	29.05	28.95	$ 27.74
03/12/2010	26.58	20.85	15.12	15.95	15.50	12.32	21.38	26.82	26.01	23.57	24.47	24.99	22.76	27.95	33.44	25.34	28.93	25.68	24.07	32.07	32.36	31.09	23.33	$ 13.26
03/13/2010	11.67	12.56	11.32	11.70	11.64	12.76	18.07	21.60	31.14	30.88	30.63	31.19	31.15	32.04	31.84	31.75	31.74	30.59	30.36	31.84	31.85	31.91	31.01	$ 14.27
03/14/2010	11.33	11.15	11.13	11.20	11.26	11.35	14.83	17.63	30.81	31.70	31.71	31.82	32.05	31.93	32.23	31.73	28.08	28.45	32.11	32.17	28.90	26.02	24.05	$ 22.73
03/15/2010	20.24	20.48	13.51	18.44	21.03	25.25	21.51	22.71	13.99	11.34	11.37	12.07	11.47	11.45	11.73	23.26	26.22	14.16	14.13	14.27	14.27	14.25	13.37	$ 12.14
03/16/2010	11.21	11.11	11.11	11.14	11.62	14.31	15.19	17.42	30.16	25.61	25.45	27.86	30.63	28.72	21.01	14.86	14.77	20.08	27.05	33.37	35.36	34.38	25.21	$ 12.86
03/17/2010	11.35	11.34	11.39	14.82	24.82	31.04	32.93	34.23	36.00	22.40	14.23	14.66	14.69	14.59	14.17	14.61	14.67	14.80	17.61	29.47	28.69	21.84	14.84	$ 11.96
03/18/2010	11.24	11.24	11.08	11.13	11.24	11.55	13.26	23.15	22.57	28.53	32.87	30.44	28.61	25.74	27.54	23.08	24.11	28.61	28.52	28.57	28.52	28.07	26.72	$ 20.62
03/19/2010	11.26	11.14	11.14	11.23	11.30	12.90	19.56	22.24	28.62	25.84	28.30	26.31	29.47	29.20	28.00	21.76	18.99	15.02	21.51	23.33	29.70	24.97	14.17	$ 12.08
03/20/2010	11.23	11.22	11.34	12.15	11.18	11.80	18.77	29.66	25.75	27.64	25.74	30.69	28.83	30.57	29.07	29.02	30.03	18.36	25.40	31.26	31.68	28.75	20.00	$ 15.30
03/21/2010	12.21	11.13	11.14	11.23	11.14	11.30	15.71	20.95	22.76	24.05	27.30	29.53	24.93	31.97	22.54	15.57	14.17	24.96	25.14	29.60	30.25	23.10	13.50	$ 11.37
03/22/2010	11.14	11.02	11.07	11.16	11.33	17.02	20.51	26.61	32.31	32.18	32.26	32.36	32.29	32.25	31.91	30.97	32.27	32.27	32.25	32.20	32.16	29.37	18.29	$ 12.66
03/23/2010	11.14	11.13	11.13	11.35	11.78	18.35	28.18	33.57	36.05	40.96	40.32	34.88	15.67	27.20	13.25	19.04	30.50	26.58	18.65	24.87	26.56	20.85	14.75	$ 13.45
03/24/2010	13.38	13.25	13.02	13.03	13.28	14.55	27.34	37.97	30.00	32.28	31.20	18.34	15.84	15.25	12.02	17.00	25.66	26.52	26.99	32.30	31.39	29.50	12.35	$ 11.34
03/25/2010	11.10	11.06	11.04	11.02	11.00	10.60	11.08	13.04	11.31	11.62	13.52	14.08	16.56	17.57	24.90	36.49	33.25	33.82	25.66	17.36	12.20	13.84	10.35	$ 10.85
03/26/2010	11.26	8.49	7.91	8.16	10.31	11.52	13.46	15.42	15.78	16.00	16.97	17.93	23.39	26.38	27.06	27.70	28.52	23.09	23.06	24.73	21.66	29.58	29.18	$ 18.04
03/27/2010	17.66	18.19	15.94	21.88	26.29	19.82	22.67	24.75	24.99	25.28	27.12	27.72	25.94	26.77	20.53	18.53	18.45	18.55	18.50	24.32	28.76	20.85	15.28	$ 11.28
03/28/2010	11.11	11.08	11.06	11.05	11.06	11.09	11.06	11.06	11.66	11.01	11.03	11.73	11.10	15.49	20.88	18.35	18.41	18.45	18.95	23.01	31.68	30.46	18.22	$ 13.87
03/29/2010	11.05	10.23	11.39	11.70	14.55	25.92	30.09	30.92	26.19	26.24	26.62	16.22	19.98	24.07	22.03	22.60	23.45	21.79	24.46	22.18	23.10	23.31	14.01	$ 11.64
03/30/2010	14.59	13.76	8.91	11.65	13.31	14.38	18.32	19.82	21.02	19.81	18.18	19.00	29.76	23.27	27.18	11.57	16.19	18.32	25.23	26.31	27.04	27.08	28.65	$ 34.14
03/31/2010	40.63	19.98	11.51	11.13	11.16	12.70	23.51	25.06	24.21	23.80	36.44	29.71	18.97	20.13	21.71	25.87	20.77	19.82	18.84	22.57	22.29	19.85	20.72	$ 12.69

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

04/01/2010	11.09	11.07	11.05	11.07	11.09	11.13	11.51	12.64	16.04	19.43	19.76	18.09	18.40	19.34	21.77	22.91	23.29	21.41	18.69	23.13	25.98	14.99	14.36	$ 14.33
04/02/2010	11.45	10.83	12.22	12.62	10.99	11.29	11.13	11.23	13.24	20.47	21.11	21.85	21.83	21.59	22.22	21.62	21.99	20.49	17.41	16.62	15.85	14.52	11.79	$ 10.53
04/03/2010	8.57	10.92	13.04	12.40	12.82	12.81	12.52	13.65	18.08	24.96	26.00	26.05	26.75	22.56	20.73	19.01	19.55	19.39	19.18	19.98	21.27	23.62	16.55	$ 13.68
04/04/2010	13.72	13.28	12.99	11.73	11.12	12.56	24.15	15.40	21.30	26.36	26.83	24.37	19.01	14.73	15.01	26.05	17.91	16.71	15.81	14.18	19.97	23.36	14.65	$ 12.23
04/05/2010	13.31	12.24	12.44	11.56	11.73	20.11	30.52	30.13	29.99	30.21	30.23	29.91	29.58	29.61	34.54	35.57	35.83	35.04	35.50	35.37	33.06	27.39	19.07	$ 12.61
04/06/2010	11.27	11.28	11.28	11.26	11.26	11.27	11.33	11.25	12.70	12.84	22.35	31.59	31.30	30.57	32.19	29.94	31.88	30.77	29.62	33.50	35.30	29.19	23.11	$ 14.83
04/07/2010	15.96	14.62	13.19	12.99	13.05	23.38	25.49	24.81	29.90	46.56	44.09	31.03	30.72	31.62	31.10	36.40	35.75	31.50	31.50	34.08	33.34	29.59	23.92	$ 26.79
04/08/2010	25.12	26.09	26.21	26.56	27.27	27.56	24.58	32.67	29.95	32.68	34.85	29.81	30.25	31.86	24.49	21.17	30.04	29.88	29.47	30.62	32.50	29.43	28.03	$ 27.02
04/09/2010	23.85	19.92	23.33	17.53	22.86	24.40	21.82	29.36	30.68	31.65	30.31	29.72	29.67	29.59	25.44	29.61	29.60	29.32	28.09	29.83	30.62	28.02	28.32	$ 27.06
04/10/2010	26.68	26.68	26.68	26.81	21.83	27.04	29.01	29.76	29.64	30.11	30.50	29.46	29.45	31.37	29.84	29.64	30.70	30.16	29.74	28.57	29.65	29.62	29.28	$ 25.25
04/11/2010	22.79	22.49	15.37	15.91	19.20	27.84	28.87	20.98	28.76	29.54	20.06	30.14	29.92	30.29	30.58	30.38	30.69	29.75	29.85	29.72	30.15	29.03	26.33	$ 25.14
04/12/2010	19.34	22.33	25.90	24.46	23.02	21.59	20.15	18.72	17.28	15.84	14.41	12.97	11.54	10.21	10.77	11.40	15.62	22.81	26.40	13.83	15.10	12.77	11.37	$ 11.44
04/13/2010	11.47	11.54	16.43	19.53	24.96	27.32	26.10	28.00	29.61	31.70	31.55	31.07	31.65	31.33	31.23	29.58	22.75	15.78	13.60	15.15	18.86	14.81	15.18	$ 16.89
04/14/2010	19.11	16.80	14.45	14.32	16.33	20.47	23.24	15.98	14.81	14.92	31.13	32.15	33.97	31.31	31.30	28.72	28.45	30.72	29.83	27.83	30.86	29.35	25.11	$ 20.47
04/15/2010	17.35	24.76	14.17	13.72	15.50	17.91	15.63	21.43	30.89	32.86	32.30	31.89	31.15	31.66	32.22	30.71	31.13	30.06	29.57	28.82	31.64	30.18	28.16	$ 23.31
04/16/2010	24.69	16.95	14.22	20.98	22.36	22.84	26.38	29.67	32.69	32.84	33.40	32.38	33.13	32.66	32.64	32.53	32.41	32.46	32.36	30.44	31.84	27.49	20.97	$ 14.37
04/17/2010	14.28	13.47	13.17	12.76	13.42	26.12	27.34	27.76	28.31	28.26	28.14	28.15	29.52	28.44	29.39	27.85	27.83	27.99	27.91	27.36	29.01	28.75	26.71	$ 26.19
04/18/2010	17.63	16.64	24.64	15.79	13.88	16.69	14.43	14.27	30.08	24.74	29.34	29.47	22.41	22.56	25.43	25.41	24.10	27.69	16.14	21.11	30.37	25.35	18.24	$ 13.68
04/19/2010	14.02	14.64	22.88	12.49	13.27	20.46	27.98	34.37	36.86	36.29	28.75	34.76	36.44	35.82	36.42	61.73	64.32	35.97	33.68	30.79	33.11	31.79	25.44	$ 27.06
04/20/2010	26.65	20.46	15.43	11.78	20.89	30.02	31.43	36.16	34.50	36.12	35.68	36.03	52.60	32.93	32.70	32.55	32.53	32.51	32.40	32.17	30.05	27.76	21.90	$ 19.58
04/21/2010	11.79	11.10	11.09	11.11	20.35	27.53	15.57	24.24	36.13	38.26	35.64	36.15	19.75	11.14	11.14	11.33	12.62	14.17	15.12	15.03	15.28	15.05	14.12	$ 12.62
04/22/2010	11.87	11.20	15.15	13.99	15.57	15.66	15.60	15.39	15.56	15.03	15.64	16.52	16.72	16.75	18.08	29.88	31.77	31.61	31.32	31.31	31.64	31.76	24.46	$ 22.83
04/23/2010	22.35	21.27	22.79	24.33	19.70	13.42	13.94	14.92	15.15	15.30	15.42	15.74	15.88	15.86	14.11	13.85	13.91	13.92	13.86	13.37	13.66	13.68	13.74	$ 13.72
04/24/2010	13.60	13.81	14.01	14.13	13.74	13.02	13.80	13.81	13.88	16.73	27.29	29.75	29.70	28.52	28.67	28.80	25.36	31.27	19.16	13.56	16.72	16.21	15.78	$ 13.45
04/25/2010	12.09	13.11	14.09	13.77	14.68	14.98	14.06	15.24	15.25	11.80	11.33	13.53	18.60	21.86	27.51	28.54	28.14	27.74	27.33	27.05	28.91	25.42	20.50	$ 15.35
04/26/2010	13.54	15.26	15.65	12.50	11.83	13.94	22.78	29.76	29.90	13.17	12.80	25.14	33.39	32.94	32.43	31.35	31.99	31.68	31.65	30.92	29.08	20.53	11.16	$ 11.12
04/27/2010	11.16	11.13	11.09	11.17	14.93	15.65	14.36	14.90	27.87	32.22	32.17	31.60	30.91	30.80	31.11	27.51	27.77	28.73	27.17	26.46	29.60	26.97	22.05	$ 16.77
04/28/2010	14.86	14.55	15.52	16.13	19.42	12.80	15.81	16.74	26.16	31.03	31.29	30.49	26.51	18.13	21.15	30.96	25.44	17.52	24.88	17.18	27.54	23.52	23.34	$ 25.74
04/29/2010	17.07	17.21	17.33	16.88	16.72	17.59	22.09	29.01	31.66	31.31	30.25	31.56	31.94	31.07	29.91	27.97	30.25	25.04	26.29	27.91	28.65	23.07	12.80	$ 11.17
04/30/2010	11.13	11.25	11.13	11.08	11.15	19.79	20.14	11.51	13.68	19.81	35.47	34.43	23.81	12.59	12.16	17.81	20.66	18.04	26.28	23.86	26.37	26.41	26.55	$ 26.53

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

05/01/2010	26.55	26.53	27.43	26.06	25.22	21.76	16.09	15.64	16.38	24.34	25.08	26.65	25.74	26.88	26.05	21.62	20.49	20.37	23.87	22.64	30.53	26.81	18.26	$ 16.45
05/02/2010	14.66	13.79	11.93	11.20	11.27	11.28	11.28	11.22	11.38	17.55	14.19	14.60	18.17	29.86	24.74	21.03	30.10	29.74	30.17	29.79	30.43	30.25	27.83	$ 20.48
05/03/2010	14.39	14.21	14.04	11.22	11.63	13.62	16.38	30.00	23.12	27.62	34.68	36.04	39.91	35.64	77.65	83.11	51.37	93.56	35.51	141.75	94.14	58.57	28.62	$ 26.87
05/04/2010	26.50	17.71	11.98	12.84	14.99	69.41	33.09	31.85	31.60	31.49	31.37	30.62	33.01	35.03	35.46	26.53	29.43	26.13	28.70	28.81	30.79	28.31	23.48	$ 16.44
05/05/2010	15.88	14.24	14.76	15.84	16.09	16.34	16.58	16.83	19.55	27.18	27.58	28.05	27.98	28.07	29.04	29.36	32.19	30.98	32.06	31.04	29.62	28.21	20.55	$ 16.65
05/06/2010	17.47	17.37	17.22	16.40	17.66	25.16	26.96	36.62	33.78	32.83	137.15	77.81	34.52	118.84	135.32	102.63	73.38	69.95	97.82	107.24	39.58	32.15	28.92	$ 16.37
05/07/2010	11.09	11.06	13.08	24.84	25.63	28.48	29.78	109.45	106.72	41.15	72.82	110.13	118.37	103.77	137.33	81.53	26.35	30.56	35.64	68.81	40.14	17.91	15.69	$ 13.01
05/08/2010	11.50	12.16	13.52	13.81	13.42	15.52	21.32	22.47	22.46	28.16	28.82	30.28	29.48	28.35	17.63	14.52	13.59	14.17	20.43	26.86	27.66	27.83	25.65	$ 20.23
05/09/2010	14.83	11.07	10.86	10.65	10.86	12.86	14.35	17.08	16.89	24.68	18.33	16.33	13.87	13.21	13.35	15.80	15.64	16.56	14.70	13.81	13.66	13.56	14.23	$ 15.79
05/10/2010	12.49	13.63	13.63	13.61	13.62	13.15	13.16	14.04	17.34	31.07	29.67	23.87	28.55	26.50	26.07	17.85	21.06	31.36	28.59	27.70	30.66	19.23	13.74	$ 11.57
05/11/2010	11.35	11.40	12.42	15.88	22.49	28.61	27.24	27.79	29.47	30.36	30.10	30.66	31.50	31.46	31.21	30.96	30.71	30.46	30.20	29.95	29.70	28.73	27.03	$ 25.34
05/12/2010	23.65	21.95	20.26	18.56	16.92	17.44	19.08	20.72	22.36	24.01	25.65	27.29	28.90	29.46	29.47	29.48	29.50	29.51	29.52	29.54	29.54	29.39	29.17	$ 28.95
05/13/2010	28.73	28.51	28.29	28.06	27.86	28.09	28.50	28.91	29.32	29.73	30.15	30.56	30.94	30.83	30.53	30.23	29.94	29.64	29.34	29.04	28.67	27.15	25.23	$ 23.31
05/14/2010	21.39	19.47	17.55	15.63	13.95	15.55	18.19	20.84	23.48	26.12	28.76	31.40	33.84	33.88	33.20	32.52	31.84	31.16	30.48	29.80	29.05	27.44	25.58	$ 23.73
05/15/2010	21.87	20.01	18.15	16.29	14.65	15.52	17.12	18.71	20.31	21.91	23.50	25.10	26.59	26.95	26.99	27.04	27.08	27.13	27.17	27.21	26.73	24.80	22.78	$ 20.76
05/16/2010	18.75	16.73	14.71	12.70	11.60	12.96	14.45	15.94	17.43	18.91	20.40	21.89	22.92	22.78	22.57	22.36	22.16	21.95	21.74	21.53	20.98	19.71	18.42	$ 17.13
05/17/2010	15.83	14.54	13.25	11.96	11.77	13.73	15.74	17.76	19.77	21.79	23.81	25.82	27.43	28.23	29.01	29.79	30.57	31.35	32.13	32.91	32.61	30.32	27.99	$ 25.65
05/18/2010	23.32	20.98	18.65	16.31	15.76	18.29	20.88	23.47	26.05	28.64	31.23	33.82	34.77	34.09	33.40	32.71	32.03	31.34	30.65	29.97	28.61	26.59	24.58	$ 22.56
05/19/2010	20.54	18.53	16.51	14.49	14.74	17.09	19.45	21.80	24.15	26.50	28.86	31.21	32.13	31.77	31.40	31.04	30.67	30.30	29.94	29.57	28.18	26.11	24.03	$ 21.95
05/20/2010	19.87	17.79	15.72	14.25	16.09	18.41	20.73	23.06	25.38	27.70	30.03	31.93	31.82	31.44	31.06	30.69	30.31	29.93	29.55	28.93	27.14	25.19	23.24	$ 21.29
05/21/2010	19.34	17.39	15.45	14.14	15.72	17.66	19.60	21.53	23.47	25.41	27.35	28.78	28.25	27.52	26.79	26.06	25.32	24.59	23.86	22.71	19.94	17.00	14.72	$ 14.46
05/22/2010	14.33	14.20	14.08	13.95	13.83	13.70	13.69	13.90	16.31	14.77	18.55	22.26	25.97	29.68	31.22	29.38	27.49	25.60	23.71	21.82	19.94	18.05	16.51	$ 15.50
05/23/2010	14.50	13.50	12.51	11.51	12.42	14.89	17.36	19.83	22.30	24.77	27.24	29.71	30.58	30.18	29.77	29.37	28.97	28.57	28.17	27.76	26.58	24.81	23.04	$ 21.27
05/24/2010	19.50	17.73	15.96	14.22	14.74	16.63	18.52	20.41	22.30	24.20	26.09	34.34	39.51	31.53	33.67	50.73	51.43	47.89	59.68	54.91	50.13	45.35	40.58	$ 35.80
05/25/2010	31.02	26.48	26.26	27.65	29.03	30.42	31.81	33.19	34.58	35.94	36.94	37.80	38.66	39.13	38.68	38.77	37.77	35.21	32.65	30.08	27.51	24.94	22.37	$ 19.81
05/26/2010	17.95	17.06	16.18	15.30	14.42	13.54	12.65	11.78	13.17	16.35	19.53	22.72	25.90	29.08	32.27	35.32	34.19	31.03	27.86	24.70	21.53	18.37	15.21	$ 12.13
05/27/2010	11.25	11.33	11.42	11.50	11.58	11.66	11.74	11.95	14.44	17.77	21.10	24.43	27.76	34.30	43.64	34.95	37.15	28.94	26.35	23.76	21.17	18.58	15.99	$ 13.40
05/28/2010	11.96	14.11	16.51	18.91	21.31	23.71	26.12	28.52	30.44	30.98	31.42	31.87	32.31	32.76	33.21	33.65	32.91	29.73	26.48	23.22	19.96	16.71	13.53	$ 13.62
05/29/2010	15.41	17.20	18.99	20.78	22.57	24.36	26.12	27.11	27.78	28.45	29.12	29.79	30.46	31.13	31.59	30.13	28.19	26.26	24.32	22.39	20.45	18.51	16.71	$ 16.06
05/30/2010	15.67	15.29	14.91	14.52	14.14	13.75	13.61	15.49	17.85	20.20	22.55	24.90	27.26	29.61	31.53	30.87	29.77	28.67	27.57	26.47	25.37	24.27	23.19	$ 22.25
05/31/2010	21.33	20.40	19.48	18.56	17.64	16.72	16.32	18.16	20.24	22.33	24.42	26.51	28.60	30.68	31.78	30.15	28.38	26.60	24.83	23.05	21.27	19.50	18.07	$ 17.48

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

06/01/2010	16.91	16.35	15.78	15.22	14.65	14.09	15.18	19.84	24.61	29.39	34.17	38.94	41.61	39.37	36.93	34.49	34.66	31.96	46.58	30.41	28.51	26.61	24.71	$ 22.80
06/02/2010	20.90	19.00	17.24	17.86	19.37	20.87	22.38	23.89	25.39	26.90	28.40	29.81	31.19	37.89	36.32	28.55	28.83	29.10	29.37	29.65	29.92	30.19	30.34	$ 29.86
06/03/2010	29.29	28.73	28.16	27.59	27.03	26.46	26.19	27.14	28.23	29.32	30.40	31.49	32.58	33.67	34.11	32.15	29.97	27.78	25.59	23.41	21.22	19.03	17.31	$ 17.08
06/04/2010	16.95	16.83	16.70	16.58	16.45	16.33	18.62	28.39	38.70	49.01	59.32	69.52	72.73	71.66	69.36	59.90	49.28	39.00	35.45	37.10	32.60	30.64	28.68	$ 26.72
06/05/2010	24.76	22.80	20.84	19.23	20.57	22.58	24.59	26.61	28.62	30.63	32.65	34.35	33.94	33.13	32.32	31.50	30.69	29.88	29.06	28.08	26.15	24.08	22.00	$ 19.93
06/06/2010	17.86	15.78	13.71	12.11	12.91	14.06	15.21	16.35	17.50	18.64	19.79	20.90	21.84	22.77	23.69	24.62	25.55	26.47	27.40	27.68	25.72	23.58	21.43	$ 19.29
06/07/2010	17.15	15.00	12.86	11.82	14.37	17.20	20.03	22.85	25.68	28.51	31.34	33.65	34.36	34.96	35.56	36.15	36.75	27.48	16.84	16.54	16.23	15.93	15.63	$ 15.32
06/08/2010	15.02	15.57	17.98	20.46	22.94	25.42	27.89	30.37	32.85	34.58	34.76	35.01	35.49	35.04	34.91	34.56	34.53	34.76	34.55	32.97	27.42	19.39	20.33	$ 21.33
06/09/2010	26.12	24.52	14.61	21.10	23.88	24.94	27.98	30.25	31.20	28.83	28.99	31.43	31.99	32.18	32.66	33.57	33.61	31.79	31.15	31.92	36.25	34.69	31.84	$ 15.84
06/10/2010	11.86	11.42	11.33	11.33	11.33	19.67	11.59	36.52	34.03	40.42	38.65	36.10	35.61	35.48	42.14	42.17	38.08	36.22	25.74	21.56	31.49	29.11	21.51	$ 24.74
06/11/2010	14.79	20.88	15.40	15.34	17.45	25.57	24.51	23.24	27.66	33.52	45.10	19.80	14.81	15.69	15.12	14.33	14.81	14.86	18.50	28.86	31.68	31.09	31.36	$ 30.41
06/12/2010	18.59	18.09	19.26	15.02	15.16	15.68	17.48	25.74	26.06	27.30	30.83	31.77	30.65	28.65	31.85	31.29	31.44	31.45	28.37	27.06	26.83	23.30	18.15	$ 18.73
06/13/2010	19.41	24.40	17.49	14.01	13.62	13.60	13.75	20.39	26.25	26.33	26.42	27.29	27.03	28.61	30.41	29.73	29.58	28.37	27.38	25.72	26.47	26.60	20.50	$ 11.15
06/14/2010	11.17	11.10	11.61	15.84	16.00	16.08	22.94	28.11	28.05	30.73	36.21	34.72	33.67	34.49	32.81	46.16	39.54	31.67	28.36	28.53	29.12	28.42	15.89	$ 20.36
06/15/2010	11.18	11.13	11.40	11.14	11.13	11.26	11.31	12.61	25.29	43.32	95.49	95.46	95.51	95.13	95.12	95.15	69.81	30.25	30.30	30.07	30.38	30.76	30.12	$ 17.88
06/16/2010	11.19	11.13	11.11	11.15	11.24	11.52	16.87	14.15	19.10	20.61	26.86	30.44	34.99	32.87	35.86	36.17	35.55	35.32	34.08	28.93	30.06	28.36	26.87	$ 26.70
06/17/2010	26.76	26.68	18.39	17.34	26.68	26.47	11.93	13.61	23.41	11.26	11.07	11.07	11.16	25.43	32.50	35.34	31.45	31.56	27.23	23.17	21.98	16.99	17.11	$ 14.13
06/18/2010	13.78	14.79	15.29	15.23	15.09	15.12	15.33	15.69	18.92	18.36	29.88	27.53	32.93	33.59	24.67	34.63	35.04	33.26	33.46	33.11	28.84	22.07	15.37	$ 15.22
06/19/2010	18.10	15.32	13.63	13.38	13.14	12.89	12.64	12.39	12.14	11.89	11.64	11.39	24.08	25.82	29.36	28.28	21.61	20.59	23.06	26.69	25.84	29.25	21.27	$ 14.39
06/20/2010	12.43	11.20	11.44	11.74	12.03	12.33	12.63	12.92	13.22	13.09	13.23	13.41	17.35	17.31	25.08	38.41	33.47	35.05	35.12	33.85	34.24	30.41	11.94	$ 13.65
06/21/2010	17.28	22.17	14.87	13.70	13.11	11.21	15.71	21.89	27.00	28.05	32.50	32.49	33.47	31.74	16.76	14.81	14.75	20.92	30.86	29.13	28.17	29.64	29.35	$ 23.83
06/22/2010	19.60	13.91	13.37	12.64	11.52	10.95	13.46	14.24	14.82	23.10	27.84	29.03	26.77	28.85	29.20	29.90	29.31	29.09	27.49	28.34	30.53	30.43	29.99	$ 28.67
06/23/2010	28.69	28.77	27.09	22.86	18.61	14.60	14.08	15.33	15.97	29.82	30.26	32.61	34.43	36.06	41.16	38.04	44.41	45.58	34.09	34.16	34.74	34.24	32.92	$ 19.17
06/24/2010	13.52	11.90	11.67	12.15	14.08	22.72	27.06	31.83	32.69	35.00	34.96	35.52	35.18	34.81	35.29	35.26	35.05	35.09	34.83	34.19	24.06	14.46	13.20	$ 12.27
06/25/2010	14.27	14.99	15.09	15.19	15.20	14.38	15.04	23.59	31.90	30.85	31.56	33.51	36.74	34.95	34.37	35.15	34.04	33.12	34.09	30.54	14.29	14.51	16.74	$ 24.36
06/26/2010	24.24	19.68	26.08	25.05	24.53	15.69	27.85	28.69	28.87	30.94	33.59	34.52	34.65	35.80	35.46	34.18	34.69	35.28	35.18	35.22	33.86	34.21	32.50	$ 30.97
06/27/2010	23.30	19.94	17.68	20.16	15.50	16.50	13.58	11.27	18.43	29.16	31.22	31.63	32.15	30.76	25.17	17.79	26.48	27.32	28.38	29.68	28.56	29.08	24.30	$ 23.17
06/28/2010	16.20	14.92	12.17	12.85	14.97	15.56	15.47	15.10	15.79	17.03	19.91	24.75	25.69	28.43	31.72	31.40	30.77	30.19	29.80	20.69	16.43	16.92	17.27	$ 17.26
06/29/2010	16.01	16.33	17.30	17.32	16.95	16.58	18.58	18.69	30.17	24.53	21.25	33.17	32.25	32.56	32.56	47.90	72.63	59.55	39.08	36.57	33.64	31.62	30.16	$ 21.20
06/30/2010	17.46	17.45	17.42	17.42	17.42	17.42	17.41	16.78	21.14	22.23	22.01	26.65	34.67	36.32	36.81	36.91	37.69	32.99	29.99	29.88	19.40	21.83	12.83	$ 11.57

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR																								
07/01/2010	13.33	13.45	13.61	15.26	13.44	12.98	13.36	13.26	18.89	20.85	29.65	32.87	39.53	32.74	29.32	32.15	32.36	34.27	34.11	28.44	33.59	26.58	14.15	$ 14.62
07/02/2010	13.08	12.91	13.35	14.46	14.19	13.36	14.96	15.44	14.02	16.95	26.00	23.73	33.00	24.24	23.95	33.01	31.33	50.88	61.08	32.19	33.72	27.88	15.72	$ 13.41
07/03/2010	13.65	13.15	13.00	12.57	13.30	13.26	13.17	13.46	13.12	13.07	22.52	23.64	35.55	32.52	34.08	35.59	17.91	11.51	19.56	23.97	16.45	13.98	18.70	$ 15.06
07/04/2010	15.53	13.13	12.84	12.55	12.26	11.97	11.68	11.39	11.82	14.59	24.33	28.30	30.46	31.82	29.75	19.39	16.05	16.72	16.71	17.15	19.38	22.93	23.15	$ 19.33
07/05/2010	15.10	14.59	14.32	14.30	14.50	14.59	14.70	15.83	23.69	29.83	33.51	36.83	35.46	38.34	34.29	18.18	15.54	15.91	16.37	16.94	17.31	18.28	18.86	$ 17.44
07/06/2010	16.70	16.23	16.03	16.01	16.01	16.02	16.41	19.11	19.14	26.69	28.67	29.07	33.13	35.14	30.78	34.08	37.76	33.89	35.20	34.31	52.91	31.53	27.03	$ 24.61
07/07/2010	27.41	21.58	16.92	16.57	18.66	17.32	25.95	25.55	27.88	29.96	52.25	35.19	59.54	40.16	60.88	68.05	55.52	74.75	37.39	33.43	37.28	31.18	29.46	$ 30.10
07/08/2010	28.96	25.76	29.28	28.87	24.82	26.24	24.21	29.04	31.26	30.74	31.25	32.08	35.42	35.27	55.15	42.95	57.25	30.29	30.08	31.02	31.89	30.92	24.67	$ 27.68
07/09/2010	27.49	21.77	18.00	23.93	17.79	29.63	31.42	32.93	32.19	33.72	34.33	34.39	33.51	34.49	34.59	32.62	31.31	31.04	31.13	32.51	31.75	31.47	28.08	$ 28.78
07/10/2010	28.53	16.85	16.06	15.80	15.60	15.44	15.44	19.27	30.09	28.56	27.67	30.60	28.88	29.28	29.43	30.83	30.23	32.21	31.89	32.20	29.83	29.93	26.35	$ 18.97
07/11/2010	14.03	15.46	15.29	15.25	15.25	15.26	15.30	25.25	28.25	29.79	30.68	32.03	31.91	35.00	35.15	35.02	34.90	31.87	18.01	15.93	15.49	15.37	13.75	$ 12.88
07/12/2010	11.36	14.51	13.77	15.32	18.35	31.56	27.02	30.36	32.87	31.60	34.73	36.97	38.63	37.98	32.38	26.97	18.65	25.96	30.84	32.86	34.36	32.95	31.35	$ 22.56
07/13/2010	19.90	17.59	17.42	25.21	25.47	14.01	25.64	24.38	16.52	14.03	17.98	30.61	32.28	32.56	32.66	34.47	34.41	34.37	34.06	34.17	34.40	29.38	16.82	$ 15.47
07/14/2010	15.46	15.44	15.41	15.41	15.42	14.56	14.91	23.61	32.01	31.44	33.32	34.71	34.51	35.26	34.12	32.00	34.12	33.20	32.71	32.54	32.59	33.50	33.64	$ 34.12
07/15/2010	16.86	11.18	15.11	22.47	27.30	30.66	28.45	31.89	33.88	35.89	36.73	39.75	41.81	39.47	40.81	34.45	35.46	36.19	35.11	35.20	33.54	32.15	30.42	$ 31.60
07/16/2010	19.49	14.55	14.63	15.13	14.13	16.62	26.98	27.94	27.57	32.99	33.38	33.44	34.29	34.17	37.34	35.58	32.39	32.12	32.18	32.07	31.73	31.70	31.04	$ 17.81
07/17/2010	24.08	21.18	20.03	15.77	25.17	26.96	24.14	18.52	16.17	16.89	28.13	33.66	35.42	34.65	35.25	33.13	33.43	35.78	31.88	32.39	20.96	23.97	28.15	$ 25.69
07/18/2010	19.73	20.85	15.58	17.93	16.62	14.08	14.22	21.16	27.92	25.48	15.15	21.53	21.64	30.97	31.77	31.76	37.36	35.18	32.12	32.21	28.95	30.70	29.11	$ 24.35
07/19/2010	17.45	16.14	11.88	12.92	13.58	24.48	22.83	28.63	34.10	34.36	33.57	34.43	33.46	35.09	32.53	35.33	35.37	35.39	35.39	33.84	33.42	16.19	13.96	$ 20.93
07/20/2010	12.01	11.47	11.71	11.30	11.23	23.91	21.29	23.88	18.87	23.21	29.56	30.28	32.59	32.41	33.12	33.89	32.48	34.02	35.08	33.55	33.70	32.66	32.82	$ 16.25
07/21/2010	12.22	11.48	11.15	11.11	11.11	11.18	12.65	17.87	29.83	29.71	31.33	31.64	31.85	32.05	32.26	32.46	32.67	32.87	32.40	30.34	28.22	26.10	23.98	$ 21.86
07/22/2010	19.74	17.62	16.80	18.65	20.59	22.52	24.45	26.39	28.32	30.25	31.22	31.19	31.16	31.13	31.10	31.07	31.04	31.01	30.22	28.65	27.09	25.53	23.97	$ 22.40
07/23/2010	20.84	19.28	18.30	17.81	17.32	16.83	16.34	15.85	15.36	14.89	24.79	43.34	61.89	35.26	16.58	16.60	16.62	16.64	16.66	16.67	16.69	16.69	16.39	$ 15.99
07/24/2010	15.59	15.19	14.69	14.01	13.34	12.66	11.99	11.77	15.44	19.99	24.55	29.11	33.66	38.22	40.90	34.86	32.87	30.51	27.14	23.73	20.33	16.92	13.52	$ 11.35
07/25/2010	11.59	11.89	12.19	12.49	12.79	13.09	13.39	13.68	13.96	14.23	14.51	14.79	15.06	15.34	15.62	16.41	18.06	19.72	21.38	23.04	24.70	26.36	28.02	$ 28.23
07/26/2010	26.33	24.41	22.49	20.57	18.65	16.74	14.82	15.16	18.72	22.30	25.88	29.47	33.05	36.63	40.07	40.34	39.31	38.29	37.26	36.23	35.21	34.18	33.16	$ 32.21
07/27/2010	31.27	30.33	29.39	28.45	27.72	27.59	27.49	27.40	27.31	27.22	27.13	27.03	27.02	27.25	27.49	27.73	27.97	28.21	28.45	28.69	28.85	28.77	28.68	$ 28.60
07/28/2010	28.51	28.42	28.33	28.24	28.61	29.99	31.40	32.82	34.23	35.64	37.59	40.28	44.99	50.24	55.48	60.73	65.97	71.22	33.07	27.19	25.39	23.58	21.78	$ 19.98
07/29/2010	18.18	16.38	16.59	20.34	24.16	27.97	31.79	35.61	39.42	43.23	44.08	42.71	41.35	39.98	38.62	37.25	35.88	34.41	31.70	28.64	25.57	22.50	19.43	$ 16.36
07/30/2010	13.29	12.47	16.54	20.79	25.03	29.28	33.52	37.77	42.01	43.50	41.84	40.18	38.52	36.87	35.21	33.55	31.89	30.05	28.02	26.00	23.97	21.94	19.92	$ 17.89
07/31/2010	15.87	15.31	16.11	16.90	17.70	18.50	19.29	20.09	20.89	22.22	23.91	25.61	27.30	29.00	30.70	32.39	32.42	30.28	28.14	25.99	23.85	21.70	19.56	$ 17.42

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

08/01/2010	16.08	15.78	15.49	15.20	14.91	14.62	14.33	14.04	15.61	19.54	23.47	27.41	31.34	32.11	29.72	27.32	24.93	22.53	20.13	17.74	15.34	12.95	12.13	$ 14.28
08/02/2010	16.51	18.74	20.96	23.19	25.42	27.64	29.00	28.95	28.87	28.79	28.71	28.64	28.56	28.48	29.07	30.70	32.35	33.97	34.00	33.14	32.27	31.41	30.55	$ 29.68
08/03/2010	28.82	27.98	28.23	29.05	29.86	30.67	31.48	32.29	33.10	33.85	33.57	32.94	32.30	31.67	31.03	30.40	29.76	29.15	28.81	28.56	28.31	28.06	27.81	$ 27.55
08/04/2010	27.30	27.07	26.96	26.88	26.81	26.73	21.90	27.06	29.57	31.66	32.50	34.83	63.92	87.50	94.26	79.41	78.16	76.63	59.18	35.82	32.20	31.89	30.29	$ 26.05
08/05/2010	16.06	15.88	14.80	14.77	15.19	15.95	23.14	28.25	29.95	30.09	32.09	31.85	34.24	34.44	35.01	35.13	34.92	34.95	33.15	29.89	21.03	24.13	17.34	$ 16.02
08/06/2010	13.85	23.25	20.39	14.31	14.96	15.07	13.28	17.56	26.88	27.97	23.97	32.25	31.25	33.43	28.37	18.66	22.11	33.66	33.76	33.24	33.09	24.82	21.32	$ 14.86
08/07/2010	14.37	12.96	13.42	13.50	27.24	27.99	16.34	13.81	14.97	21.23	25.87	33.45	33.58	34.71	35.68	32.10	31.96	28.82	29.70	29.16	29.66	25.97	21.29	$ 14.38
08/08/2010	15.38	13.90	13.19	12.11	12.14	11.85	12.21	13.83	15.84	16.32	14.90	14.76	28.91	31.03	32.12	35.74	33.86	34.56	34.64	34.72	29.96	28.99	24.86	$ 21.53
08/09/2010	19.31	16.39	15.65	15.07	15.01	16.06	16.41	20.69	29.79	34.18	84.77	78.74	35.78	30.12	28.83	23.80	32.42	31.49	31.98	32.46	32.37	31.14	31.20	$ 30.08
08/10/2010	24.31	20.66	23.05	27.40	27.93	29.46	27.88	34.13	38.07	32.76	32.63	37.72	51.18	58.45	90.95	84.47	86.43	55.53	30.32	30.68	29.57	30.67	28.32	$ 21.71
08/11/2010	24.54	12.05	11.83	11.80	16.89	29.57	29.50	29.78	30.62	43.39	87.16	111.96	36.28	33.32	70.15	74.01	39.96	39.78	34.17	35.48	31.28	27.79	21.14	$ 11.13
08/12/2010	11.13	11.17	12.01	20.76	28.25	29.07	29.55	29.36	29.37	28.76	32.69	31.43	34.75	45.74	17.25	17.23	14.55	13.01	11.30	11.91	13.43	16.01	17.17	$ 16.06
08/13/2010	13.16	11.41	11.21	11.08	10.96	11.10	11.27	14.02	14.25	12.78	22.23	22.69	17.13	25.91	25.56	27.08	27.21	22.26	19.90	19.99	21.36	20.02	12.66	$ 13.76
08/14/2010	18.09	22.42	23.16	25.90	25.85	19.75	18.16	17.26	22.35	23.90	23.61	23.67	26.17	26.15	25.86	25.66	25.77	26.09	25.61	26.04	26.06	26.02	26.04	$ 26.06
08/15/2010	23.47	18.24	11.24	17.02	19.13	18.05	13.88	15.42	22.27	25.68	26.66	27.49	28.99	29.52	26.86	26.66	27.25	27.12	26.87	26.23	25.94	25.86	25.89	$ 26.01
08/16/2010	25.95	24.11	14.33	15.59	22.60	25.64	25.11	26.27	26.50	26.97	26.72	26.78	26.30	26.53	26.27	26.61	26.60	26.23	26.36	26.31	26.17	22.68	18.38	$ 16.06
08/17/2010	13.16	11.68	11.63	11.68	15.07	15.90	15.96	16.58	25.91	40.95	40.67	37.62	37.23	33.85	29.93	29.00	28.93	29.06	30.69	31.26	30.79	28.27	16.97	$ 16.91
08/18/2010	27.44	13.31	11.38	11.35	22.07	28.11	28.14	24.29	28.39	28.97	28.68	29.39	33.56	33.55	34.18	34.11	30.24	29.70	29.87	29.31	28.57	28.22	28.53	$ 18.55
08/19/2010	14.02	13.31	11.35	18.34	22.93	26.42	28.26	25.88	26.72	27.11	28.95	30.64	29.28	32.64	35.15	33.13	34.35	36.45	35.01	34.98	34.97	34.64	33.47	$ 33.59
08/20/2010	29.78	21.38	17.44	12.66	28.09	28.23	28.23	28.35	29.06	29.57	30.82	29.67	30.22	30.04	30.76	30.62	30.74	29.95	29.39	16.92	11.16	11.14	11.17	$ 15.71
08/21/2010	23.09	28.50	28.34	28.27	28.35	28.28	28.32	33.59	29.75	28.83	28.91	28.77	29.39	32.62	28.92	28.95	29.17	28.84	28.87	28.75	28.80	28.80	28.80	$ 28.80
08/22/2010	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	$ 28.80
08/23/2010	28.80	28.80	28.80	28.80	28.80	28.80	29.20	28.67	29.58	29.47	27.00	11.16	11.20	10.26	10.61	11.03	11.06	11.07	11.19	11.06	11.04	11.03	11.10	$ 11.07
08/24/2010	11.08	11.07	11.13	11.18	11.19	11.28	12.23	11.39	12.00	12.62	12.44	17.95	12.07	18.54	15.89	13.84	16.81	18.93	20.92	20.95	25.28	25.39	25.38	$ 23.24
08/25/2010	16.99	12.95	11.32	11.32	11.28	11.40	15.67	18.65	28.00	30.28	30.68	31.32	34.27	30.96	30.89	30.27	29.94	29.87	30.83	29.82	29.22	27.18	15.19	$ 12.39
08/26/2010	10.96	11.98	11.88	12.24	17.13	16.20	17.19	15.40	12.01	11.18	17.90	23.37	29.15	29.57	29.50	27.55	29.22	29.45	27.22	29.72	30.65	29.04	26.20	$ 17.20
08/27/2010	15.96	16.86	14.98	13.91	16.99	13.79	13.03	12.09	12.55	14.76	16.27	20.14	20.91	21.01	21.12	21.37	21.35	22.03	21.71	20.34	20.94	17.94	14.67	$ 14.03
08/28/2010	13.26	13.04	12.45	13.03	10.65	11.21	11.34	13.32	13.76	14.21	14.79	15.25	18.58	31.16	157.25	154.87	96.19	29.10	29.14	19.95	21.03	20.28	17.65	$ 14.24
08/29/2010	14.14	14.04	22.40	15.60	9.44	10.44	13.48	13.61	13.97	14.55	23.91	33.20	33.21	32.11	32.29	34.14	33.83	34.02	32.91	32.81	35.13	34.72	29.52	$ 16.34
08/30/2010	11.78	11.01	12.22	13.25	13.51	19.57	20.04	25.23	13.48	25.29	30.11	28.28	30.89	31.73	34.70	31.29	34.69	34.79	33.81	34.88	39.61	39.14	33.64	$ 30.80
08/31/2010	21.00	12.87	11.09	11.07	11.10	11.19	11.47	20.11	18.52	24.34	20.94	27.81	33.95	39.58	57.88	36.07	35.27	36.76	34.34	34.67	34.13	34.38	31.77	$ 22.10

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR																								
09/01/2010	16.96	14.38	13.15	13.40	13.67	15.04	14.24	28.82	32.04	31.93	31.73	31.74	33.42	31.44	33.67	34.70	35.20	33.87	33.23	33.29	31.27	23.95	17.01	$ 15.16
09/02/2010	13.44	12.80	12.80	14.19	14.37	15.57	16.87	23.44	28.92	30.63	33.64	35.16	34.49	35.09	34.91	35.30	38.88	38.11	36.26	27.89	18.43	20.34	15.00	$ 13.92
09/03/2010	13.60	13.60	13.59	13.89	14.74	17.83	17.93	16.36	16.55	27.25	29.30	26.94	16.18	22.02	17.42	14.38	14.22	14.30	13.17	14.14	13.94	13.93	13.37	$ 11.23
09/04/2010	10.78	11.50	12.05	12.60	10.92	10.87	10.78	11.69	13.20	13.26	12.96	12.60	12.18	11.21	12.44	13.42	13.48	13.46	13.23	13.67	14.42	14.60	24.44	$ 13.31
09/05/2010	11.20	11.23	11.14	11.12	10.99	10.55	10.11	10.26	10.99	11.02	17.55	19.61	14.03	13.60	13.60	13.60	13.65	13.61	13.61	13.51	13.33	13.54	18.51	$ 12.99
09/06/2010	10.40	7.22	7.21	7.21	7.21	7.26	7.25	7.32	7.37	7.41	7.68	8.63	9.62	10.60	20.57	22.77	25.90	26.54	19.42	21.27	23.43	25.70	26.87	$ 20.92
09/07/2010	12.71	12.20	11.62	11.15	12.74	12.47	13.76	13.63	13.59	13.80	12.91	11.92	14.13	17.50	33.64	33.19	32.32	29.24	30.57	27.01	25.04	15.21	14.90	$ 15.28
09/08/2010	16.11	9.60	10.88	11.00	11.02	11.13	11.56	11.45	25.06	25.00	25.99	28.79	29.19	28.55	28.98	29.37	29.20	29.30	27.81	29.16	24.48	16.79	14.16	$ 14.90
09/09/2010	23.30	12.98	13.12	12.52	12.96	14.32	22.97	16.47	16.39	16.75	20.96	16.40	17.07	19.23	22.83	27.64	21.99	22.79	26.04	28.11	27.86	14.63	14.84	$ 14.82
09/10/2010	16.66	15.06	12.39	14.99	16.08	16.50	22.63	25.96	25.90	21.91	17.81	26.90	27.08	27.93	20.91	18.39	18.42	17.12	15.65	13.83	16.35	16.79	16.32	$ 15.72
09/11/2010	13.65	13.56	13.59	13.60	13.87	13.81	13.58	14.12	11.46	12.57	13.68	14.80	15.51	15.64	16.02	17.59	17.94	18.13	17.75	18.02	18.16	17.01	15.20	$ 12.73
09/12/2010	12.15	11.91	11.79	12.30	11.91	11.93	12.52	14.01	14.59	15.47	15.40	16.17	13.01	16.81	18.71	20.57	22.78	30.36	25.93	19.38	19.01	18.53	16.59	$ 16.37
09/13/2010	16.74	11.28	10.78	11.08	11.15	11.21	11.64	13.94	15.59	15.64	15.99	18.02	18.60	16.44	15.95	22.51	22.80	20.12	28.36	27.42	25.86	19.12	20.47	$ 20.42
09/14/2010	20.24	14.88	17.04	17.96	18.83	18.65	15.19	20.02	17.77	18.05	19.15	24.72	25.41	21.49	26.76	28.86	28.58	28.12	28.92	26.56	19.44	17.24	13.83	$ 11.10
09/15/2010	11.02	11.03	11.93	14.48	13.97	15.06	16.00	20.31	18.90	19.01	20.34	23.76	31.51	32.33	29.98	29.22	23.95	20.46	24.18	18.48	14.92	18.25	21.42	$ 17.74
09/16/2010	12.24	11.99	14.22	16.90	14.89	16.15	15.35	20.97	25.48	32.21	31.87	31.95	29.14	28.86	31.72	28.75	26.89	27.19	26.42	26.60	29.13	22.91	20.52	$ 12.31
09/17/2010	11.11	11.05	11.04	11.03	11.03	11.07	11.17	11.25	18.27	30.94	26.88	27.72	29.87	31.83	29.71	31.85	32.02	32.10	29.00	28.33	26.60	18.75	16.08	$ 13.94
09/18/2010	13.45	13.31	13.24	13.21	13.01	13.40	12.97	13.30	15.22	15.28	16.88	21.04	24.24	23.98	25.62	26.07	31.76	31.70	29.47	22.39	22.93	20.84	19.28	$ 16.18
09/19/2010	13.57	13.50	13.56	13.44	12.33	11.66	13.99	14.84	14.50	15.49	16.37	20.41	22.77	23.69	22.82	22.16	21.12	24.10	21.52	25.47	30.78	26.78	18.13	$ 14.98
09/20/2010	16.51	17.98	19.02	22.08	17.43	16.44	15.72	15.84	19.05	28.98	31.59	23.82	30.65	32.13	30.42	27.95	29.53	29.92	30.13	25.16	21.76	20.61	17.18	$ 15.09
09/21/2010	16.37	17.09	13.18	13.61	13.37	14.98	15.24	14.97	22.12	17.97	21.44	27.03	32.19	46.04	33.66	27.86	27.89	28.18	28.49	28.58	28.44	23.66	18.74	$ 21.08
09/22/2010	15.23	15.86	14.86	15.28	15.04	17.18	22.40	20.96	24.95	26.58	27.54	28.71	30.10	29.21	30.46	29.69	29.13	27.68	29.74	31.83	24.37	23.29	17.09	$ 15.35
09/23/2010	14.52	12.02	11.02	11.05	12.86	16.97	15.23	17.53	24.60	28.33	31.44	24.37	26.23	26.80	30.60	28.28	28.19	28.45	28.00	36.87	21.69	25.76	16.77	$ 13.43
09/24/2010	14.51	14.25	13.46	14.55	15.38	18.58	28.29	26.01	27.82	26.23	25.58	28.71	28.59	28.59	28.98	27.58	26.07	17.50	16.46	17.28	14.50	14.34	13.84	$ 13.90
09/25/2010	13.26	13.01	11.60	11.06	11.03	11.04	11.04	11.07	11.10	11.15	15.93	21.90	18.71	21.02	27.77	30.46	24.11	18.00	16.51	31.02	21.54	15.01	13.75	$ 13.58
09/26/2010	12.91	12.55	12.65	11.91	13.04	12.75	12.36	11.90	12.29	13.40	14.07	14.13	13.91	13.78	14.22	14.06	14.37	17.07	15.61	18.76	18.63	17.13	16.64	$ 15.94
09/27/2010	13.37	12.54	11.68	10.82	10.36	11.26	12.72	12.60	13.80	15.12	16.42	23.66	31.79	24.30	23.20	22.25	29.06	29.21	31.98	34.23	30.04	23.34	14.60	$ 14.58
09/28/2010	12.90	11.93	12.52	12.47	11.80	13.14	14.05	14.49	28.30	28.59	28.92	28.97	29.37	29.56	25.31	29.66	30.61	22.85	14.99	20.05	21.65	16.12	13.98	$ 12.83
09/29/2010	11.76	13.94	11.57	11.05	11.51	14.40	13.92	16.75	17.99	18.25	20.46	18.52	19.67	18.00	19.77	19.74	29.14	23.27	18.93	29.43	25.38	21.86	15.70	$ 14.15
09/30/2010	13.68	13.32	12.99	12.23	10.57	12.63	13.32	21.87	26.37	24.96	22.22	27.01	27.50	27.47	22.20	25.48	27.16	27.49	27.76	28.44	26.40	17.70	16.79	$ 15.49

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

10/01/2010	13.34	11.41	11.55	11.09	11.09	13.23	13.97	19.10	22.95	29.62	26.85	24.19	22.46	28.13	30.21	23.34	21.45	16.68	14.13	14.57	15.64	15.31	14.71	$ 14.19
10/02/2010	13.50	13.26	12.94	12.15	12.38	13.68	11.78	11.25	11.41	14.78	17.26	14.81	14.72	14.85	14.33	14.11	14.19	14.60	14.33	15.34	16.83	17.45	14.37	$ 13.55
10/03/2010	12.46	11.98	11.31	11.47	11.59	12.87	13.01	13.30	13.30	16.93	26.59	21.27	19.03	17.03	14.69	15.12	18.09	16.23	17.47	28.01	20.85	18.75	14.53	$ 13.79
10/04/2010	13.38	13.13	12.66	11.84	14.02	15.31	13.03	20.20	24.67	24.93	25.99	27.72	26.15	25.56	22.12	28.76	26.17	24.86	22.83	26.30	24.51	19.35	15.66	$ 13.65
10/05/2010	13.69	13.66	13.66	13.89	18.75	20.84	18.36	20.05	17.55	26.78	23.81	22.01	22.47	27.72	21.50	21.67	21.60	22.10	18.30	20.16	17.76	17.19	17.06	$ 17.00
10/06/2010	16.96	16.94	16.91	16.90	16.89	16.90	16.93	16.91	16.94	17.16	19.72	20.80	22.62	25.86	23.65	27.88	29.67	29.34	28.29	27.96	24.57	26.33	26.11	$ 25.94
10/07/2010	25.73	24.82	25.88	26.10	26.35	23.41	19.56	17.33	21.09	25.00	20.00	21.70	22.25	27.37	27.87	28.14	24.62	23.17	28.25	28.26	28.30	24.85	22.00	$ 20.00
10/08/2010	17.60	17.45	17.41	17.40	17.83	18.52	22.62	29.95	25.50	25.22	24.59	22.75	21.30	19.33	20.47	20.54	20.57	20.73	19.16	20.21	18.34	18.25	17.67	$ 20.87
10/09/2010	15.57	13.42	13.64	13.97	14.17	14.72	15.19	15.39	15.50	15.61	15.74	15.88	16.43	16.16	16.44	16.49	16.54	16.55	16.47	16.53	16.44	16.28	15.77	$ 14.84
10/10/2010	13.85	13.31	13.18	13.14	13.88	14.31	14.52	14.57	14.65	15.44	16.75	17.12	17.37	17.43	18.66	20.65	17.97	17.31	17.52	17.64	17.46	17.17	16.13	$ 15.65
10/11/2010	15.65	15.74	15.84	15.73	15.71	16.00	16.54	16.64	17.10	23.78	30.57	31.99	30.35	30.78	30.75	29.51	28.99	24.78	25.44	28.94	27.14	20.24	17.46	$ 16.95
10/12/2010	15.79	15.77	16.20	16.35	17.34	17.33	21.60	21.24	17.48	18.94	19.41	22.92	23.04	24.04	26.23	22.90	22.56	20.38	21.20	20.38	19.65	18.38	17.47	$ 17.43
10/13/2010	17.45	17.32	17.18	17.41	16.60	17.04	23.40	23.79	27.44	29.84	24.82	22.76	21.92	25.49	20.00	18.58	17.81	18.26	21.65	20.52	18.64	18.93	13.14	$ 12.54
10/14/2010	11.05	11.88	11.46	11.68	13.51	17.06	15.68	18.15	16.84	18.48	23.84	31.40	22.85	17.84	17.01	17.05	17.34	17.42	16.26	22.01	25.94	16.59	13.53	$ 13.71
10/15/2010	14.45	13.26	16.59	16.60	16.62	16.63	16.54	16.50	19.06	20.69	27.77	23.43	21.61	16.53	18.24	22.03	21.86	20.24	26.38	26.59	21.89	17.55	11.77	$ 13.15
10/16/2010	13.80	12.09	11.91	14.54	13.52	13.88	15.29	16.59	18.76	20.65	23.52	21.73	19.79	19.54	16.62	16.78	16.62	16.50	18.71	20.63	17.82	14.24	14.22	$ 14.27
10/17/2010	12.98	12.56	12.97	13.26	12.77	11.84	13.80	13.90	18.98	25.41	28.45	28.63	28.72	19.21	21.41	25.22	26.57	23.36	18.19	20.51	18.44	15.47	16.11	$ 13.78
10/18/2010	11.82	11.46	11.05	11.04	11.70	13.02	13.83	18.76	19.67	20.39	20.92	25.72	28.14	29.88	26.06	21.01	31.95	28.97	28.48	28.83	22.02	17.75	18.72	$ 14.63
10/19/2010	14.77	11.60	11.03	11.78	11.56	14.33	22.45	20.41	14.91	29.24	71.44	40.19	17.68	22.01	21.40	17.19	17.58	20.46	22.87	28.06	22.97	18.26	14.31	$ 12.33
10/20/2010	10.71	11.08	13.34	12.82	12.80	11.09	23.29	15.89	17.01	37.91	47.92	30.74	26.30	21.49	16.94	19.08	20.55	18.55	20.49	20.93	20.58	20.60	14.88	$ 13.78
10/21/2010	13.46	13.30	13.09	12.54	13.12	17.11	26.88	19.02	24.73	28.92	26.86	23.14	26.47	27.79	19.42	20.34	20.56	19.18	26.00	26.50	24.19	21.64	16.34	$ 14.21
10/22/2010	11.34	11.06	12.40	11.56	13.00	20.82	25.78	23.68	28.58	28.21	26.48	17.94	16.84	17.32	18.24	17.70	17.13	16.71	17.24	17.41	16.90	16.09	11.33	$ 11.16
10/23/2010	11.19	11.25	11.18	11.17	11.21	11.24	14.84	16.63	17.78	20.51	20.70	19.85	18.13	17.77	16.18	14.25	16.09	16.50	17.79	20.63	20.49	15.44	13.69	$ 11.81
10/24/2010	11.11	11.17	11.09	11.08	11.09	11.09	11.12	11.13	11.71	14.63	15.64	17.80	21.74	20.46	18.85	15.06	17.92	20.88	20.13	24.58	27.87	24.60	14.13	$ 12.25
10/25/2010	12.42	11.21	12.62	12.47	12.24	14.76	14.82	17.33	20.94	21.27	20.58	20.48	20.21	20.66	26.01	20.25	17.42	19.97	26.25	27.54	26.11	24.08	14.21	$ 13.53
10/26/2010	13.10	12.09	12.01	12.66	12.84	13.19	12.61	12.40	17.52	19.78	21.91	22.87	19.78	20.77	17.42	25.39	21.36	16.33	18.48	17.38	20.62	15.26	11.08	$ 11.05
10/27/2010	9.90	9.42	12.01	14.53	14.55	15.95	24.66	18.24	19.38	21.21	21.01	20.93	20.83	20.84	18.52	18.53	19.86	20.24	20.53	25.32	26.76	22.49	13.82	$ 13.92
10/28/2010	11.42	11.39	12.44	12.85	12.45	21.61	24.51	33.29	33.64	33.97	31.46	32.77	30.79	31.54	29.13	31.19	29.71	29.32	21.98	13.22	14.58	14.83	14.76	$ 13.95
10/29/2010	13.49	11.13	11.86	13.33	13.83	14.22	16.10	15.57	11.95	14.40	14.52	14.70	26.48	29.78	18.28	15.74	18.41	17.66	16.24	11.46	14.82	13.41	12.64	$ 13.13
10/30/2010	20.95	18.28	21.61	25.64	25.18	25.14	25.52	32.13	29.73	14.61	14.62	14.82	20.02	24.03	22.68	25.10	16.94	20.22	19.82	19.37	18.93	18.49	18.04	$ 17.60
10/31/2010	17.16	16.71	16.27	15.83	15.39	14.94	14.50	14.15	14.34	14.42	14.48	14.54	14.60	14.65	14.71	14.77	14.82	14.88	14.93	15.17	16.45	16.51	16.58	$ 16.78

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

11/01/2010	16.83	16.85	16.82	16.65	17.12	20.91	26.29	29.04	28.78	29.17	29.59	30.63	33.05	32.87	32.83	33.01	32.88	33.04	33.16	33.51	33.02	32.64	25.56	$ 15.02
11/02/2010	13.57	14.24	14.55	14.94	15.78	21.68	26.20	29.21	30.06	33.06	29.28	18.08	27.95	22.94	18.82	24.25	28.00	18.88	15.46	22.61	21.45	19.10	15.80	$ 14.58
11/03/2010	19.28	16.43	17.12	18.42	20.41	23.78	25.94	26.83	29.46	30.09	31.52	30.67	31.28	31.17	25.60	24.33	20.36	19.96	19.82	23.69	23.70	17.60	16.14	$ 15.35
11/04/2010	13.95	13.96	15.10	14.97	15.81	23.68	31.43	32.01	31.90	31.80	32.44	31.47	31.72	28.28	25.17	24.51	32.75	24.48	17.21	15.73	15.19	14.65	14.12	$ 13.58
11/05/2010	13.04	12.50	11.97	13.74	16.59	18.11	24.64	32.75	32.15	32.86	31.54	31.93	30.29	32.17	30.14	31.79	32.82	32.81	30.59	32.75	27.87	32.41	30.83	$ 16.06
11/06/2010	14.29	14.19	14.21	14.69	30.21	17.56	30.77	32.97	34.38	34.04	33.12	33.40	32.81	28.71	20.83	31.99	24.90	20.99	32.02	32.72	29.55	27.44	27.88	$ 22.42
11/07/2010	23.03	22.07	22.73	22.54	18.24	17.04	20.78	25.86	30.31	35.64	26.92	22.52	22.09	17.24	17.22	20.82	16.52	14.95	29.03	35.78	35.23	24.47	16.59	$ 16.57
11/08/2010	15.81	15.58	15.07	14.82	15.08	15.44	18.19	25.16	34.79	33.89	27.77	27.12	31.01	26.46	16.01	15.16	14.79	16.91	27.66	28.37	28.34	23.09	16.03	$ 15.56
11/09/2010	21.94	14.52	17.72	16.04	14.99	15.80	22.75	25.87	25.94	32.72	31.68	32.71	30.76	24.66	24.44	19.66	16.70	17.74	27.53	21.88	22.83	18.29	16.65	$ 16.27
11/10/2010	15.85	16.00	14.94	14.09	15.32	15.24	17.39	16.69	19.85	15.34	14.58	14.84	17.15	20.94	24.73	27.93	29.58	30.49	31.94	32.77	29.52	28.87	22.24	$ 23.32
11/11/2010	27.03	14.86	19.36	14.32	18.21	15.21	15.85	16.14	17.64	44.75	24.43	21.68	25.70	21.91	20.97	21.05	20.92	20.37	21.02	21.10	21.08	24.45	20.21	$ 15.75
11/12/2010	14.49	13.77	13.76	13.33	13.85	13.87	15.69	16.87	20.16	24.48	16.89	18.64	21.11	21.51	20.98	20.54	16.17	15.46	18.47	16.10	14.81	16.36	14.97	$ 14.02
11/13/2010	13.91	14.02	14.40	14.17	14.26	15.05	15.02	15.46	18.72	20.23	23.05	18.63	16.10	15.28	15.25	15.60	14.67	15.91	16.44	14.91	14.86	14.82	14.74	$ 14.74
11/14/2010	14.67	14.37	14.51	14.16	13.68	13.83	15.11	13.88	15.69	17.54	15.15	14.92	14.70	15.28	15.66	16.12	16.49	17.37	20.93	23.45	22.94	20.35	20.55	$ 17.24
11/15/2010	13.97	13.61	13.57	13.55	13.54	14.04	14.95	18.62	21.95	21.25	28.84	28.54	32.90	33.07	32.94	29.85	27.98	20.81	20.49	20.60	30.74	28.00	23.10	$ 18.02
11/16/2010	14.71	13.74	14.24	14.45	14.86	20.87	66.64	24.32	20.34	15.33	15.04	14.99	14.74	15.27	15.72	16.09	16.35	18.31	23.97	27.50	26.44	24.34	17.42	$ 16.33
11/17/2010	15.09	14.09	15.64	15.09	14.83	14.40	15.96	20.48	20.68	23.43	28.34	32.05	31.98	34.38	33.93	26.02	24.86	20.87	28.97	32.48	33.79	31.18	29.23	$ 24.29
11/18/2010	15.02	13.41	15.53	15.94	16.25	14.80	16.40	23.94	27.14	30.77	26.24	31.15	50.53	32.59	31.65	27.31	30.08	23.53	28.07	26.27	32.89	30.67	15.91	$ 15.19
11/19/2010	15.87	15.84	16.20	17.31	20.29	17.00	18.15	25.41	34.69	34.46	33.22	35.29	34.62	35.18	32.08	30.03	23.99	21.30	28.96	21.22	25.37	22.36	17.67	$ 16.05
11/20/2010	16.00	15.71	15.63	15.60	15.69	15.81	15.77	15.95	18.43	21.92	23.72	23.93	19.49	24.73	25.76	17.25	21.89	21.52	22.03	28.18	26.10	23.76	18.16	$ 16.97
11/21/2010	16.76	16.41	14.71	15.83	16.08	15.86	15.87	14.47	12.53	11.26	11.29	11.75	13.12	14.59	16.05	17.51	18.97	20.44	20.82	19.31	12.54	12.92	12.27	$ 11.61
11/22/2010	11.19	11.23	11.29	11.33	11.33	11.44	11.72	11.62	11.46	11.30	11.15	9.44	8.48	7.71	8.32	11.16	10.82	11.11	11.21	11.22	11.08	11.19	11.11	$ 10.27
11/23/2010	7.95	8.40	9.48	10.56	11.15	11.07	11.11	8.69	11.71	13.21	10.02	7.80	10.37	10.85	10.99	11.18	11.17	11.01	10.75	9.12	10.00	11.10	12.02	$ 12.67
11/24/2010	11.40	11.54	11.49	11.46	11.57	11.55	11.48	11.31	11.33	16.06	26.62	22.82	27.64	28.71	28.47	26.52	22.88	19.27	15.69	14.59	14.70	14.73	14.06	$ 12.84
11/25/2010	11.65	11.33	11.40	11.42	12.86	12.69	11.55	12.68	11.51	11.63	13.47	12.35	11.79	11.70	12.27	11.69	11.71	12.50	13.76	14.19	14.00	14.33	17.50	$ 15.22
11/26/2010	14.50	13.01	12.96	12.79	12.93	12.98	13.03	14.00	14.55	15.52	15.72	15.54	15.36	15.60	15.72	15.59	15.93	16.12	15.98	15.33	15.52	16.07	16.21	$ 16.19
11/27/2010	11.99	11.65	11.63	11.46	12.45	15.92	16.33	16.84	17.37	19.53	19.35	23.04	23.65	20.99	14.92	14.43	15.80	14.49	12.86	12.58	11.96	13.91	12.41	$ 11.83
11/28/2010	11.94	12.05	13.02	11.88	13.44	13.93	15.25	16.20	21.72	26.69	27.68	18.20	16.58	22.54	25.62	16.17	26.47	28.95	28.37	31.98	20.03	14.35	14.55	$ 14.34
11/29/2010	14.16	14.02	14.25	13.11	11.69	14.28	26.12	21.36	27.88	32.47	29.51	33.07	31.85	30.21	25.55	17.93	17.69	17.95	16.75	16.58	17.14	17.29	14.55	$ 13.65
11/30/2010	11.49	11.08	11.10	11.27	11.29	11.24	11.64	12.21	11.37	17.91	25.01	22.82	16.14	15.66	15.67	15.44	15.66	17.55	25.69	26.79	26.40	19.49	12.09	$ 12.98

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

12/01/2010	11.86	11.72	11.54	11.47	11.40	11.34	17.97	22.39	26.83	23.70	28.39	28.72	29.95	35.42	37.99	31.95	30.79	29.87	32.55	32.78	31.86	31.87	32.26	$ 29.41
12/02/2010	20.87	19.33	20.87	19.07	18.31	20.25	22.87	68.28	35.60	35.35	34.54	33.58	34.26	34.55	34.34	33.89	33.58	31.47	33.44	34.43	34.31	32.06	28.81	$ 27.51
12/03/2010	15.55	15.86	18.69	17.49	16.88	17.56	22.75	49.60	33.83	33.76	33.50	30.69	30.41	30.25	32.01	22.18	24.74	24.00	26.98	29.17	33.16	34.50	27.20	$ 21.61
12/04/2010	18.81	21.39	24.85	20.02	21.19	20.56	18.27	18.40	23.28	25.84	27.19	31.11	34.84	37.28	34.93	30.81	34.33	35.25	40.38	36.81	34.71	30.76	24.29	$ 22.37
12/05/2010	19.08	24.02	21.89	18.61	19.15	18.06	18.26	21.45	26.62	31.13	33.06	34.84	32.22	31.29	33.60	30.44	20.65	18.47	33.44	33.28	31.35	33.06	29.30	$ 26.65
12/06/2010	21.49	19.67	18.74	21.79	25.63	25.05	23.95	21.36	20.62	21.05	34.00	35.31	33.39	24.98	22.83	87.89	20.77	73.01	25.49	28.21	28.08	28.07	24.21	$ 20.91
12/07/2010	11.56	11.21	11.19	11.17	11.16	11.28	13.41	20.19	30.73	32.72	32.20	33.90	36.15	37.12	37.09	33.15	33.01	52.72	55.52	34.86	36.24	35.01	34.31	$ 26.91
12/08/2010	11.30	11.21	11.20	11.22	11.39	25.66	35.44	40.05	24.05	34.83	40.96	47.77	85.01	82.63	44.01	31.56	33.93	59.96	46.32	34.64	39.90	27.42	24.68	$ 24.60
12/09/2010	13.99	11.17	11.16	11.17	11.44	17.31	18.80	30.49	34.19	32.82	24.07	28.43	19.10	21.09	25.20	27.99	18.42	9.72	12.15	16.65	16.47	18.52	33.07	$ 25.53
12/10/2010	14.05	14.88	14.67	13.73	12.46	11.83	11.86	11.25	11.58	11.36	12.62	14.25	14.50	13.98	14.06	14.42	14.39	14.60	19.11	20.28	19.66	19.10	18.74	$ 16.05
12/11/2010	14.29	14.04	12.59	11.21	11.34	11.33	11.33	11.32	11.37	11.52	11.48	11.42	11.44	11.43	11.42	11.42	11.43	11.50	11.64	18.56	25.64	13.78	11.87	$ 11.96
12/12/2010	11.32	11.83	13.21	13.11	13.07	13.06	12.68	12.98	13.61	14.17	14.54	14.68	14.56	15.85	12.12	11.31	11.74	15.19	30.18	20.21	20.64	20.78	25.22	$ 18.49
12/13/2010	20.58	18.68	15.54	17.62	16.04	19.74	20.76	29.41	34.47	33.67	30.40	32.66	35.49	35.00	32.57	30.58	30.67	35.37	56.98	80.84	51.35	73.52	42.46	$ 28.73
12/14/2010	20.86	32.58	34.66	32.65	25.36	34.22	35.22	41.29	53.44	70.70	80.87	75.20	77.83	54.34	35.87	41.12	42.04	81.14	82.35	80.22	73.62	47.31	27.45	$ 21.02
12/15/2010	16.46	16.05	16.25	16.87	24.65	30.99	33.63	38.88	35.64	31.78	23.80	26.43	31.45	31.79	31.44	33.47	31.98	32.04	37.29	37.18	37.97	33.50	35.39	$ 35.02
12/16/2010	28.66	19.02	13.16	12.44	12.53	13.39	15.17	28.78	30.84	34.23	32.85	35.36	34.21	34.13	34.80	35.24	40.28	62.40	36.40	34.19	34.59	33.85	32.42	$ 26.95
12/17/2010	19.41	13.58	13.08	13.76	14.05	14.47	14.57	16.65	28.53	33.81	37.47	36.71	36.58	36.30	36.33	32.59	32.64	32.15	32.60	33.01	33.14	22.60	20.66	$ 28.12
12/18/2010	23.94	17.89	13.41	13.67	14.67	24.88	29.79	30.99	32.64	33.13	32.32	27.63	16.65	14.31	20.34	27.50	29.13	18.42	13.63	14.04	14.40	14.34	13.80	$ 13.39
12/19/2010	13.42	13.93	14.90	13.10	14.97	18.40	19.38	23.73	26.35	26.53	26.34	26.30	26.18	25.95	23.84	25.36	26.23	26.33	26.73	26.92	26.99	27.09	26.18	$ 20.05
12/20/2010	16.52	15.01	17.12	20.47	20.29	20.19	20.30	23.94	27.26	26.76	25.77	26.49	26.91	26.74	26.54	25.41	25.84	25.56	26.28	26.67	26.83	26.54	21.35	$ 14.68
12/21/2010	13.84	12.87	13.48	13.75	14.22	14.80	19.91	26.21	37.64	36.89	34.56	40.84	40.43	33.05	38.50	37.45	36.63	38.95	36.99	30.50	27.18	27.52	27.82	$ 25.62
12/22/2010	14.32	13.40	13.42	14.33	14.28	14.81	16.29	18.02	22.38	30.03	36.07	37.09	36.77	37.32	34.54	31.17	30.10	30.26	36.34	37.09	34.07	32.77	29.43	$ 14.63
12/23/2010	16.84	15.16	14.64	14.70	14.80	16.30	21.02	21.56	19.79	30.27	32.63	31.07	30.03	28.43	22.80	20.74	21.03	25.42	33.28	25.55	21.23	21.80	20.73	$ 16.23
12/24/2010	14.28	14.09	14.11	14.08	15.71	19.81	16.96	18.71	20.93	26.17	25.96	26.28	27.77	26.11	21.06	25.04	26.47	25.66	23.26	21.71	20.96	19.37	26.48	$ 26.66
12/25/2010	23.26	14.30	13.88	13.59	13.73	13.43	13.43	13.71	17.57	14.74	16.64	17.45	16.12	15.78	27.64	17.83	18.69	19.18	24.41	21.47	26.05	28.03	23.34	$ 23.40
12/26/2010	18.16	14.87	15.01	14.96	14.63	14.88	15.10	21.39	25.25	21.81	25.35	22.91	25.40	24.51	22.77	17.94	14.81	19.97	27.13	24.36	28.75	28.78	18.97	$ 16.31
12/27/2010	19.92	17.30	19.61	23.72	21.07	21.03	20.88	26.15	28.10	27.83	28.34	31.41	34.17	32.81	32.00	33.65	29.76	39.36	84.11	42.02	29.99	32.71	30.95	$ 15.90
12/28/2010	13.33	13.22	13.18	14.38	14.15	26.56	22.59	63.15	42.47	29.58	27.46	27.52	28.04	28.93	28.19	27.87	27.92	27.94	29.34	26.72	27.44	28.07	28.20	$ 27.24
12/29/2010	16.07	11.44	11.08	15.00	15.92	23.65	28.68	28.07	32.46	31.02	30.95	29.90	26.16	20.64	18.78	16.61	16.71	16.76	21.52	27.11	27.36	14.83	14.87	$ 14.75
12/30/2010	14.57	14.53	13.70	13.47	13.47	13.93	14.41	13.80	12.98	12.17	11.52	11.60	11.44	11.45	11.59	12.38	12.14	13.75	16.62	17.51	26.82	22.32	12.15	$ 11.19
12/31/2010	$ 11.06	$ 11.11	$ 13.29	$ 13.20	$ 12.32	$ 13.33	$ 13.21	$ 13.60	$ 14.25	$ 16.00	$ 17.13	$ 13.70	$ 17.32	$ 15.48	$ 16.46	$ 14.58	$ 12.71	$ 11.44	$ 11.33	$ 12.18	$ 14.26	$ 14.77	$ 14.33	$ 14.10

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
1/1/2010	1899	1902	1901	1918	1936	1983	2028	2065	2039	2038	2044	2021	2001	1964	1916	1914	1958	2110	2218	2222	2219	2182	2140	2102
1/2/2010	2056	2026	2007	2000	2014	2036	2090	2161	2171	2178	2164	2112	2076	2036	1997	1995	2043	2199	2362	2382	2389	2372	2312	2257
1/3/2010	2208	2179	2162	2173	2178	2201	2226	2263	2266	2276	2249	2183	2113	2057	2047	2031	2097	2240	2351	2347	2317	2257	2161	2077
1/4/2010	2026	1991	1976	1977	2019	2124	2326	2474	2435	2384	2431	2403	2395	2363	2322	2279	2313	2421	2529	2527	2506	2435	2320	2216
1/5/2010	2156	2117	2105	2120	2147	2254	2441	2565	2547	2528	2503	2468	2444	2385	2352	2317	2350	2436	2523	2499	2471	2374	2257	2158
1/6/2010	2086	2048	2026	2023	2060	2178	2362	2474	2457	2434	2410	2358	2329	2306	2279	2222	2192	2248	2360	2405	2395	2351	2242	2116
1/7/2010	2020	1958	1935	1928	1957	2074	2243	2354	2340	2337	2346	2331	2297	2243	2249	2261	2314	2417	2544	2543	2508	2421	2309	2213
1/8/2010	2137	2094	2087	2092	2128	2226	2378	2488	2476	2439	2415	2364	2308	2295	2266	2247	2228	2273	2330	2296	2262	2191	2110	2015
1/9/2010	1946	1911	1895	1891	1901	1948	2006	2083	2116	2158	2181	2145	2092	2024	1998	2015	2044	2145	2266	2259	2240	2196	2123	2065
1/10/2010	2020	1992	1971	1976	2004	2045	2073	2126	2145	2162	2096	2027	1985	1946	1914	1891	1932	2069	2243	2278	2285	2235	2149	2060
1/11/2010	2002	1963	1935	1936	1960	2067	2239	2356	2330	2307	2303	2278	2258	2236	2227	2212	2191	2288	2390	2376	2335	2248	2131	2009
1/12/2010	1919	1867	1841	1843	1866	1976	2146	2269	2243	2193	2150	2079	2044	2012	1994	2004	2004	2083	2206	2214	2207	2156	2071	1981
1/13/2010	1930	1921	1919	1936	1978	2101	2292	2411	2366	2278	2204	2129	2053	1999	1938	1892	1875	1942	2092	2097	2076	2003	1901	1805
1/14/2010	1729	1704	1692	1711	1755	1884	2081	2194	2167	2100	2050	1977	1961	1910	1840	1832	1827	1877	1994	1977	1937	1855	1736	1626
1/15/2010	1540	1499	1472	1477	1500	1614	1789	1919	1916	1907	1936	1931	1910	1897	1865	1847	1845	1879	1932	1898	1867	1809	1724	1648
1/16/2010	1580	1541	1524	1519	1523	1564	1629	1709	1760	1808	1854	1839	1807	1764	1729	1701	1718	1771	1829	1812	1768	1714	1658	1594
1/17/2010	1540	1486	1460	1447	1466	1494	1535	1596	1640	1683	1708	1726	1721	1706	1685	1681	1717	1795	1902	1897	1876	1834	1775	1709
1/18/2010	1647	1614	1602	1613	1640	1715	1829	1941	1967	2001	2040	2044	2038	2020	1995	1984	1995	2039	2095	2074	2025	1949	1849	1728
1/19/2010	1652	1607	1591	1586	1619	1733	1924	2047	2039	2021	2029	2020	2000	1978	1950	1917	1904	1950	2042	2035	2014	1956	1858	1753
1/20/2010	1686	1650	1636	1643	1679	1824	2017	2149	2143	2124	2143	2144	2138	2104	2069	2066	2064	2114	2164	2140	2100	2023	1904	1788
1/21/2010	1714	1667	1648	1641	1672	1794	1986	2089	2095	2087	2096	2103	2109	2092	2053	2028	2032	2055	2084	2064	2027	1944	1828	1700
1/22/2010	1623	1565	1545	1550	1588	1705	1894	2007	1996	1993	2007	1989	1966	1946	1917	1892	1878	1904	1956	1932	1901	1844	1753	1650
1/23/2010	1570	1519	1496	1480	1480	1516	1570	1639	1677	1706	1741	1739	1720	1690	1668	1634	1627	1674	1738	1724	1701	1649	1566	1487
1/24/2010	1424	1381	1339	1320	1327	1345	1395	1447	1490	1525	1564	1571	1555	1537	1515	1474	1483	1511	1615	1657	1658	1629	1561	1507
1/25/2010	1444	1421	1422	1460	1509	1633	1858	1997	2002	2012	2033	2017	2018	2044	2039	2042	2052	2093	2191	2182	2153	2091	1995	1880
1/26/2010	1811	1778	1774	1792	1829	1962	2155	2275	2272	2274	2295	2271	2261	2240	2244	2252	2252	2273	2369	2357	2319	2246	2125	2017
1/27/2010	1933	1914	1904	1913	1950	2079	2267	2375	2342	2278	2229	2201	2148	2084	2039	2045	2039	2079	2166	2150	2124	2054	1939	1826
1/28/2010	1732	1694	1675	1698	1773	1942	2169	2323	2321	2285	2278	2244	2204	2169	2134	2117	2135	2223	2381	2416	2409	2359	2255	2159
1/29/2010	2089	2062	2038	2032	2058	2162	2338	2465	2424	2409	2414	2365	2311	2264	2235	2192	2205	2250	2348	2330	2307	2253	2172	2088
1/30/2010	2023	1988	1962	1963	1964	2001	2069	2150	2185	2170	2162	2080	2010	1973	1902	1849	1851	1923	2079	2127	2122	2085	2026	1948
1/31/2010	1898	1884	1893	1916	1944	1996	2051	2114	2117	2063	1992	1922	1872	1821	1782	1741	1746	1820	1995	2055	2053	2010	1942	1878

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
2/1/2010	1823	1810	1815	1837	1888	1989	2169	2295	2242	2180	2144	2095	2023	1964	1926	1869	1851	1905	2039	2053	2025	1950	1842	1737
2/2/2010	1660	1628	1605	1605	1644	1763	1950	2070	2044	2031	1997	1970	1953	1944	1945	1934	1912	1958	2045	2040	2007	1943	1831	1724
2/3/2010	1651	1610	1593	1617	1661	1796	2006	2143	2149	2153	2165	2129	2102	2077	2053	2027	2003	2007	2115	2146	2137	2066	1952	1843
2/4/2010	1773	1747	1744	1743	1786	1911	2088	2206	2173	2143	2139	2080	2037	1996	1967	1931	1911	1916	2026	2046	2029	1958	1848	1736
2/5/2010	1647	1607	1576	1577	1612	1734	1917	2037	2033	2046	2080	2096	2106	2105	2082	2061	2060	2079	2151	2144	2092	2035	1947	1857
2/6/2010	1787	1766	1741	1745	1758	1803	1862	1921	1965	2017	2000	1963	1908	1857	1813	1777	1779	1834	1990	2046	2043	2028	1971	1921
2/7/2010	1866	1843	1831	1845	1863	1906	1960	2022	2032	1988	1925	1866	1832	1796	1764	1743	1754	1805	1909	1926	1945	1931	1962	1906
2/8/2010	1865	1853	1865	1890	1940	2036	2199	2310	2273	2207	2152	2087	2038	1990	1954	1939	1986	2045	2155	2187	2176	2103	1995	1885
2/9/2010	1813	1774	1776	1785	1819	1934	2090	2170	2155	2156	2143	2086	2072	2071	2039	2070	2074	2144	2326	2412	2407	2347	2238	2144
2/10/2010	2080	2044	2015	1993	1982	2057	2216	2321	2330	2317	2307	2265	2204	2172	2169	2140	2135	2179	2298	2322	2285	2184	2079	1967
2/11/2010	1882	1846	1837	1839	1876	1988	2168	2269	2250	2189	2122	2076	2028	1993	1940	1896	1888	1920	2071	2163	2166	2134	2058	1972
2/12/2010	1924	1918	1933	1972	2030	2168	2355	2467	2452	2387	2267	2154	2063	2001	1938	1919	1904	1932	2045	2078	2065	2038	1982	1920
2/13/2010	1878	1865	1853	1846	1854	1893	1969	2039	2086	2072	2003	1927	1851	1795	1751	1712	1706	1766	1919	1998	2000	1984	1934	1890
2/14/2010	1844	1834	1839	1863	1894	1937	1991	2035	2044	2012	1938	1846	1786	1733	1675	1651	1660	1728	1853	1940	1956	1927	1878	1810
2/15/2010	1755	1720	1716	1730	1769	1870	2011	2105	2142	2186	2218	2195	2164	2132	2092	2117	2126	2165	2254	2281	2253	2162	2051	1941
2/16/2010	1859	1836	1822	1824	1855	1969	2141	2235	2229	2242	2254	2255	2234	2204	2169	2164	2153	2179	2251	2280	2240	2143	2021	1904
2/17/2010	1819	1779	1761	1776	1815	1947	2159	2258	2233	2186	2126	2059	2037	2015	2002	1992	2006	2032	2138	2180	2146	2079	1965	1852
2/18/2010	1778	1734	1721	1720	1749	1863	2045	2138	2123	2113	2087	2060	2020	2001	1987	1965	1960	1929	2030	2105	2092	2037	1948	1854
2/19/2010	1797	1775	1780	1803	1863	1996	2197	2303	2248	2152	2079	1990	1923	1875	1830	1762	1726	1731	1851	1928	1926	1885	1818	1720
2/20/2010	1642	1604	1585	1571	1587	1633	1698	1765	1818	1850	1837	1805	1759	1704	1672	1667	1677	1708	1780	1822	1789	1749	1678	1602
2/21/2010	1534	1497	1462	1451	1460	1487	1536	1583	1608	1638	1659	1667	1680	1664	1647	1644	1656	1696	1781	1828	1796	1745	1664	1576
2/22/2010	1513	1486	1477	1487	1535	1659	1840	1946	1928	1931	1944	1945	1960	1953	1943	1938	1937	1949	2029	2049	2014	1947	1828	1725
2/23/2010	1647	1607	1586	1591	1628	1743	1926	2039	2042	2032	2031	2025	2018	1999	1993	2002	2007	2017	2083	2105	2077	2010	1901	1799
2/24/2010	1733	1708	1693	1692	1739	1871	2082	2190	2162	2148	2112	2118	2105	2089	2079	2087	2097	2116	2206	2272	2240	2163	2061	1944
2/25/2010	1868	1846	1822	1825	1852	1963	2132	2210	2183	2137	2061	2012	1989	1984	1970	1937	1933	1968	2058	2138	2137	2082	1993	1898
2/26/2010	1841	1824	1818	1838	1882	1996	2199	2280	2225	2164	2122	2084	2048	2015	1962	1921	1898	1912	1977	2049	2032	1985	1910	1824
2/27/2010	1755	1719	1700	1700	1715	1746	1804	1855	1898	1938	1946	1937	1915	1895	1863	1858	1856	1885	1937	1949	1925	1874	1803	1728
2/28/2010	1661	1628	1608	1596	1598	1620	1663	1698	1729	1744	1759	1754	1742	1718	1703	1703	1715	1750	1826	1879	1857	1800	1713	1620

IPL System Loads For Calendar Year 2010, MW

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
3/1/2010	1557	1530	1523	1533	1579	1713	1893	1984	1979	1975	1974	1952	1911	1869	1839	1825	1828	1840	1900	1972	1959	1885	1808	1712
3/2/2010	1660	1629	1619	1621	1670	1787	1985	2089	2065	2044	2008	1934	1873	1839	1807	1783	1771	1779	1851	1948	1951	1900	1819	1718
3/3/2010	1662	1647	1652	1671	1712	1830	2023	2100	2085	2080	2076	2048	2002	1965	1951	1947	1941	1943	1973	2025	2004	1949	1856	1755
3/4/2010	1697	1678	1665	1684	1729	1860	2059	2129	2078	1999	1949	1891	1852	1821	1772	1729	1705	1699	1786	1906	1925	1882	1797	1706
3/5/2010	1643	1620	1621	1633	1684	1823	2032	2111	2050	1985	1925	1867	1815	1767	1724	1673	1631	1619	1680	1786	1791	1773	1709	1645
3/6/2010	1586	1578	1567	1581	1612	1681	1769	1823	1814	1771	1714	1663	1602	1540	1486	1448	1430	1444	1515	1646	1652	1642	1609	1564
3/7/2010	1522	1513	1517	1527	1558	1599	1659	1681	1678	1654	1599	1551	1516	1470	1453	1475	1515	1564	1631	1693	1676	1627	1549	1462
3/8/2010	1404	1366	1365	1387	1459	1600	1811	1882	1860	1811	1775	1743	1704	1682	1645	1617	1580	1554	1600	1706	1703	1640	1532	1440
3/9/2010	1375	1348	1336	1356	1406	1534	1746	1813	1786	1751	1739	1715	1706	1705	1691	1685	1654	1645	1674	1740	1713	1637	1525	1411
3/10/2010	1338	1288	1260	1268	1296	1415	1603	1679	1680	1688	1699	1701	1676	1675	1651	1631	1596	1557	1559	1656	1642	1570	1460	1347
3/11/2010	1264	1208	1194	1197	1217	1342	1539	1640	1677	1681	1706	1700	1676	1658	1655	1634	1609	1617	1661	1697	1670	1598	1491	1375
3/12/2010	1295	1245	1224	1221	1245	1351	1555	1630	1666	1681	1718	1695	1689	1686	1673	1660	1643	1613	1639	1657	1622	1570	1480	1389
3/13/2010	1306	1257	1225	1215	1231	1269	1340	1397	1475	1538	1589	1600	1592	1575	1564	1549	1557	1572	1603	1650	1621	1575	1510	1432
3/14/2010	1374	1329	1315	1322	1339	1379	1449	1492	1541	1582	1577	1575	1552	1557	1571	1582	1612	1629	1688	1726	1680	1605	1509	1428
3/15/2010	1370	1352	1351	1382	1495	1694	1827	1850	1841	1855	1848	1827	1802	1782	1769	1762	1764	1769	1784	1821	1766	1649	1524	1444
3/16/2010	1391	1370	1360	1399	1532	1733	1875	1871	1815	1786	1746	1706	1685	1646	1610	1574	1537	1524	1540	1642	1612	1515	1414	1336
3/17/2010	1297	1293	1312	1358	1486	1715	1847	1836	1782	1746	1706	1684	1660	1628	1612	1565	1528	1512	1518	1622	1600	1505	1408	1333
3/18/2010	1308	1300	1309	1353	1485	1699	1838	1817	1773	1740	1714	1690	1664	1639	1602	1560	1521	1493	1514	1612	1591	1489	1379	1301
3/19/2010	1252	1242	1255	1292	1404	1617	1753	1736	1708	1691	1671	1656	1642	1614	1567	1522	1480	1447	1445	1531	1507	1419	1332	1252
3/20/2010	1207	1184	1178	1193	1229	1301	1389	1433	1463	1480	1471	1444	1411	1387	1358	1351	1338	1347	1374	1452	1423	1366	1288	1226
3/21/2010	1189	1168	1172	1181	1216	1279	1343	1397	1449	1481	1484	1460	1429	1421	1416	1419	1447	1475	1509	1597	1561	1488	1411	1347
3/22/2010	1312	1294	1300	1339	1457	1676	1810	1847	1850	1868	1871	1879	1870	1853	1843	1836	1824	1824	1846	1874	1803	1699	1569	1481
3/23/2010	1429	1399	1399	1431	1552	1767	1875	1872	1836	1796	1746	1710	1677	1649	1606	1560	1524	1498	1507	1621	1595	1511	1409	1331
3/24/2010	1289	1281	1286	1325	1449	1652	1790	1779	1764	1766	1733	1712	1684	1636	1589	1547	1513	1509	1520	1610	1572	1463	1346	1261
3/25/2010	1210	1188	1179	1213	1319	1500	1618	1633	1631	1647	1668	1676	1672	1666	1687	1707	1726	1764	1788	1821	1779	1688	1591	1525
3/26/2010	1490	1480	1475	1515	1627	1819	1935	1926	1901	1889	1845	1799	1761	1715	1643	1589	1540	1516	1537	1655	1680	1628	1553	1490
3/27/2010	1451	1433	1432	1455	1501	1574	1650	1677	1688	1652	1596	1536	1478	1428	1379	1360	1358	1369	1408	1489	1474	1413	1336	1269
3/28/2010	1224	1204	1196	1196	1215	1262	1310	1353	1400	1444	1458	1469	1464	1457	1449	1451	1469	1485	1510	1565	1542	1481	1407	1347
3/29/2010	1322	1324	1350	1394	1523	1688	1798	1812	1837	1811	1767	1723	1695	1643	1602	1561	1515	1503	1508	1604	1603	1526	1440	1358
3/30/2010	1329	1324	1340	1381	1502	1681	1791	1786	1755	1728	1693	1663	1633	1590	1557	1523	1487	1467	1468	1550	1542	1460	1359	1287
3/31/2010	1248	1237	1239	1274	1370	1530	1641	1649	1638	1643	1637	1616	1604	1603	1598	1566	1539	1500	1475	1554	1539	1433	1328	1235

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
4/1/2010	1177	1143	1124	1143	1224	1365	1469	1511	1547	1601	1628	1637	1661	1668	1662	1639	1610	1582	1554	1610	1586	1492	1363	1269
4/2/2010	1193	1146	1125	1125	1180	1287	1364	1403	1476	1533	1562	1576	1579	1584	1564	1554	1535	1503	1468	1519	1502	1424	1319	1228
4/3/2010	1153	1111	1083	1066	1085	1126	1166	1216	1311	1370	1397	1388	1369	1348	1326	1324	1325	1313	1304	1372	1396	1340	1264	1188
4/4/2010	1138	1106	1087	1081	1097	1151	1180	1230	1278	1293	1291	1293	1281	1266	1258	1255	1258	1265	1288	1381	1413	1343	1245	1163
4/5/2010	1119	1086	1095	1118	1223	1401	1525	1559	1610	1663	1701	1732	1749	1756	1750	1728	1704	1726	1710	1693	1640	1544	1426	1324
4/6/2010	1237	1197	1181	1190	1281	1456	1557	1608	1661	1726	1751	1781	1817	1814	1808	1787	1765	1726	1687	1729	1715	1597	1446	1333
4/7/2010	1269	1230	1203	1223	1299	1482	1604	1635	1664	1715	1725	1720	1724	1697	1661	1638	1608	1595	1612	1661	1579	1457	1332	1244
4/8/2010	1167	1138	1123	1137	1237	1408	1546	1574	1588	1630	1629	1617	1626	1596	1571	1548	1541	1549	1544	1630	1631	1529	1430	1349
4/9/2010	1305	1295	1292	1332	1438	1634	1719	1715	1690	1685	1670	1641	1616	1577	1544	1497	1454	1425	1408	1475	1500	1444	1360	1292
4/10/2010	1258	1236	1239	1253	1290	1359	1398	1429	1440	1442	1426	1396	1373	1351	1336	1332	1332	1327	1313	1372	1386	1320	1245	1170
4/11/2010	1117	1092	1078	1079	1102	1145	1163	1215	1267	1293	1315	1327	1331	1339	1349	1365	1381	1390	1389	1458	1479	1380	1269	1166
4/12/2010	1119	1079	1079	1105	1203	1397	1489	1513	1548	1592	1615	1631	1639	1648	1640	1616	1596	1585	1557	1595	1596	1468	1326	1224
4/13/2010	1157	1130	1118	1135	1223	1421	1517	1541	1562	1610	1637	1676	1708	1720	1730	1718	1691	1662	1627	1655	1635	1503	1358	1245
4/14/2010	1176	1138	1120	1142	1234	1414	1507	1526	1543	1611	1647	1685	1722	1755	1767	1776	1743	1730	1696	1689	1710	1577	1417	1304
4/15/2010	1227	1185	1166	1170	1254	1431	1512	1567	1637	1713	1769	1816	1825	1831	1827	1791	1775	1778	1729	1736	1722	1588	1440	1323
4/16/2010	1257	1210	1184	1196	1287	1464	1553	1596	1649	1708	1761	1778	1768	1734	1671	1591	1531	1499	1464	1479	1485	1401	1285	1184
4/17/2010	1128	1086	1074	1077	1106	1175	1213	1279	1339	1374	1381	1365	1345	1328	1307	1306	1297	1295	1293	1348	1396	1341	1270	1209
4/18/2010	1169	1149	1139	1143	1166	1216	1228	1281	1328	1335	1335	1330	1319	1305	1295	1302	1307	1314	1327	1390	1426	1352	1251	1177
4/19/2010	1142	1130	1133	1180	1295	1490	1568	1596	1604	1621	1613	1618	1616	1602	1586	1545	1502	1488	1476	1536	1543	1425	1299	1210
4/20/2010	1170	1149	1143	1172	1275	1453	1552	1568	1579	1603	1607	1614	1616	1619	1594	1566	1543	1512	1487	1533	1540	1430	1293	1201
4/21/2010	1157	1132	1123	1155	1263	1456	1547	1572	1586	1618	1629	1637	1647	1648	1633	1608	1577	1549	1524	1559	1565	1449	1319	1217
4/22/2010	1157	1134	1124	1147	1252	1425	1512	1551	1578	1615	1631	1653	1690	1684	1679	1655	1615	1571	1548	1583	1587	1478	1344	1253
4/23/2010	1187	1155	1140	1151	1235	1406	1491	1547	1583	1631	1644	1646	1633	1610	1589	1563	1517	1488	1466	1499	1479	1402	1304	1210
4/24/2010	1150	1121	1107	1099	1128	1190	1240	1304	1372	1417	1441	1450	1439	1410	1402	1403	1426	1415	1401	1424	1421	1350	1264	1186
4/25/2010	1133	1097	1076	1079	1083	1114	1136	1187	1263	1313	1343	1360	1362	1355	1352	1357	1377	1382	1398	1436	1440	1358	1262	1181
4/26/2010	1135	1109	1114	1144	1249	1434	1547	1576	1611	1645	1639	1643	1638	1609	1587	1554	1523	1525	1517	1532	1547	1448	1319	1230
4/27/2010	1191	1173	1167	1198	1296	1488	1585	1605	1598	1625	1625	1616	1609	1589	1563	1531	1499	1483	1467	1517	1561	1474	1352	1275
4/28/2010	1230	1221	1232	1262	1391	1579	1672	1675	1587	1646	1652	1632	1626	1610	1586	1549	1519	1490	1472	1505	1547	1448	1319	1238
4/29/2010	1192	1173	1169	1207	1308	1495	1573	1604	1607	1636	1652	1658	1657	1655	1655	1618	1581	1570	1551	1561	1605	1493	1357	1255
4/30/2010	1192	1152	1137	1151	1242	1404	1485	1558	1612	1667	1704	1738	1738	1726	1708	1678	1645	1621	1597	1625	1631	1540	1429	1339

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
5/1/2010	1255	1218	1196	1168	1178	1220	1252	1314	1389	1451	1484	1493	1476	1461	1452	1441	1443	1432	1430	1466	1493	1422	1345	1257
5/2/2010	1194	1153	1133	1119	1131	1150	1162	1239	1322	1382	1433	1475	1482	1484	1488	1500	1520	1532	1528	1549	1596	1501	1370	1265
5/3/2010	1203	1150	1136	1147	1238	1402	1491	1584	1636	1704	1739	1754	1770	1779	1787	1774	1751	1713	1648	1627	1610	1485	1355	1247
5/4/2010	1180	1152	1129	1149	1247	1403	1495	1571	1628	1678	1709	1738	1762	1770	1766	1757	1740	1714	1680	1667	1682	1565	1404	1282
5/5/2010	1205	1161	1140	1154	1248	1416	1505	1579	1644	1715	1758	1800	1859	1886	1901	1887	1874	1843	1786	1761	1716	1579	1423	1310
5/6/2010	1224	1179	1152	1160	1238	1381	1472	1536	1595	1650	1667	1687	1700	1705	1718	1710	1693	1672	1631	1610	1635	1516	1373	1254
5/7/2010	1189	1150	1130	1151	1236	1408	1495	1558	1621	1695	1770	1824	1870	1883	1870	1808	1763	1716	1684	1665	1618	1472	1320	1213
5/8/2010	1136	1099	1078	1077	1102	1139	1174	1264	1341	1388	1415	1408	1385	1368	1343	1337	1349	1360	1370	1411	1442	1383	1319	1250
5/9/2010	1198	1179	1160	1165	1187	1208	1232	1297	1319	1333	1322	1308	1283	1265	1252	1252	1254	1257	1269	1306	1389	1343	1249	1183
5/10/2010	1139	1130	1137	1174	1293	1463	1565	1591	1597	1623	1627	1617	1622	1609	1587	1550	1509	1500	1500	1541	1549	1440	1315	1221
5/11/2010	1183	1160	1155	1186	1281	1464	1566	1609	1633	1675	1696	1713	1721	1720	1713	1698	1670	1642	1622	1617	1640	1542	1391	1269
5/12/2010	1201	1158	1140	1151	1244	1406	1508	1586	1651	1680	1678	1698	1709	1707	1688	1652	1621	1606	1591	1613	1645	1552	1401	1288
5/13/2010	1208	1173	1153	1170	1277	1454	1570	1646	1715	1814	1871	1913	1951	1957	1959	1951	1936	1906	1865	1865	1898	1767	1611	1494
5/14/2010	1399	1323	1288	1282	1349	1474	1550	1604	1662	1709	1729	1737	1756	1756	1748	1724	1692	1645	1596	1555	1581	1491	1366	1258
5/15/2010	1188	1151	1112	1107	1121	1149	1190	1289	1372	1434	1469	1463	1448	1430	1397	1407	1405	1391	1373	1390	1424	1360	1269	1192
5/16/2010	1139	1097	1081	1073	1083	1102	1116	1186	1254	1309	1343	1367	1370	1363	1366	1372	1391	1394	1397	1418	1445	1374	1275	1189
5/17/2010	1136	1105	1103	1128	1223	1398	1507	1563	1597	1636	1665	1674	1664	1646	1623	1612	1596	1587	1581	1580	1576	1476	1345	1249
5/18/2010	1203	1174	1158	1180	1269	1443	1537	1583	1615	1641	1653	1668	1665	1651	1630	1604	1573	1546	1547	1554	1564	1474	1345	1248
5/19/2010	1204	1167	1164	1180	1270	1434	1518	1563	1603	1639	1647	1647	1646	1635	1623	1582	1549	1543	1525	1537	1572	1477	1352	1247
5/20/2010	1197	1164	1153	1178	1271	1421	1514	1584	1628	1683	1695	1712	1719	1688	1676	1647	1601	1580	1583	1605	1596	1499	1377	1285
5/21/2010	1222	1188	1167	1191	1275	1436	1532	1612	1657	1720	1736	1753	1756	1737	1719	1675	1639	1606	1563	1550	1580	1522	1404	1302
5/22/2010	1225	1173	1142	1136	1159	1187	1235	1329	1412	1471	1508	1537	1558	1569	1589	1607	1625	1628	1609	1578	1604	1545	1433	1315
5/23/2010	1235	1174	1148	1122	1125	1120	1150	1257	1365	1483	1580	1687	1777	1855	1911	1970	2009	2022	2020	2002	2025	1929	1776	1630
5/24/2010	1519	1431	1390	1385	1470	1596	1727	1860	1976	2109	2209	2329	2392	2441	2456	2447	2413	2379	2319	2227	2178	2041	1833	1655
5/25/2010	1535	1460	1411	1405	1470	1596	1719	1844	1955	2069	2172	2257	2333	2387	2422	2434	2407	2374	2305	2239	2205	2068	1867	1704
5/26/2010	1582	1495	1448	1429	1515	1625	1757	1887	2017	2155	2264	2325	2407	2449	2485	2499	2478	2443	2369	2289	2258	2094	1884	1723
5/27/2010	1593	1517	1471	1447	1520	1629	1757	1890	2018	2176	2301	2407	2463	2506	2521	2505	2452	2342	2191	2104	2064	1921	1754	1564
5/28/2010	1443	1365	1321	1304	1371	1468	1576	1709	1823	1942	2020	2108	2182	2241	2274	2298	2308	2274	2215	2118	2086	1969	1789	1640
5/29/2010	1504	1417	1349	1312	1307	1290	1347	1479	1630	1783	1900	1992	2065	2111	2154	2184	2196	2181	2127	2046	1994	1912	1752	1606
5/30/2010	1474	1388	1321	1283	1266	1251	1275	1394	1521	1669	1820	1944	2032	2103	2169	2211	2224	2201	2162	2090	2059	1981	1845	1697
5/31/2010	1570	1501	1456	1440	1449	1439	1454	1524	1645	1838	1984	2070	2120	2152	2184	2203	2118	1967	1860	1791	1776	1705	1557	1443

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
6/1/2010	1373	1324	1313	1321	1406	1523	1639	1742	1834	1960	2075	2169	2254	2314	2345	2373	2364	2334	2287	2202	2173	2048	1853	1676
6/2/2010	1571	1486	1446	1434	1522	1669	1734	1776	1822	1905	1949	2058	2165	2251	2286	2248	2272	2269	2192	2113	2094	1990	1817	1662
6/3/2010	1556	1474	1431	1432	1518	1660	1746	1814	1913	2034	2125	2203	2294	2341	2308	2205	2108	2051	2006	1955	1969	1894	1738	1601
6/4/2010	1489	1423	1385	1383	1450	1563	1668	1823	1950	2101	2211	2291	2363	2408	2438	2444	2434	2394	2326	2235	2215	2116	1955	1814
6/5/2010	1684	1609	1558	1539	1550	1556	1603	1688	1787	1840	1916	1990	1995	2037	2085	2093	2116	2129	2105	2051	2046	1971	1833	1711
6/6/2010	1631	1559	1512	1484	1465	1372	1332	1366	1417	1472	1516	1574	1634	1678	1717	1747	1771	1767	1739	1679	1666	1614	1486	1364
6/7/2010	1269	1228	1200	1211	1282	1384	1496	1605	1687	1778	1844	1897	1943	1978	2011	2011	1989	1963	1906	1834	1823	1733	1571	1438
6/8/2010	1348	1294	1272	1278	1356	1457	1574	1643	1727	1837	1883	1905	1939	1958	1920	1866	1807	1769	1743	1737	1768	1695	1572	1450
6/9/2010	1368	1324	1299	1328	1416	1564	1682	1783	1843	1910	1960	2037	2135	2197	2239	2231	2217	2168	2091	1988	1949	1866	1701	1545
6/10/2010	1433	1358	1321	1309	1377	1467	1599	1728	1826	1951	2049	2113	2205	2260	2278	2308	2309	2274	2195	2107	2079	1987	1811	1642
6/11/2010	1542	1460	1419	1417	1494	1598	1709	1861	1986	2162	2326	2443	2530	2605	2544	2342	2306	2231	2170	2116	2074	1985	1845	1697
6/12/2010	1594	1517	1475	1454	1461	1502	1548	1642	1720	1824	1925	2024	2127	2223	2291	2322	2374	2357	2298	2159	2014	1884	1753	1627
6/13/2010	1537	1460	1411	1383	1379	1361	1388	1465	1571	1701	1812	1924	2021	2100	2179	2215	2204	2210	2170	2036	1959	1857	1721	1588
6/14/2010	1503	1432	1408	1428	1504	1620	1738	1844	2025	2160	2260	2379	2484	2539	2386	2361	2382	2379	2319	2232	2118	1973	1813	1676
6/15/2010	1570	1510	1474	1475	1555	1677	1784	1876	1957	2049	2145	2236	2355	2464	2523	2521	2460	2391	2304	2132	2012	1891	1726	1602
6/16/2010	1514	1456	1423	1433	1529	1646	1758	1887	1995	2112	2194	2250	2311	2343	2353	2356	2331	2298	2226	2145	2076	1975	1779	1605
6/17/2010	1491	1411	1363	1358	1418	1515	1657	1790	1899	2023	2125	2195	2269	2341	2385	2413	2404	2378	2316	2225	2156	2056	1865	1692
6/18/2010	1552	1464	1399	1393	1452	1544	1673	1817	1970	2132	2248	2368	2502	2592	2636	2665	2652	2611	2556	2458	2260	2049	1887	1733
6/19/2010	1629	1539	1472	1433	1437	1447	1482	1590	1759	1907	2034	2123	2177	2227	2267	2297	2300	2267	2235	2153	2080	2005	1857	1715
6/20/2010	1591	1507	1440	1396	1381	1341	1400	1540	1709	1857	1993	2102	2198	2281	2352	2400	2421	2412	2381	2332	2292	2226	2058	1883
6/21/2010	1757	1671	1620	1609	1662	1754	1890	2049	2122	2113	2104	2163	2260	2352	2404	2451	2470	2472	2440	2376	2350	2239	2043	1752
6/22/2010	1598	1520	1464	1441	1506	1646	1764	1815	1874	2004	2122	2236	2349	2371	2385	2416	2420	2421	2361	2292	2253	2159	1992	1840
6/23/2010	1723	1639	1604	1605	1683	1792	1933	2064	2240	2412	2548	2666	2742	2790	2822	2817	2805	2757	2694	2608	2563	2432	2198	1947
6/24/2010	1792	1698	1636	1623	1677	1779	1883	1972	2070	2186	2246	2298	2355	2388	2409	2417	2410	2374	2308	2209	2143	2046	1860	1691
6/25/2010	1559	1471	1415	1395	1447	1529	1636	1770	1892	2026	2116	2212	2276	2343	2389	2416	2397	2366	2295	2182	2109	2009	1837	1682
6/26/2010	1552	1473	1416	1380	1390	1385	1438	1546	1693	1869	2033	2178	2298	2376	2438	2482	2494	2476	2436	2366	2315	2246	2094	1955
6/27/2010	1828	1728	1652	1594	1577	1555	1592	1726	1931	2098	2241	2357	2420	2443	2440	2445	2455	2409	2270	2140	2083	1990	1853	1734
6/28/2010	1641	1574	1543	1553	1635	1747	1848	1944	2022	2153	2279	2368	2430	2470	2506	2485	2454	2388	2288	2183	2120	2001	1823	1661
6/29/2010	1542	1455	1414	1404	1474	1560	1681	1814	1909	1980	2044	2085	2132	2175	2195	2197	2167	2121	2051	1950	1888	1799	1625	1473
6/30/2010	1370	1305	1266	1255	1326	1400	1493	1606	1692	1784	1844	1891	1940	1975	1998	2032	2041	2018	1972	1891	1849	1768	1606	1452

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
7/1/2010	1360	1284	1256	1251	1312	1386	1492	1587	1693	1781	1843	1907	1955	1998	2018	2044	2046	2024	1972	1896	1836	1748	1576	1429
7/2/2010	1334	1266	1224	1230	1273	1346	1446	1557	1649	1740	1796	1853	1906	1931	1975	1999	2006	1991	1935	1853	1780	1706	1549	1408
7/3/2010	1313	1240	1198	1169	1175	1158	1195	1300	1431	1549	1652	1738	1807	1888	1972	2043	2105	2116	2090	2016	1953	1886	1749	1626
7/4/2010	1509	1419	1366	1327	1301	1279	1310	1447	1619	1805	1974	2128	2210	2275	2321	2346	2351	2316	2261	2171	2110	2053	1982	1868
7/5/2010	1741	1644	1574	1534	1523	1501	1529	1640	1820	1993	2140	2241	2306	2327	2345	2390	2404	2387	2340	2261	2203	2104	1933	1772
7/6/2010	1640	1548	1500	1464	1518	1600	1729	1882	2042	2221	2363	2471	2564	2616	2661	2679	2670	2635	2573	2473	2400	2275	2076	1895
7/7/2010	1756	1656	1598	1572	1611	1693	1817	1949	2123	2292	2452	2581	2668	2713	2747	2757	2744	2701	2632	2536	2473	2338	2155	1967
7/8/2010	1834	1728	1657	1634	1694	1786	1895	2041	2212	2402	2541	2664	2733	2793	2734	2518	2385	2312	2251	2187	2168	2095	1950	1816
7/9/2010	1715	1638	1598	1596	1659	1779	1879	1940	2000	2077	2128	2216	2307	2358	2406	2433	2427	2335	2250	2178	2122	2027	1850	1701
7/10/2010	1570	1486	1416	1377	1373	1370	1400	1509	1641	1809	1960	2052	2102	2128	2119	2095	2123	2142	2101	2031	1965	1894	1742	1604
7/11/2010	1483	1411	1357	1321	1308	1287	1310	1440	1595	1750	1903	2026	2120	2201	2252	2276	2274	2230	2179	2112	2111	2034	1893	1731
7/12/2010	1660	1572	1518	1507	1561	1660	1756	1844	1936	2051	2171	2274	2379	2455	2504	2539	2539	2513	2450	2354	2300	2185	1998	1815
7/13/2010	1684	1601	1542	1537	1591	1713	1809	1862	1919	1994	2076	2198	2254	2169	2141	2213	2284	2304	2282	2197	2148	2045	1874	1708
7/14/2010	1590	1515	1470	1466	1523	1623	1740	1900	2055	2211	2348	2460	2545	2614	2669	2687	2681	2648	2590	2487	2430	2323	2131	1958
7/15/2010	1825	1735	1668	1642	1693	1793	1891	2008	2178	2382	2548	2669	2771	2835	2858	2767	2503	2369	2296	2235	2221	2111	1949	1804
7/16/2010	1704	1633	1573	1559	1625	1722	1813	1902	2064	2214	2321	2424	2496	2563	2605	2619	2611	2570	2495	2386	2316	2189	2023	1841
7/17/2010	1714	1606	1554	1509	1526	1528	1577	1736	1920	2098	2228	2316	2392	2442	2476	2513	2535	2516	2437	2338	2267	2111	1928	1772
7/18/2010	1645	1538	1471	1424	1414	1398	1417	1522	1663	1847	2017	2140	2167	2046	1962	2028	2047	2035	2006	1977	1992	1940	1799	1663
7/19/2010	1569	1501	1473	1485	1572	1690	1803	1892	2001	2147	2277	2419	2520	2595	2634	2588	2503	2397	2307	2220	2197	2067	1902	1741
7/20/2010	1628	1569	1507	1497	1554	1664	1749	1835	1915	2028	2135	2221	2271	2303	2327	2290	2207	2146	2109	2070	2063	1971	1819	1660
7/21/2010	1566	1503	1462	1474	1552	1685	1790	1883	2007	2172	2294	2419	2505	2562	2590	2580	2566	2552	2471	2389	2354	2229	2040	1876
7/22/2010	1744	1650	1597	1576	1634	1748	1846	1989	2131	2275	2414	2487	2475	2509	2592	2598	2581	2543	2482	2420	2390	2298	2112	1975
7/23/2010	1869	1802	1757	1746	1809	1923	2021	2160	2310	2464	2597	2720	2800	2852	2872	2863	2831	2783	2702	2618	2586	2475	2297	2118
7/24/2010	1989	1902	1831	1783	1776	1778	1796	1934	2103	2276	2405	2512	2553	2599	2650	2663	2664	2635	2581	2520	2499	2389	2176	2004
7/25/2010	1863	1772	1683	1627	1619	1620	1604	1720	1872	1950	1999	2084	2199	2280	2338	2386	2395	2373	2331	2239	2211	2101	1927	1767
7/26/2010	1641	1562	1503	1500	1561	1671	1756	1870	1989	2122	2235	2330	2428	2480	2528	2556	2538	2514	2434	2330	2249	2122	1905	1742
7/27/2010	1616	1527	1475	1467	1524	1635	1729	1839	1970	2147	2297	2442	2523	2580	2618	2640	2636	2607	2550	2474	2441	2293	2117	1954
7/28/2010	1825	1748	1698	1687	1745	1870	1961	2099	2261	2413	2535	2662	2745	2752	2792	2797	2763	2718	2663	2562	2519	2326	2065	1905
7/29/2010	1792	1714	1683	1656	1734	1853	1919	1981	2077	2206	2300	2391	2454	2500	2509	2514	2474	2420	2337	2218	2174	2030	1843	1682
7/30/2010	1555	1474	1415	1400	1472	1592	1659	1734	1842	1927	2038	2143	2204	2229	2251	2266	2247	2165	2077	2021	2001	1909	1767	1640
7/31/2010	1547	1475	1426	1401	1414	1435	1441	1536	1630	1712	1758	1759	1746	1757	1778	1801	1806	1790	1760	1734	1748	1678	1572	1488

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
8/1/2010	1399	1348	1304	1285	1272	1292	1298	1383	1503	1644	1751	1851	1939	1977	2029	2078	2107	2092	2079	2027	2023	1926	1780	1630
8/2/2010	1515	1443	1401	1405	1473	1608	1689	1823	1954	2135	2288	2417	2508	2582	2635	2644	2620	2572	2516	2441	2398	2250	2062	1891
8/3/2010	1767	1694	1644	1621	1690	1830	1918	2011	2094	2138	2203	2329	2480	2594	2682	2768	2808	2791	2736	2688	2669	2535	2356	2212
8/4/2010	2096	2017	1965	1940	2004	2131	2211	2350	2484	2674	2809	2837	2880	2934	2992	3013	2998	2968	2890	2774	2589	2379	2179	2020
8/5/2010	1902	1816	1752	1729	1783	1910	1991	2090	2208	2333	2451	2541	2624	2669	2706	2720	2692	2626	2545	2458	2418	2247	2030	1852
8/6/2010	1713	1614	1542	1508	1549	1650	1709	1808	1940	2076	2181	2267	2343	2392	2420	2408	2367	2303	2191	2089	2050	1915	1745	1597
8/7/2010	1487	1401	1358	1330	1339	1360	1370	1485	1622	1760	1868	1960	2035	2096	2148	2189	2219	2203	2138	2052	2035	1918	1766	1619
8/8/2010	1509	1414	1362	1326	1313	1311	1313	1415	1563	1735	1895	2030	2106	2184	2231	2280	2308	2279	2261	2206	2177	2059	1888	1732
8/9/2010	1614	1535	1486	1479	1557	1698	1775	1872	2027	2214	2388	2545	2685	2778	2840	2851	2839	2802	2743	2668	2621	2468	2278	2115
8/10/2010	1995	1908	1847	1829	1897	2036	2108	2195	2341	2499	2666	2804	2882	2947	2978	2982	2930	2897	2860	2793	2757	2574	2375	2208
8/11/2010	2077	1997	1939	1926	1991	2140	2205	2306	2442	2624	2707	2720	2802	2869	2890	2918	2892	2813	2696	2605	2549	2374	2169	2003
8/12/2010	1878	1799	1742	1714	1787	1930	2013	2124	2295	2451	2584	2721	2819	2882	2918	2931	2910	2858	2772	2685	2636	2459	2244	2068
8/13/2010	1937	1835	1769	1746	1803	1942	2003	2121	2267	2447	2581	2706	2809	2864	2885	2892	2841	2777	2655	2507	2448	2316	2142	1991
8/14/2010	1880	1789	1712	1666	1678	1721	1741	1833	1952	2085	2213	2331	2363	2405	2474	2531	2539	2515	2484	2413	2375	2244	2092	1953
8/15/2010	1828	1741	1688	1638	1636	1642	1629	1752	1907	2097	2285	2409	2507	2575	2637	2665	2670	2648	2595	2498	2450	2256	2044	1862
8/16/2010	1725	1636	1562	1531	1579	1709	1774	1869	1973	2101	2193	2271	2357	2417	2468	2491	2479	2445	2362	2257	2192	2001	1778	1615
8/17/2010	1506	1436	1400	1388	1466	1617	1688	1768	1878	2008	2119	2228	2320	2383	2384	2396	2397	2336	2249	2208	2179	2022	1839	1696
8/18/2010	1597	1519	1478	1482	1573	1742	1819	1889	1978	2105	2226	2335	2419	2478	2516	2556	2550	2503	2424	2345	2293	2105	1904	1736
8/19/2010	1612	1524	1477	1464	1533	1698	1750	1859	2002	2166	2287	2408	2507	2590	2646	2684	2674	2633	2560	2499	2432	2231	2020	1851
8/20/2010	1738	1655	1600	1574	1657	1814	1873	1957	2090	2247	2374	2504	2609	2682	2721	2742	2689	2586	2490	2428	2364	2212	2045	1891
8/21/2010	1765	1678	1621	1591	1598	1623	1642	1702	1796	1855	1893	1944	1984	2025	2076	2097	2089	2087	2062	2051	2041	1940	1793	1677
8/22/2010	1557	1482	1431	1390	1398	1407	1409	1508	1650	1734	1811	1938	2036	2125	2211	2289	2335	2318	2273	2211	2160	2011	1821	1663
8/23/2010	1552	1477	1436	1433	1516	1694	1767	1816	1871	1920	1999	2119	2235	2301	2355	2383	2367	2336	2266	2209	2160	1959	1779	1639
8/24/2010	1532	1449	1415	1410	1497	1654	1725	1792	1909	2016	2115	2202	2253	2283	2291	2278	2234	2187	2132	2140	2101	1950	1759	1607
8/25/2010	1502	1444	1404	1404	1497	1675	1758	1808	1856	1970	2067	2082	2140	2211	2271	2311	2301	2258	2165	2091	2015	1824	1626	1467
8/26/2010	1379	1309	1290	1290	1368	1525	1578	1638	1713	1799	1846	1900	1947	1981	2019	2044	2051	2015	1963	1898	1858	1702	1519	1382
8/27/2010	1297	1245	1212	1220	1292	1447	1518	1582	1666	1773	1828	1893	1952	2008	2054	2091	2096	2072	2000	1922	1866	1726	1566	1418
8/28/2010	1319	1263	1206	1201	1209	1244	1257	1347	1470	1598	1710	1799	1885	1983	2072	2166	2218	2213	2158	2095	2045	1910	1770	1630
8/29/2010	1540	1459	1407	1380	1365	1384	1388	1483	1663	1855	2039	2196	2317	2394	2456	2489	2494	2461	2417	2365	2296	2124	1942	1781
8/30/2010	1662	1579	1532	1518	1610	1782	1867	1936	2073	2234	2309	2345	2412	2471	2512	2531	2531	2499	2442	2413	2338	2145	1949	1793
8/31/2010	1672	1588	1539	1530	1611	1762	1857	1916	2035	2166	2275	2379	2480	2546	2626	2660	2644	2608	2529	2500	2415	2202	1999	1830

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
9/1/2010	1712	1620	1567	1550	1625	1787	1860	1939	2068	2233	2355	2471	2507	2545	2598	2619	2585	2482	2375	2356	2298	2099	1910	1769
9/2/2010	1649	1579	1536	1529	1610	1773	1844	1921	2049	2181	2275	2345	2363	2375	2364	2361	2331	2320	2266	2276	2206	2052	1880	1753
9/3/2010	1675	1607	1548	1510	1602	1745	1822	1830	1855	1945	1996	2010	2029	2030	2019	1988	1919	1827	1731	1698	1668	1567	1441	1332
9/4/2010	1252	1196	1159	1137	1150	1175	1180	1240	1317	1370	1401	1429	1442	1463	1468	1496	1507	1487	1441	1453	1440	1360	1269	1190
9/5/2010	1129	1085	1059	1048	1055	1073	1071	1119	1200	1269	1320	1359	1394	1424	1467	1513	1546	1545	1513	1525	1509	1431	1333	1250
9/6/2010	1178	1145	1117	1113	1127	1148	1144	1177	1287	1402	1505	1578	1662	1720	1810	1892	1953	1960	1923	1932	1889	1751	1585	1470
9/7/2010	1378	1311	1280	1286	1376	1552	1654	1721	1843	1997	2117	2239	2293	2251	2191	2148	2112	2069	1982	1984	1911	1755	1567	1421
9/8/2010	1332	1269	1236	1242	1321	1471	1541	1585	1660	1737	1788	1832	1883	1932	1969	2000	1992	1965	1903	1879	1803	1628	1464	1337
9/9/2010	1259	1208	1180	1192	1263	1420	1497	1534	1591	1661	1708	1737	1783	1821	1836	1835	1834	1804	1751	1779	1719	1580	1424	1313
9/10/2010	1238	1205	1174	1188	1267	1430	1510	1543	1609	1686	1739	1793	1845	1878	1907	1913	1886	1820	1762	1793	1744	1647	1517	1416
9/11/2010	1341	1289	1251	1242	1253	1302	1339	1383	1424	1484	1510	1514	1510	1518	1562	1617	1663	1675	1631	1653	1618	1521	1414	1323
9/12/2010	1249	1192	1159	1133	1125	1149	1142	1209	1309	1403	1489	1571	1627	1670	1730	1785	1821	1817	1784	1800	1738	1599	1457	1337
9/13/2010	1265	1221	1196	1209	1302	1491	1583	1620	1718	1820	1917	2009	2099	2170	2228	2263	2223	2195	2145	2155	2057	1863	1672	1510
9/14/2010	1420	1348	1302	1296	1368	1540	1645	1660	1705	1768	1820	1900	1925	1931	1935	1943	1977	1978	1923	1938	1838	1671	1500	1374
9/15/2010	1290	1237	1222	1227	1301	1481	1569	1611	1673	1769	1842	1932	2018	2106	2168	2208	2204	2159	2113	2137	2042	1894	1707	1588
9/16/2010	1504	1456	1425	1421	1501	1699	1811	1835	1887	1938	2026	2112	2180	2190	2175	2121	2049	1993	1893	1886	1798	1621	1468	1344
9/17/2010	1263	1227	1198	1204	1286	1441	1528	1552	1617	1694	1734	1750	1799	1841	1865	1876	1869	1821	1750	1752	1671	1551	1422	1305
9/18/2010	1227	1179	1150	1139	1157	1196	1237	1288	1388	1483	1562	1634	1686	1741	1802	1859	1879	1844	1812	1839	1764	1635	1514	1406
9/19/2010	1334	1286	1249	1229	1232	1254	1271	1317	1404	1499	1578	1677	1792	1878	1853	1835	1868	1881	1848	1887	1795	1695	1560	1445
9/20/2010	1366	1308	1294	1306	1401	1595	1703	1728	1818	1929	2005	2125	2229	2308	2352	2390	2393	2349	2292	2298	2157	1981	1783	1635
9/21/2010	1518	1446	1405	1410	1482	1678	1782	1796	1887	2018	2167	2306	2424	2523	2580	2609	2586	2517	2442	2429	2289	2093	1907	1739
9/22/2010	1608	1565	1516	1497	1567	1735	1846	1870	1933	2058	2117	2134	2108	2060	2028	2002	1988	1962	1949	1971	1888	1725	1571	1443
9/23/2010	1376	1330	1310	1326	1424	1615	1731	1765	1870	2004	2139	2278	2383	2461	2498	2517	2503	2425	2367	2369	2251	2069	1886	1732
9/24/2010	1633	1566	1521	1507	1591	1774	1875	1909	1997	2124	2205	2169	2162	2231	2286	2284	2203	2073	1972	1955	1849	1691	1536	1390
9/25/2010	1294	1233	1186	1172	1183	1225	1259	1306	1378	1436	1483	1515	1541	1560	1581	1598	1605	1564	1521	1529	1454	1357	1259	1183
9/26/2010	1127	1094	1069	1065	1072	1097	1131	1157	1216	1272	1295	1312	1324	1336	1338	1351	1362	1364	1396	1481	1418	1325	1225	1155
9/27/2010	1107	1081	1075	1101	1183	1366	1484	1488	1514	1564	1597	1624	1657	1661	1662	1656	1628	1598	1611	1652	1572	1447	1316	1222
9/28/2010	1167	1138	1125	1138	1227	1401	1517	1515	1550	1606	1628	1642	1659	1659	1650	1654	1644	1611	1605	1652	1564	1441	1308	1210
9/29/2010	1159	1128	1114	1135	1218	1390	1505	1506	1551	1620	1671	1701	1732	1747	1756	1766	1754	1729	1703	1721	1615	1479	1342	1241
9/30/2010	1174	1122	1110	1132	1218	1390	1507	1518	1570	1649	1701	1745	1782	1783	1780	1762	1742	1676	1665	1695	1598	1470	1339	1236

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
10/1/2010	1171	1144	1122	1139	1212	1373	1481	1490	1527	1582	1608	1635	1638	1652	1641	1632	1600	1555	1538	1558	1491	1399	1282	1197
10/2/2010	1144	1105	1086	1082	1104	1149	1213	1264	1345	1389	1410	1417	1405	1377	1344	1331	1327	1324	1386	1420	1375	1317	1245	1171
10/3/2010	1128	1095	1083	1078	1093	1130	1177	1217	1277	1307	1324	1337	1331	1327	1324	1327	1340	1347	1429	1486	1425	1345	1248	1181
10/4/2010	1140	1132	1131	1174	1271	1469	1598	1597	1605	1621	1624	1628	1619	1596	1578	1555	1535	1523	1576	1612	1536	1425	1316	1227
10/5/2010	1195	1167	1175	1202	1305	1507	1620	1613	1605	1618	1624	1623	1624	1614	1597	1578	1556	1534	1573	1615	1535	1424	1300	1224
10/6/2010	1186	1169	1158	1193	1301	1485	1604	1594	1586	1617	1632	1643	1656	1657	1647	1634	1603	1580	1616	1646	1572	1445	1328	1236
10/7/2010	1180	1154	1140	1158	1241	1426	1546	1539	1576	1622	1656	1696	1715	1729	1729	1723	1706	1656	1678	1697	1592	1460	1327	1220
10/8/2010	1171	1130	1122	1138	1232	1405	1527	1536	1556	1607	1642	1682	1702	1705	1713	1711	1684	1638	1617	1614	1529	1424	1307	1209
10/9/2010	1147	1108	1090	1082	1104	1161	1231	1300	1331	1395	1446	1482	1509	1538	1573	1611	1624	1604	1614	1609	1531	1442	1337	1245
10/10/2010	1173	1122	1092	1077	1086	1115	1153	1191	1278	1363	1447	1533	1599	1669	1707	1746	1762	1741	1767	1754	1652	1524	1391	1289
10/11/2010	1219	1182	1163	1174	1253	1427	1552	1552	1602	1636	1809	1846	1915	1967	1980	1968	1926	1873	1885	1856	1737	1575	1438	1316
10/12/2010	1238	1199	1173	1179	1269	1442	1557	1564	1601	1686	1749	1823	1866	1888	1877	1857	1839	1799	1834	1809	1704	1570	1418	1314
10/13/2010	1240	1192	1173	1182	1267	1431	1563	1559	1596	1651	1702	1753	1802	1775	1702	1672	1630	1619	1675	1654	1557	1428	1306	1221
10/14/2010	1158	1137	1129	1141	1234	1411	1543	1540	1559	1591	1616	1627	1638	1622	1603	1579	1551	1524	1587	1605	1529	1417	1305	1226
10/15/2010	1173	1147	1140	1158	1246	1421	1543	1530	1560	1592	1598	1602	1611	1594	1581	1549	1497	1468	1513	1512	1464	1361	1273	1200
10/16/2010	1145	1119	1108	1114	1151	1211	1297	1337	1377	1394	1387	1377	1361	1355	1345	1344	1349	1339	1400	1408	1368	1301	1217	1151
10/17/2010	1103	1076	1061	1056	1072	1109	1157	1187	1246	1279	1310	1319	1334	1348	1365	1383	1403	1408	1484	1478	1409	1318	1230	1147
10/18/2010	1103	1078	1076	1106	1199	1382	1520	1522	1543	1569	1587	1592	1600	1595	1576	1553	1544	1545	1617	1602	1525	1412	1304	1222
10/19/2010	1180	1153	1157	1187	1291	1478	1614	1606	1601	1609	1602	1604	1604	1581	1568	1557	1530	1520	1600	1596	1527	1428	1315	1235
10/20/2010	1190	1175	1166	1202	1297	1492	1635	1616	1607	1623	1622	1621	1623	1609	1590	1574	1549	1535	1609	1598	1533	1425	1311	1225
10/21/2010	1175	1154	1146	1157	1238	1398	1529	1552	1563	1581	1587	1595	1592	1573	1553	1524	1500	1492	1574	1578	1520	1433	1335	1263
10/22/2010	1228	1211	1217	1243	1347	1496	1630	1647	1655	1640	1624	1611	1583	1575	1535	1520	1476	1457	1533	1510	1448	1378	1284	1211
10/23/2010	1163	1130	1126	1126	1148	1205	1280	1325	1370	1415	1425	1413	1396	1373	1348	1338	1342	1345	1429	1418	1372	1301	1226	1161
10/24/2010	1113	1089	1060	1063	1069	1102	1154	1190	1234	1283	1321	1347	1356	1370	1366	1376	1392	1426	1519	1515	1455	1370	1279	1187
10/25/2010	1141	1117	1114	1134	1236	1429	1584	1602	1617	1653	1672	1683	1685	1676	1645	1629	1606	1617	1693	1664	1589	1482	1350	1268
10/26/2010	1219	1188	1171	1192	1283	1488	1635	1680	1686	1644	1662	1651	1633	1619	1605	1587	1560	1538	1621	1599	1522	1418	1290	1214
10/27/2010	1159	1137	1123	1145	1234	1422	1563	1565	1571	1609	1635	1643	1643	1626	1599	1574	1549	1550	1620	1597	1528	1429	1310	1221
10/28/2010	1175	1148	1144	1164	1268	1456	1610	1625	1636	1664	1678	1669	1664	1645	1630	1632	1647	1688	1741	1717	1657	1545	1440	1362
10/29/2010	1320	1293	1290	1318	1414	1599	1730	1732	1703	1692	1655	1624	1608	1563	1523	1484	1460	1462	1548	1548	1509	1456	1387	1329
10/30/2010	1288	1280	1278	1288	1320	1389	1477	1511	1541	1537	1501	1461	1414	1375	1354	1347	1349	1378	1456	1440	1400	1337	1274	1225
10/31/2010	1189	1171	1162	1165	1188	1232	1295	1328	1355	1372	1367	1363	1351	1343	1331	1320	1318	1325	1423	1471	1459	1411	1330	1265

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
11/1/2010	1238	1221	1235	1280	1397	1603	1757	1759	1726	1711	1676	1661	1638	1610	1567	1554	1548	1589	1687	1670	1606	1526	1434	1359
11/2/2010	1316	1299	1294	1327	1440	1624	1775	1766	1737	1735	1702	1681	1654	1620	1599	1581	1591	1649	1736	1708	1653	1547	1440	1373
11/3/2010	1328	1324	1343	1389	1520	1721	1872	1849	1796	1748	1691	1664	1635	1602	1582	1574	1587	1608	1672	1660	1610	1516	1408	1345
11/4/2010	1306	1286	1279	1313	1422	1619	1758	1748	1731	1726	1704	1679	1670	1654	1651	1616	1610	1676	1745	1727	1659	1554	1448	1366
11/5/2010	1330	1309	1305	1341	1450	1647	1793	1797	1756	1755	1722	1703	1698	1679	1657	1640	1633	1689	1758	1730	1679	1607	1525	1459
11/6/2010	1418	1402	1392	1415	1445	1526	1631	1678	1680	1648	1610	1573	1525	1465	1433	1421	1428	1495	1605	1619	1603	1563	1497	1441
11/7/2010	1399	1387	1379	1385	1403	1451	1510	1548	1572	1553	1514	1471	1436	1407	1390	1372	1381	1449	1564	1550	1545	1481	1401	1328
11/8/2010	1282	1262	1257	1277	1328	1458	1657	1741	1711	1681	1667	1649	1639	1632	1610	1585	1568	1588	1673	1644	1605	1520	1428	1331
11/9/2010	1270	1250	1239	1251	1292	1413	1620	1699	1670	1647	1654	1637	1641	1638	1631	1606	1570	1592	1671	1635	1592	1512	1416	1306
11/10/2010	1235	1213	1202	1215	1253	1374	1575	1666	1645	1638	1644	1629	1638	1630	1618	1586	1565	1584	1672	1647	1599	1528	1419	1303
11/11/2010	1245	1217	1207	1212	1244	1358	1551	1642	1626	1620	1628	1631	1626	1636	1624	1608	1568	1604	1679	1639	1597	1508	1409	1309
11/12/2010	1219	1183	1173	1173	1206	1314	1508	1606	1603	1609	1622	1633	1631	1622	1608	1581	1552	1559	1607	1566	1526	1463	1375	1298
11/13/2010	1231	1196	1169	1159	1172	1206	1268	1319	1380	1416	1432	1435	1425	1415	1399	1400	1428	1495	1515	1484	1458	1399	1342	1284
11/14/2010	1225	1200	1180	1174	1184	1222	1270	1316	1374	1434	1425	1413	1408	1383	1371	1350	1369	1479	1605	1611	1592	1538	1469	1405
11/15/2010	1340	1313	1312	1329	1386	1507	1709	1807	1778	1753	1753	1704	1681	1651	1632	1618	1632	1706	1792	1783	1759	1697	1596	1518
11/16/2010	1466	1441	1430	1439	1478	1596	1778	1865	1850	1849	1859	1848	1839	1836	1829	1817	1839	1901	1921	1875	1808	1722	1608	1495
11/17/2010	1418	1382	1367	1376	1416	1542	1734	1833	1793	1753	1743	1722	1686	1659	1643	1631	1625	1701	1793	1780	1762	1702	1614	1516
11/18/2010	1465	1420	1398	1386	1416	1521	1696	1809	1796	1792	1801	1777	1766	1747	1718	1686	1693	1775	1859	1850	1839	1783	1696	1607
11/19/2010	1556	1526	1530	1539	1579	1704	1889	1977	1959	1943	1926	1897	1879	1844	1804	1755	1729	1782	1833	1794	1750	1693	1609	1518
11/20/2010	1438	1391	1365	1372	1395	1447	1521	1589	1611	1645	1664	1649	1614	1590	1567	1553	1538	1609	1679	1665	1644	1605	1546	1481
11/21/2010	1414	1363	1335	1316	1321	1330	1360	1383	1405	1441	1458	1461	1461	1454	1430	1414	1416	1512	1573	1563	1528	1470	1372	1282
11/22/2010	1213	1162	1142	1141	1171	1278	1467	1597	1606	1626	1651	1656	1656	1652	1630	1607	1604	1664	1713	1693	1651	1568	1461	1342
11/23/2010	1254	1202	1162	1158	1190	1312	1524	1683	1702	1697	1712	1715	1696	1680	1655	1630	1633	1743	1851	1859	1854	1808	1726	1630
11/24/2010	1568	1533	1523	1531	1565	1675	1858	1966	1964	1986	1999	2009	2017	2042	2021	1987	1963	2010	2005	1961	1902	1826	1718	1602
11/25/2010	1500	1432	1373	1340	1335	1346	1359	1383	1424	1496	1544	1551	1512	1457	1411	1373	1371	1421	1447	1471	1507	1524	1519	1491
11/26/2010	1481	1478	1483	1500	1542	1617	1692	1737	1729	1733	1729	1710	1684	1650	1615	1601	1633	1751	1839	1824	1799	1752	1689	1591
11/27/2010	1527	1467	1437	1430	1437	1469	1548	1603	1634	1646	1643	1628	1598	1555	1512	1482	1502	1636	1745	1751	1748	1736	1699	1647
11/28/2010	1598	1566	1555	1560	1573	1607	1651	1683	1693	1657	1619	1577	1543	1506	1468	1449	1482	1620	1743	1759	1756	1695	1629	1543
11/29/2010	1477	1441	1440	1447	1488	1598	1784	1893	1855	1841	1799	1752	1713	1685	1657	1645	1677	1784	1818	1791	1754	1673	1566	1444
11/30/2010	1352	1293	1262	1261	1281	1370	1544	1667	1659	1678	1703	1733	1763	1792	1818	1837	1877	1984	2037	2026	2000	1930	1825	1715

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
12/1/2010	1640	1609	1593	1595	1642	1761	1963	2073	2073	2072	2097	2097	2104	2099	2088	2095	2125	2203	2232	2199	2166	2080	1957	1829
12/2/2010	1736	1689	1669	1680	1720	1842	2033	2124	2092	2066	2046	1981	1936	1921	1917	1906	1937	2027	2072	2050	2019	1956	1844	1732
12/3/2010	1656	1610	1590	1590	1626	1729	1925	2023	1990	1941	1925	1880	1864	1834	1812	1786	1798	1916	1958	1940	1912	1863	1788	1688
12/4/2010	1618	1581	1567	1565	1582	1624	1687	1767	1801	1853	1884	1896	1871	1843	1821	1821	1842	1950	2009	1984	1959	1911	1835	1760
12/5/2010	1687	1626	1593	1579	1584	1615	1663	1745	1799	1848	1895	1889	1884	1869	1889	1927	1992	2112	2161	2151	2141	2090	1992	1905
12/6/2010	1841	1817	1841	1889	1969	2122	2337	2478	2451	2446	2371	2281	2237	2206	2183	2191	2239	2385	2500	2505	2482	2392	2269	2137
12/7/2010	2053	2013	2006	2009	2045	2162	2337	2425	2373	2314	2262	2196	2142	2100	2062	2050	2099	2273	2381	2394	2391	2338	2226	2126
12/8/2010	2065	2030	2031	2055	2097	2218	2409	2514	2461	2396	2322	2221	2165	2107	2065	2047	2071	2220	2339	2344	2339	2288	2185	2089
12/9/2010	2039	2019	2019	2036	2078	2193	2389	2482	2420	2351	2247	2186	2158	2150	2125	2114	2138	2229	2259	2234	2191	2107	2005	1877
12/10/2010	1785	1745	1719	1702	1714	1803	1975	2083	2051	2011	1985	1933	1884	1839	1808	1780	1767	1883	1964	1944	1921	1876	1798	1706
12/11/2010	1645	1599	1579	1568	1582	1625	1689	1767	1804	1830	1849	1842	1803	1777	1748	1759	1784	1874	1886	1848	1805	1754	1676	1605
12/12/2010	1560	1542	1550	1567	1596	1648	1713	1782	1828	1917	1962	1990	2017	2032	2024	2037	2072	2187	2212	2200	2166	2101	2031	1957
12/13/2010	1907	1899	1910	1940	2007	2141	2301	2428	2449	2439	2414	2371	2347	2334	2312	2305	2355	2461	2540	2536	2511	2436	2340	2213
12/14/2010	2142	2116	2113	2129	2177	2287	2464	2555	2515	2433	2335	2253	2201	2146	2106	2090	2124	2283	2397	2411	2410	2367	2270	2182
12/15/2010	2133	2125	2133	2155	2218	2341	2549	2645	2600	2500	2376	2284	2203	2158	2145	2165	2211	2325	2369	2348	2297	2217	2107	1996
12/16/2010	1914	1872	1848	1859	1885	1994	2138	2230	2233	2219	2218	2194	2151	2104	2074	2078	2100	2197	2253	2224	2187	2121	1999	1891
12/17/2010	1814	1777	1772	1769	1810	1919	2082	2195	2195	2190	2196	2172	2146	2139	2100	2049	2048	2166	2246	2237	2220	2188	2125	2043
12/18/2010	1972	1941	1912	1917	1913	1955	2026	2111	2148	2128	2059	1989	1916	1858	1826	1822	1850	2001	2102	2097	2053	2005	1949	1877
12/19/2010	1804	1764	1766	1778	1805	1855	1927	2002	2030	2033	1998	1929	1908	1892	1886	1879	1905	2003	2064	2039	2009	1964	1883	1801
12/20/2010	1724	1679	1666	1672	1703	1815	1956	2080	2082	2092	2080	2067	2039	2014	1979	1978	1995	2106	2168	2149	2120	2061	1961	1853
12/21/2010	1765	1708	1682	1684	1709	1802	1920	2038	2048	2058	2077	2075	2067	2052	2024	2010	2017	2092	2130	2094	2047	1981	1891	1777
12/22/2010	1693	1639	1610	1613	1641	1738	1890	2050	2114	2179	2200	2184	2164	2152	2115	2094	2101	2163	2192	2153	2117	2073	2005	1917
12/23/2010	1852	1798	1755	1741	1754	1819	1940	2053	2060	2040	2040	2021	1975	1943	1916	1897	1912	1993	2039	2016	1981	1926	1854	1749
12/24/2010	1673	1618	1587	1577	1596	1640	1707	1775	1790	1806	1803	1774	1745	1733	1733	1728	1741	1832	1868	1836	1813	1784	1746	1701
12/25/2010	1650	1602	1584	1569	1587	1615	1656	1716	1721	1754	1754	1730	1708	1671	1674	1675	1684	1758	1840	1843	1852	1856	1822	1783
12/26/2010	1727	1707	1694	1695	1702	1750	1801	1844	1855	1886	1874	1869	1840	1811	1814	1805	1835	1947	2016	2021	2011	1970	1919	1846
12/27/2010	1807	1795	1798	1823	1872	1947	2031	2114	2108	2131	2143	2131	2100	2060	2027	1999	1986	2095	2196	2192	2167	2096	2008	1909
12/28/2010	1836	1795	1780	1782	1815	1901	2025	2122	2140	2160	2143	2094	2005	1937	1920	1946	1964	2044	2086	2052	2035	1969	1888	1799
12/29/2010	1732	1697	1694	1707	1749	1842	1965	2061	2070	2033	1970	1909	1854	1811	1811	1829	1866	1971	2010	1986	1951	1886	1797	1678
12/30/2010	1599	1552	1523	1518	1529	1603	1699	1779	1800	1822	1836	1810	1767	1760	1703	1642	1618	1711	1778	1758	1726	1669	1583	1477
12/31/2010	1402	1348	1324	1302	1316	1358	1412	1470	1494	1513	1552	1550	1542	1533	1516	1493	1524	1603	1612	1553	1489	1437	1371	1318

LOAD RESEARCH

[170 IAC 4-7-4(2)(A)-(E)]

Load shape data including annual load shapes, seasonal load shapes, monthly load shapes, selected weekly load shapes, and daily load shapes are maintained by IPL at the rate class/customer class level.

IPL currently maintains a load research sample of 515 load profile meters. The distribution of these meters by rate and class are shown in the following table.

Load Research Meters by Rate and Class			
Rate RS	97	Rate SS	123
Rate RC	107	Rate SH	31
Rate RH	147		
Residential	351	Sm C & I	154

In addition to the Residential and Small Commercial/Industrial meters outlined above, all Large Commercial/Industrial have 15 minute profile metering. The 15 minute information provides load research and billing increment data for our demand sensitive customers.

Table 1 shows the load research sample design. In some cases, the strata were designed to permit the analysis of certain sub-groups within rates. The stratification criteria are shown for the following rates:

RS – Residential Basic Service

RC – Residential Basic Service with electric water heating

RH – Residential Basic Service with electric heat

SS – Small Commercial & Industrial Secondary Service (Small)

SH – Small Commercial & Industrial Secondary Service (Electric Space Conditioning

Table 1

STRATIFICATION CRITERIA BY RATE

Rate	# of Strata	Criteria
RS	4	high/low winter and high/low summer
RC	4	high/low winter and high/low summer
RH	5	small/large heat pump houses, small/large resistance houses and apartments
SS	6	survey small/large by manufacturing; non-manufacturing; billing manufacturing/non-manufacturing
SH	4	annual kWh

Hourly data is retained in EXCEL spreadsheets. Typical weekdays, weekend days, system peak days and rate peak days are available for the following groups:

classes
rates
heat pump houses
resistance houses
electrically heated apartments
electrically heated houses
rate SS manufacturing
rate SS non-manufacturing

Historical Billing Data

Historical billing data by account is maintained on an on-going basis. The monthly billed kWh is weather adjusted for each account.

The actual and normal cooling degree days (CDD's) and heating degree days (HDD's) are calculated for each of IPL's twenty billing districts. The number of days in each billing district is also calculated. Using this data coefficients are calculated for each billing district and used to weather adjust each accounts kWh usage.

IPL Historical Load Shapes Data Files Are Provided Electronically

Table A

Future Avoided Capacity and Production Costs
Used to Evaluate DSM Programs

Year	Energy ($/kWh)	Capacity ($/kW-year)
1	0.0240	130.45
2	0.0242	130.45
3	0.0245	130.45
4	0.0530	130.45
5	0.0552	130.45
6	0.0560	130.45
7	0.0578	130.45
8	0.0626	130.45
9	0.0626	130.45
10	0.0678	130.45
11	0.0695	130.45
12	0.0712	130.45
13	0.0730	130.45
14	0.0748	130.45
15	0.0766	130.45
16	0.0785	130.45
17	0.0804	130.45
18	0.0824	130.45
19	0.0845	130.45
20	0.0866	130.45

Table C. Standard DSM Benefit/Cost Tests

DSM test objectives and valuation equation and components

	Standard Benefit / Cost Tests			
	RIM	TRC	UC	Participant
Goal/Impact of test				
Minimizes Utility costs			X	
Minimizes Customer rate impacts	X			
Achieves Customer fairness	X			
Minimizes Overall/Societal costs		X		
Maximizes Participant benefit				X
Test Benefit and Cost Components				
Benefits				
Production Cost Savings (energy)	X	X	X	
Capacity Cost Savings	X	X	X	
Participant Bill Savings				X
Costs				
Lost Revenue to Utility (Customer base)	X			
Incentives paid by Utility	X		X	
Program Administrative Costs	X	X	X	
Participant Costs (investment)		X		X

B/C test ratio (equation)

Benefit/Cost test equation is ratio of marked ("X" above). Benefits and Costs expressed as present values.

Annual Per Participant Data **[170 IAC 4-7-6(b)(5-8)]**

Table D

Program	kWh Savings	kW Savings	Bill Savings*	Net** Participant Cost	Market Penetration (% per MPS)
Residential A/C Load Management	11	1.00	$20.73	$0.00	8.4%
Residential Energy Assessment	464	0.06	$30.76	$0.00	1.8%
Residential Home Energy Audit	1,036	0.45	$68.69	$0.00	4.8%
Residential Lighting	57	0.01	$3.78	$1.66	45.7%
Residential Renewables	2,350	1.54	$155.81	$10,000.00	0.00%
Residential New Construction	1,810	0.22	$120.00	$785.71	0.02%
Residentilal 2nd Refrigerator Pickup	907	0.20	$60.13	$0.00	1.1%
Residential Low Income Weatherization	1,304	0.55	$86.46	$0.00	0.3%
Residential High Eff HVAC Incentives	696	0.40	$46.14	$0.00	0.2%
Residential Peer Comparison Reports	283	0.03	$18.76	$0.00	6.0%
Residential Multi-Family Direct Install	715	0.09	$47.40	$0.00	1.8%
Residential Room AC Pickup	113	0.60	$7.49	$0.00	0.1%
Residential Energy Efficient Schools-Kits	417		$27.65	$0.00	2.4%
C&I Custom-Business Solutions	29,879	4.50	$2,563.62	$2,289.86	0.4%
C&I Prescriptive	20,820	2.10	$1,786.36	$7,580.50	4.9%
C&I Renewables	2,350	1.50	$201.63	$10,000.00	0.0%
C&I A/C Load Management	40	3.50	$53.43	$0.00	1.1%
C&I School Audits	-	-	$0.00	$0.00	0.1%

* Based on 2010 projected rates
** One-time investment net of IPL incentives

Indianapolis Power & Light Company

3-Year Demand Side Management Plan

October 15, 2010

Table of Contents

Page

EXECUTIVE SUMMARY

Introduction

The Indiana Utility Regulatory Commission ("IURC" or "Commission") conducted a generic statewide investigation into energy efficiency and demand side management ("DSM") that culminated in a December 9, 2009 Order ("Generic DSM Order").[1] The Generic DSM Order established mandatory energy savings goals and other requirements regarding the implementation of five Core Programs constituting a mandatory minimum offering to be made by all utilities on a uniform basis through the State.[2] The Core Programs must be offered through a statewide Third Party Administrator ("TPA") and evaluated by a statewide Evaluation, Measurement and Verification ("EM&V") administrator. The Generic DSM Order acknowledges that the required energy savings and timeline mandated by the Commission's Order cannot be met solely through Core Programs. Consequently, the Generic DSM Order also recognizes the need for Core Plus Programs.

The Generic DSM Order established energy savings targets for jurisdictional electric utilities that will be required to meet an overall goal of 2% annual incremental cost-effective DSM savings within ten years. The annual savings goals are based on the average weather-normalized electric sales over each rolling prior three-year period. The result is that over a ten-year period the total energy savings required for IPL to comply with the statewide target is estimated to be more than 10% of current sales of electricity. In this 3-Year DSM Plan, IPL is proposing a portfolio of DSM programs that provide sufficient energy efficiency savings to meet the Commission's targets for 2011 through 2013 as well as additional savings to meet 2010 goals that will not be achieved in 2010.

The Commission's Phase I Order in *Re Petition of Indianapolis Power & Light Co.*, Cause No. 43623 (IURC 2/10/10) ("Phase I Order") authorized IPL to implement a portfolio of DSM programs and approved ratemaking to provide cost recovery for its Core and Core Plus Programs through Standard Contract Rider No. 22 (Core and Core Plus Demand-Side Management Adjustment). IPL has implemented the portfolio of DSM programs in order to begin achieving some of the energy savings required by the Generic DSM Order.

This current portfolio includes four of the five mandatory Core Programs. The Core Programs required by the Generic DSM Order include an energy efficient schools program described in the Generic DSM Order to include "[i]nformation and energy efficiency kits for K-12 schools, school building energy audits and access to prescriptive incentives available for commercial customers." Generic DSM Order at 36. IPL has requested authority to implement the school energy audits component of this Core Program in Cause No. 43911, which is currently pending before the Commission. While IPL is currently delivering the Core Programs that were approved in the "Phase I Order", IPL expects to transition the delivery of these programs to the TPA once the TPA contract is completed and approved by the IURC.

1 The IURC issued its Phase II Order in Cause No. 42693 on December 9, 2009.

2 As used herein the term "Core Programs" refers to those programs required by the Generic DSM Order. The term "Core Plus Programs" refers to DSM programs or portions thereof that exceed or go beyond the type of programs contemplated to be Core Programs.

Over the past several months, the newly established DSM Coordination Committee ("DSMCC"), consisting of eleven (11) parties that represent utilities, consumer groups and the Office of Utility Consumer Counselor ("OUCC") has issued a Request for Proposal ("RFP") and conducted due diligence to select a TPA for the delivery of the five (5) Core Programs established by the Generic DSM Order. The DSMCC also must select an independent consultant to perform EM&V of the Core Programs on a statewide basis.

The 3-Year DSM Plan contained in this report is the result of IPL's research, planning and evaluation undertaken since IPL's submission of its request for approval of its current DSM programs which were approved by the Commission in February 2010 in Cause No. 43623. Developed primarily to comply with the Generic DSM Order, the Plan begins with prior program approvals but also reflects experience gained since its request in Cause No. 43623.

The following plan incorporates both Core and Core Plus Programs that have been selected by IPL to achieve the energy savings mandated by the Generic DSM Order over the next three years (2011-2013) (the "3-Year DSM Plan"). The 3-Year DSM Plan includes both expanding IPL's current Core and Core Plus Programs and implementing new programs, including the addition of programs targeting commercial and industrial customers.

As required by the Generic DSM Order, IPL will also file annual reports with the Commission on or before July 1st of each year. The annual report, prepared in consultation with the IPL Oversight Board and in cooperation with the EM&V administrator, will summarize the (1) accomplishments of the previous year, (2) proposed changes in the 3-Year DSM Plan and the rationale for the proposed changes, and (3) revised program budgets and goals for the following year. It is currently anticipated that IPL will file a subsequent DSM plan on or before July 1, 2013, to achieve the energy savings mandated by the Generic DSM Order over the three year period 2014-2016.

DSM Plan Savings Targets and Objectives

The 3-Year DSM Plan is designed to create cumulative energy efficiency savings of 320,852 megawatt hours ("MWh") and cumulative demand savings of 94,555 kilowatts ("kW") by the end of Program Year 3. The Tables below reflect the program goals (including energy/demand impacts and program budget) for the (1) 3-Year DSM Plan, (2) Core Programs included in the 3-Year DSM Plan, and (3) Core Plus Programs included in the 3-Year DSM Plan.

3-Year DSM Plan[3]

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	293,305	81,513	81,513	26,458	26,458	$18,361,000
Year 2	356,466	110,369	191,882	32,669	59,127	$21,278,000
Year 3	415,903	128,970	320,852	35,428	94,555	$24,214,000
Total	1,065,674	320,852		94,555		$63,853,000

3 Energy/Demand Impacts shown in Table 1 do not include savings attributable to Rate REP. The Program Budget includes costs associated with the Customer Outreach and Education Program.

IPL Core Programs

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	246,446	59,735	59,735	16,086	16,086	$11,192,000
Year 2	268,664	70,634	130,369	19,262	35,347	$12,913,000
Year 3	329,406	87,533	217,900	23,849	59,197	$15,475,000
Total	844,516	217,902		59,197		$39,580,000

IPL Core Plus Program

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	46,859	21,779	21,779	10,372	10,372	$5,662,000
Year 2	87,802	39,734	61,513	13,407	23,779	$7,003,000
Year 3	86,497	41,439	102,952	11,579	35,358	$7,312,000
Total	221,158	102,952		35,358		$19,977,000

DSM Portfolio Analysis and Modeling

The DSM planning effort that resulted in the 3-Year DSM Plan utilized a combination of sources to develop the program costs and impacts. First, IPL leveraged many of the inputs and results from the 2008 electric DSM market potential study – IPL DSM Action Plan: Final Report dated July 31, 2008 prepared by Forefront Economics and H. Gil Peach & Associates LLC (the "MPS"). Second, during the procurement and planning process that led to current program delivery, IPL obtained information on pricing and impacts that has been incorporated.

Third, IPL's recent experience with current programs has resulted in adjustments to previously approved program plans.

The program costs were modeled by Vista Energy Group, Inc. ("Vista") to determine the program economics under the direction of IPL staff. Vista was also utilized for research and analytical support.

Below are the summary results for the economic evaluation of the 3-Year DSM Plan.

Table 4

Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
Residential Prescriptive Lighting	$17,440	7.87	$7,448	3.46	($6,540)	0.62	$7,403	2.72
Residential Home Energy Audit	$33,059	23.47	$15,689	2.08	($11,918)	0.72	$18,052	2.22
Residential Low Income Weatherization	$2,751	7.85	$608	1.31	($1,963)	0.57	$788	1.40
Energy Efficient Schools-Kits	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68
Energy Efficient Schools-Audits	($273)	0.00	($605)	0.00	($605)	0.00	($1,078)	0.00
Commercial and Industrial Rebate Program	$166,317	6.75	$90,541	7.54	($48,314)	0.68	$83,289	3.51
TOTAL-Core Programs	**$226,922**	**7.75**	**$114,609**	**4.13**	**($74,613)**	**0.67**	**$111,008**	**2.97**
Core Plus-Indrect Costs	$0	0.00	($4,008)	0.00	($4,008)	0.00	($4,008)	0.00
Second Refrigerator Pickup and Recycling	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80
Residential Room AC Pickup and Recycling	$38	0.00	$144	4.15	$129	3.13	$163	6.87
Residential Air Conditioning Load Management (ACLM)	$2,103	0.00	$11,832	2.51	$11,657	2.46	$13,760	3.33
C/I Air Conditioning Load Management (ACLM)	$410	0.00	$2,534	3.03	$2,496	2.94	$2,906	4.30
Residential Renewables Incentives Program	($85)	0.81	$37	1.18	($178)	0.58	($263)	0.50
Commercial and Industrial Renewables Incentives Program	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49
Residential Peer Comparison Energy Reports	$3,938	0.00	$437	1.18	($3,243)	0.47	$695	1.29
Residential Energy Assessment Program	$2,876	18.15	$824	2.26	($1,327)	0.53	$1,012	2.55
Residential New Construction Energy Star Plus Program	$1,031	7.35	$294	1.83	($783)	0.45	$248	1.52
Residential High Efficiency HVAC Incentives Program	$3,755	2.42	$3,337	3.52	($885)	0.84	$1,815	1.56
Multi-Family Direct Install Program	$14,636	0.00	$7,511	6.64	($5,382)	0.62	$9,254	19.84
Commercial and Industrial Business Energy Incentives Program	$21,878	4.77	$11,811	4.44	($12,708)	0.55	$9,170	2.18
Customer Energy Management System (CEMS)	$1,447	0.00	$2,393	2.53	$1,358	1.52	$2,805	3.30
TOTAL-Core Plus Programs	**$56,808**	**7.06**	**$39,218**	**2.49**	**($15,062)**	**0.81**	**$40,150**	**2.37**
All Programs	**$283,730**	**7.60**	**$153,827**	**3.45**	**($89,675)**	**0.71**	**$151,156**	**2.77**

TECHNOLOGY REVIEW

Description

IPL's measure screening process began with the comprehensive list of DSM programs and measures identified in the MPS. The list was reviewed and updated to determine whether any of the measures not currently in IPL's DSM program portfolio should be re-examined. These measures primarily include technologies which were marginally close to passing the benefit-cost screening in the MPS but due to economics at that time were not included in any programs. However, since IPL's system data, including avoided costs, have changed since the MPS, re-evaluating some of the measures was appropriate.

A Technology Analysis was conducted for each of these measures. This analysis characterizes the benefits and costs of each measure assuming adoption by a single participant. It considers the relevant costs and benefits of each measure without any marketing dynamics. It does not include delivery costs, incentives or program infrastructure requirements. It simply looks at the avoided cost benefits versus the incremental technology costs.[4] If a program cannot pass the Technology Analysis screening, adding program costs will only make the option more uneconomic. The Technology Analysis is a common metric and provides a quantitative method of identifying candidate technologies.

The analysis is based on the following components:

(1) Benefits- the annual avoided cost benefit for each measure over the life of the measure.

(2) Costs- the incremental technology cost for a given measure.

The Net Present Value ("NPV") of the avoided cost benefits of each measure is calculated and a Benefit Cost Ratio ("BCR") is determined. The technology data used in the analysis was taken from the IPL MPS. In a few cases, information from a recently completed Commonwealth Electric Company study was incorporated.[5] The results of the technology analysis for IPL are shown below.

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[4] The Technology Analysis is designed to present the Total Resource Cost perspective net of any program costs based on a single adopter.

[5] Commonwealth Edison Company, *Energy Efficiency and Demand Response Plan*, November 2007.

ID	Program Name	TRC Test	
		NPV $	BCR
1	High Efficiency Refrigerator- MPS	($52)	0.74
2	High Efficiency Room AC- MPS	($53)	0.81
3	High Efficiency Clothes Washer-MPS	$333	1.83
4	High Efficiency Clothes Washer-ComEd	($16)	0.97
5	High Efficiency Electric Water Heater-ComEd	($12)	0.83
6	High Efficiency Dishwasher-MPS	$31	1.61
7	High Efficiency Dishwasher-ComEd	$9	1.07
8	Energy Efficient CAC- 13-15 SEER-MPS	$50	1.06
9	Energy Efficient HP- 13-15 SEER-MPS	$348	1.35
10	Electric AC Tune Up	($63)	0.31

CUSTOMER OUTREACH AND EDUCATION

Program 1: Online Energy Feedback

Program Description

This program will be available for all IPL customers. For energy-only metered customers, daily energy consumption along with a historical view will be displayed on a one-day delay basis through a web-portal. Currently, IPL's demand metered customers are able to access energy, demand and reactive power consumption through a tool known as PowerView. This is updated each billing cycle. IPL envisions the new tool will provide similar information on a one-day delay basis. Customers with future AMI meters will be able to see 15-minute interval data on a one-day delay basis. Approximately 10,400 AMI meters will be installed by third quarter of 2011 for all demand metered customers and some energy-only metered customers.

Energy/Demand Savings and Program Budget

IPL expects some energy savings to occur from the Online Energy Feedback program.[6] Those anticipated savings vary by rate class. IPL assumed 2% participation by residential and small commercial and industrial participants and estimated 2% energy savings per participant. This estimate is based upon a review of a limited number of studies including those from ACEEE.[7] For estimates of savings for small commercial customers, IPL used average small commercial consumption based on aggregate 2009 rate class data. For large C&I customers, IPL assumed a 5% participation rate and estimated 3% energy savings per participant. This was based upon review of savings by IPL large C&I customers currently utilizing advanced metering technology as well as informal interviews with large C&I customers.

6 IPL did not use projected energy savings from this program for purposes of demonstrating its compliance with the Generic DSM Order's energy savings goals because there were insufficient studies to support reliable projections.

7 "Residential Energy Use Behavior Change Pilot" by Carroll, Ed; Hatton, Eric; and Brown, Mark.

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh Cumulative	Demand Savings MW Annual Incremental	Demand Savings MW Cumulative	Program Budget[8]
Year 1	3,019	10,065	10,065	4.7	4.7	$612,000
Year 2	9,504	1,800	11,865	0.0	4.7	$178,000
Year 3	9,504	0	11,865	0.0	4.7	$145,000
Total	22,027	11,865		4.7		$935,000

Marketing Plan

IPL will reach out to all customers who may use the online energy feedback tools through bill inserts, radio, the IPL website, print and electronic media, community events, meetings and specialized marketing materials. IPL Account Representatives will interface with commercial and industrial customers through regular channels including the IPL "Powerpoints" newsletter. Where practical, ties to this program may be embedded in DSM educational/outreach programs.

Delivery Method

IPL will likely roll out specific software functions incrementally. For example, providing one day delayed energy consumption for all energy only metered customers (using nightly AMR data) may be followed by providing 15-minute interval data for customers metered with new AMI meters for energy only and demand metered customers. Specific timelines will be developed with program vendors. The tools will be accessible through www.IPLpower.com. IPL may also conduct training workshops.

[8] Program Budget reflects the total cost of the program after DOE funding is applied. DOE funds will cover approximately 40% of the implementation cost in Years 1 and 2.

Program 2: Energy Consumer Behavior Study

Program Description

Leading energy professionals and public policy leaders have highlighted the need to engage in analyses of energy consumer behavior to better understand what motivates customers to change their energy behavior.[9] IPL also recognizes the complex challenge of blending new energy technologies with understanding customer behavior. Therefore, IPL proposes to work with the DSM OSB and energy professionals versed in consumer science to develop and implement a study of Indiana energy consumer behavior. This could include interviews, surveys, focus groups, and analysis of metered energy data. IPL intends to utilize the study results of Indiana-specific customer behavior to shape future programs.

Program Budget

The budget for this study is based primarily upon surveying customers, consultant services and modeling requirements following high level discussions with consumer science and energy professionals at Purdue University and Christensen and Associates. This will be further defined based on the scope of work.

Program Year	Program Budget
Year 1	$0
Year 2	$125,000
Year 3	$125,000
Total	$250,000

Marketing Plans

Not applicable.

Delivery Mechanism

Not applicable.

[9] See ACEEE report "Advanced Metering Initiatives and Residential Feedback Programs: A Meta-Review for Household Electricity-Saving Opportunities." June 2010, p. iv.

Program 3: Smart Appliance Pilot

Program Description

Appliance manufacturers are engaged with designing and commercializing products to automatically respond to price signals through advanced meters or information from Home Energy Management Systems ("HEMS"). Given the potential promise of this early stage technology, IPL proposes to collaboratively develop with its OSB a smart appliance rebate program for implementation in Program Year 3. This pilot rebate program for appliance purchases will reimburse consumers the premium required for the initial investment, in exchange for enabling limited scope of demand response and sharing information. Cost benefit tests will be completed and provided to the Commission prior to implementation through annual reports.

Program Budget

A $250,000 budget for this pilot is based upon providing an estimated 25 % rebate of the purchase premium to participating customers. See the table below for representative participation and rebate amounts based on preliminary research in this area.[10]

	Standard Appliance Price	Smart Appliance Price	Distribution of Dollars	# Appliances Rebated	Total IPL Cost
Electric Dryer	$450	$540	25.0%	421	$56,835
Dishwasher	$350	$420	25.0%	542	$56,910
Oven/Range	$600	$720	25.0%	316	$56,884
Water Heater	$450	$1,500	25.0%	151	$56,643
Sub-Total				**1,430**	**$227,272**
Program Administration					**$22,727**
Total				**1,430**	**$250,000**

Program Year	Program Budget
Year 1	$0
Year 2	$125,000
Year 3	$125,000
Total	$250,000

10 Standard Price based on Sears' website. Specific prices may vary.

Marketing Plans

To be developed collaboratively. IPL anticipates inviting customers with HEMS installations to participate in this program, but is willing to consider all residential customers based on analysis.

Delivery Mechanism

IPL proposes to focus on those customers who agree to HEMS and Time of Use ("TOU") rates to optimize savings, however, those without TOU rates may also provide meaningful information about consumer behavior and preferences. IPL intends to work with a local appliance retailer to implement this program.

Program 4: Program Outreach Messaging and Other Indirect Costs

Program Description and Delivery

Program Outreach Messaging includes those activities that will be required to successfully communicate to IPL's customers the growing importance of understanding their energy consumption and how to use energy more efficiently. Moreover, IPL must be able to make its customers aware of the information and programs available to assist them in these efforts.

In their daily lives, IPL's customers do not necessarily focus on energy efficiency. In order to implement successful programs, IPL must understand what messages will cause customers to consider their energy consumption and then motivate them to change their behavior. Outreach efforts will incorporate these key messages into a general awareness campaign that will be delivered through a variety of channels that may include bill inserts, the IPL website, radio, print and other mass media. This awareness campaign will help drive the behavior and decisions that IPL desires.

In addition to awareness and education, indirect expenses include appropriate training and development for program staff, memberships in relevant organizations, including those that can cost-effectively provide research into DSM-related subjects, and the addition of staff for overall portfolio analysis and reporting.

Program Budget

Program Year	Program Budget
Year 1	$895,610[11]
Year 2	$934,537
Year 3	$1,032,456
Total	$2,862,603

[11] Year 1 Program Budget includes $80,000 related to the integration of the Statewide Core Programs.

CORE PROGRAMS

Program 1: Residential Lighting Program

Program Description

The Residential Lighting Program is an existing IPL program that has been available to IPL customers since 2003. This program delivery is expected to be transitioned to the TPA on or about January 1, 2011. The goal of the Residential Lighting Program is to increase the penetration of high efficiency Energy Star ("ES") qualified lighting in the homes of IPL residential customers. This program will provide IPL residential customers with the opportunity to purchase energy efficient light bulbs (primarily Compact Fluorescent Lights ("CFLs") at reduced prices at participating area retail stores.

Energy/Demand Savings, Program Budget and Cost Effectiveness

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013). The expected demand and energy savings are representative of responses to the TPA RFP, which indicated that these savings will be achievable by the prospective TPA. The proposed program budget represents IPL's current understanding of the costs for the program to be delivered by a TPA.

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS:RESIDENTIAL LIGHTING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Prescriptive Lighting	226,233	13,009	1,598	-	-	$404	$681	$1,085
2012	Residential Prescriptive Lighting	245,750	27,017	3,318	-	-	$436	$563	$986
2013	Residential Prescriptive Lighting	300,958	44,172	5,425	-	-	$533	$667	$1,189
TOTAL		774,941			-	-	1,372	1,690	3,262

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Prescriptive Lighting	$17,440	7.87	$7,448	3.48	($5,640)	0.62	$7,403	2.72
	TOTAL	$17,440	7.87	$7,448	3.48	($5,640)	0.62	$7,403	2.72

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Prescriptive Lighting	2011	$ 149,000	$ 42,000.0	$ -	$ 1.94	$ 47,000.0	$ 1.77		228,233	0.80
Residential Prescriptive Lighting	2012		$ 43,000.0	$ -	$ 1.90	$ 43,000.0	$ 1.77		245,750	0.80
Residential Prescriptive Lighting	2013		$ 45,000.0	$ -	$ 1.86	$ 52,000.0	$ 1.77		300,958	0.80

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL - EE savings are slightly less than EE savings represented in Schedule E - due to rounding in modeling.
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs assumes 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623

Eligible Customers

This program will be available to all IPL Residential Customers.

Marketing Plan

The TPA will be responsible for all program marketing strategy. Marketing efforts may include effective signage in participating retail stores, information on the IPL web site and use of bill inserts and/or messages, and educational outreach at events such as Earth Day Indiana and other similar community events.

Delivery Method

This program will be delivered by Wisconsin Energy Conservation Corporation ("WECC") until the program is transitioned to the Statewide TPA for delivery.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 2: Residential Home Energy Audit

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-RESIDENTIAL HOME ENERGY AUDIT PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Home Energy Audit	10,588	10,969	4,765	-	-	$360	$3,761	$4,142
2012	Residential Home Energy Audit	15,083	26,595	11,652	-	-	$541	$5,013	$5,554
2013	Residential Home Energy Audit	18,935	46,212	20,073	-	-	$680	$5,631	$6,311
TOTAL		44,606			-	-	$1,601	$14,405	$16,007

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Home Energy Audit	$33,059	23.47	$15,889	2.06	($11,918)	0.72	$18,052	2.22
	TOTAL	$33,059	23.47	$15,889	2.06	($11,918)	0.72	$18,052	2.22

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Home Energy Audit	2011	$ 57,000	$ 28,000	$ -	$ 329.00	$ 193,000	$ 35.90		10,588	0.90
Residential Home Energy Audit	2012		$ 29,000	$ -	$ 313.00	$ 263,000	$ 35.90		15,083	0.90
Residential Home Energy Audit	2013		$ 30,000	$ -	$ 280.00	$ 299,000	$ 35.90		18,935	0.90

10.4.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses provided to the RFP for a Statewide TPA - derived from number of participants and per participant incentive amount
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admin
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

<u>Program 3: Residential Low Income Weatherization</u>

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-RESIDENTIAL LOW INCOME WEATHERIZATION PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Low Income Weatherization	437	670	240	-	-	$105	$459	$564
2012	Residential Low Income Weatherization	615	1,372	579	-	-	$148	$575	$723
2013	Residential Low Income Weatherization	767	2,372	1,000	-	-	$184	$679	$863
TOTAL		1,819			-	-	$437	$1,713	$2,150

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Low Income Weatherization	$2,751	7.85	$808	1.31	($1,963)	0.57	$788	1.40
	TOTAL	$2,751	7.85	$808	1.31	($1,963)	0.57	$788	1.40

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Low Income Weatherization	2011	$ 5,000	$ 42,000.00	$ -	$ 886.00	$ 25,000.00	$ 240.00		437	1.00
Residential Low Income Weatherization	2012		$ 43,000.00	$ -	$ 813.00	$ 32,000.00	$ 240.00		615	1.00
Residential Low Income Weatherization	2013		$ 45,000.00	$ -	$ 776.00	$ 39,000.00	$ 240.00		767	1.00

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

Program 4: Energy Efficient Schools - Kits

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-ENERGY EFFICIENT SCHOOLS-KITS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Energy Efficient Schools-Kits	6,847	2,855	-	-	-	$404	$396	$800
2012	Energy Efficient Schools-Kits	6,868	5,719	-	-	-	$405	$306	$711
2013	Energy Efficient Schools-Kits	8,333	9,194	-	-	-	$492	$314	$806
TOTAL		22,048		-	-	-	$1,301	$1,017	$2,317

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Energy Efficient Schools-Kits	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68
	TOTAL	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Energy Efficient Schools-Kits	2011	$ 40,000	$ 28,000	$ -	$ 43.00	$ 34,000	$ 59.00		6,847	1.00
Energy Efficient Schools-Kits	2012		$ 29,000	$ -	$ 36.00	$ 30,000	$ 59.00		6,868	1.00
Energy Efficient Schools-Kits	2013		$ 30,000	$ -	$ 30.00	$ 34,000	$ 59.00		8,333	1.00

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Incentives are representative of responses provided to the RFP for a Statewide TPA - derived from number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admin
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from IPL

Eligible Customers

The program will be available to K-12 students/schools in the IPL service territory. Initially the program may focus on a limited number of school and students in a particular grade.

Marketing Plan

The TPA will be responsible for all program marketing strategy. The program will be marketed directly to K-12 schools in IPL's service territory as well as other channels identified by the TPA. A list of the eligible schools may be provided by IPL to the TPA for direct marketing to the schools via email, phone and mail (if necessary) to obtain desired participation levels in the program.

Delivery Method

This program will continue to be delivered on IPL's behalf by the National Energy Foundation (NEF) until the program is transitioned to the Statewide TPA for delivery.

Approval Status

Although not a named program in IPL's request and approval, the Energy Efficiency Schools – Kits Program was included in the budget for Indirect Costs as requested and approved by the Commission in Cause No. 43623. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 5: Energy Efficient Schools- Audits

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-ENERGY EFFICIENT SCHOOLS-AUDITS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Energy Efficient Schools-Audits	14	-	-	-	-	$0	$301	$301
2012	Energy Efficient Schools-Audits	12	-	-	-	-	$0	$262	$262
2013	Energy Efficient Schools-Audits	13	-	-	-	-	$0	$301	$301
TOTAL		39	-	-	-	-	$0	$864	$864

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Energy Efficient Schools-Audits	($273)	0.00	($805)	0.00	($805)	0.00	($1,075)	0.00
	TOTAL	($273)	0.00	($805)	0.00	($805)	0.00	($1,075)	0.00

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Energy Efficient Schools-Audits	2011		$ 28,000	$ -	$ 19,500.00		$ -		14	1.00
Energy Efficient Schools-Audits	2012		$ 29,000	$ -	$ 19,416.67		$ -		12	1.00
Energy Efficient Schools-Audits	2013		$ 30,000	$ -	$ 20,846.15		$ -		13	1.00

10.4.2010

Number of participants is representative of responses provided to the RFP for a Statewide TPA.
Energy savings will be attributable to the C&I Prescriptive program, none associated with the actual audit
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admir
Net to Gross Ratios are from IPL

Eligible Customers

K-12 Schools in IPL's service territory will be eligible for this program.

Marketing Plan

The TPA will be responsible for all program marketing strategy. The Energy Efficient Schools Program targets K-12 schools that are greater than ten (10) years old.

Delivery Method

This program will be delivered by the Statewide TPA.

Approval Status

Approval of this program is currently pending in Cause No. 43911. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 6: Commercial & Industrial Rebate Program

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-COMMERCIAL AND INDUSTRIAL (C&I) REBATE PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Rebate Program	327	32,331	9,483	-	-	$2,664	$1,646	$4,300
2012	C/I Rebate Program	336	69,665	19,899	-	-	$3,255	$1,419	$4,674
2013	C/I Rebate Program	400	115,951	32,699	-	-	$4,471	$1,534	$6,005
TOTAL		1,063			-	-	$10,380	$4,599	$14,979

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Rebate Program Yr 1	$40,095	5.99	$23,827	6.54	($10,173)	0.73	$21,422	3.21
	C/I Rebate Program Yr 2	$52,768	6.74	$28,926	7.65	($15,155)	0.69	$26,613	3.53
	C/I Rebate Program Yr 3	$73,434	7.27	$37,788	8.28	($22,986)	0.65	$35,254	3.70
	TOTAL	$166,317	6.75	$90,541	7.54	($48,314)	0.68	$83,289	3.51

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable (M&V)	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Rebate Program-Yr1	2011	$ 126,000	$ 98,000	$ -	$ 3,756	$ 194,000	$ 8,116		327	0.80
C/I Rebate Program-Yr1	2012									
C/I Rebate Program-Yr1	2013									
C/I Rebate Program-Yr2	2011									
C/I Rebate Program-Yr2	2012		$ 101,000	$ -	$ 3,290	$ 213,000	$ 9,688		336	0.80
C/I Rebate Program-Yr2	2013									
C/I Rebate Program-Yr3	2011									
C/I Rebate Program-Yr3	2012									
C/I Rebate Program-Yr3	2013		$ 104,000	$ -	$ 2,884	$ 276,000	$ 11,178		400	0.80

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
Start Up Costs are based on IPL proportional share of the total program start up costs as estimated by TPA RFP responses
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

CORE PLUS PROGRAMS

Program 1: Residential Energy Assessment Program

Program Description

The Residential Energy Assessment Program is an existing IPL program, launched in July 2010, which educates consumers on their home energy use and identifies potential areas where they can take action to reduce their energy consumption. This program will continue to be promoted with a combination of marketing materials directing customers to IPL's website to complete an online audit of their home. The web based energy audit tool (branded as *Home Energy Inspector*) provides customers with information on: (1) no or low cost ways to reduce energy consumption, (2) identifies possible investment opportunities in energy efficiency improvements and (3) describes how a customer's energy bill is calculated. Armed with this information, customers are better equipped to make informed decisions in managing their consumption and energy costs. Customers that complete the brief energy assessment will be provided an energy efficiency kit at no charge that includes low-cost, easy-to-install energy saving water fixtures and CFLs for self installation.

IPL plans to deliver this program collaboratively with Citizens Gas to the extent that Citizens has sufficient funds available in their DSM budget to co-fund this program.

Energy/Demand Savings, Program Budget and Cost Effectiveness

Per participant savings (kWh)	464
Per participant savings (kW)	0.055
Measure Life	7 years
Net to Gross Ratio	0.80

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL ENERGY ASSESSMENT PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Energy Assessmnent	3,000	1,392	166	-	-	$60	$173	$233
2012	Residential Energy Assessmnent	3,000	2,784	330	-	-	$60	$173	$233
2013	Residential Energy Assessmnent	3,000	4,176	495	-	-	$60	$173	$233
TOTAL		9,000			-	-	$180	$519	$699

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Energy Assessment	$2,876	16.15	$824	2.26	($1,327)	0.53	$1,012	2.55
	TOTAL	$2,876	16.15	$824	2.26	($1,327)	0.53	$1,012	2.55

Program Name	Year	Marketing Costs	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Web Tool Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Energy Assessment	2011	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80
Residential Energy Assessment	2012	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80
Residential Energy Assessment	2013	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80

10.09.2010

Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010
Annual Fixed costs include WECC direct costs and allocated Admin costs based on estimated program budget
Annual Materials costs include $65,000 for online energy audit tool
Net To Gross ratio from Forefront Economics MPS Report - July 2008
Per unit incentive is estimated IPL cost share of Energy Efficiency kit. Citizens Gas will share in program costs

Program 2. Residential Second Refrigerator Pick Up and Recycling Program

Program Description

The Second Refrigerator Pick Up and Recycling Program is an existing program that provides for the removal and disposal of operable but inefficient secondary refrigerator and freezer units. Many households retain these older refrigerator or freezer units in a garage or basement and often do not realize how inefficient they are. This program provides education on the cost of keeping an older, often underutilized unit along with the opportunity to have the unit removed at no cost and recycled in an environmentally-sound manner.

This program was introduced to IPL residential customers in May, 2010. IPL is proposing an expansion of the existing program to provide for the collection of 4,000 refrigerators and freezers per year. Refrigerators and freezers must be in working condition to be eligible for this program. There is currently a limit of two units that can be picked up per household per year.

Residential customers with eligible units can schedule a date to have the unit(s) picked up at no charge and will also receive an incentive payment for each unit. The current incentive the customer receives for allowing the removal of the appliance is $30 per unit. IPL's contractor removes the units and hauls the appliance to a facility where the components, including cooling systems and insulation which are potentially harmful to the environment, can be completely recycled. The process used captures hazardous materials and recycles over 95% of the metal, glass and plastic components.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	907
Per participant savings (kW)	0.20
Measure Life	5 years
Net to Gross Ratio	1.0

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-SECOND REFRIGERATOR PICKUP AND RECYCLING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Second Ref Pickup and Recycling	4,000	3,628	800	-	-	$120	$534	$654
2012	Second Ref Pickup and Recycling	4,000	7,256	1,600	-	-	$120	$534	$654
2013	Second Ref Pickup and Recycling	4,000	10,884	2,400	-	-	$120	$534	$654
TOTAL		12,000			-	-	$360	$1,602	$1,962

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
2	Second Ref Pickup and Recycling	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80
	TOTAL	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Second Ref Pickup and Recycling	2011		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00
Second Ref Pickup and Recycling	2012		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00
Second Ref Pickup and Recycling	2013		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00

10.09.2010

Participants and program costs based on proposal from JACO Environmental.
Energy & Demand savings from Forefront Economics MPS Report dated July 2008.
Evaluation Costs assumes 5% of program costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

Eligible Customers

All IPL residential customers.

Marketing Plan

IPL will share marketing responsibilities for this program with the program administrator. IPL has marketed the existing Second Refrigerator Pick Up and Recycling Program under the tag line of "Ditch Your Fridge. Chill Your Bill." IPL will continue to use that program name and will use radio, IPL bill inserts and newsletters, print ads and community outreach events to publicize the availability of the program.

Delivery Method

This program is being delivered for IPL by JACO Environmental Inc. To better meet the demand for an expanded program, JACO is committed to opening a new recycling facility in Indianapolis. This facility would also serve as the base for collection crews and trucks.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 3: Residential Room Air Conditioner Pick Up and Recycling Program

Program Description

The Room Air Conditioner Pick Up and Recycling Program provides for the removal and disposal of operable but inefficient window/room air conditioner units. This program is intended as an add-on to the Second Refrigerator Pick Up and Recycling Program, in that a customer who schedules a pick up of a refrigerator or freezer unit may also relinquish an older, inefficient room air conditioner unit and receive an incentive for both appliances. The proposed incentive for a room air conditioner unit is $20. AC unit pick ups will only be scheduled for customers who are also having a refrigerator and / or freezer picked up on the same visit.

The units will be taken to the recycling facility and decommissioned and dismantled in an environmentally-responsible way. This program will ensure that these older, inefficient units are permanently taken off the electric grid.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	113
Per participant savings (kW)	0.60
Measure Life	3 years
Net to Gross Ratio	0.80

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL ROOM AC PICKUP AND RECYCLING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Room AC Pickup and Recycling	320	36	192	-	-	$6	$10	$16
2012	Room AC Pickup and Recycling	320	72	384	-	-	$6	$10	$16
2013	Room AC Pickup and Recycling	320	108	576	-	-	$6	$10	$16
TOTAL		960			-	-	$19	$30	$49

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
3	Room AC Pickup and Recycling	$38	0.00	$144	4.15	$129	3.13	$163	6.67
	TOTAL	$38	0.00	$144	4.15	$129	3.13	$163	6.87

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Room AC Pickup and Recycling	2011		$ -	$ -	$ 31.00		$ 20.00		320	0.80
Room AC Pickup and Recycling	2012		$ -	$ -	$ 31.00		$ 20.00		320	0.80
Room AC Pickup and Recycling	2013		$ -	$ -	$ 31.00		$ 20.00		320	0.80

10.09.2010

Participants, Incentives and program costs based on proposal from JACO Environmental, Inc.
Energy & Demand savings based on proposal from JACO Environmental, Inc.
Net to Gross Ratios are from IPL

Eligible Customers

All IPL residential customers.

Marketing Plan

IPL will share marketing responsibilities for this program with the program administrator. IPL will revise its marketing materials for the Second Refrigerator Pick Up and Recycling Program ("Ditch Your Fridge. Chill Your Bill.") to include a reference to incentives available for older, working room air conditioners. The same marketing channels will be used.

Delivery Method

This program will be delivered for IPL by JACO Environmental Inc.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 4: Residential Air Conditioning Load Management ("ACLM") Program

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	11
Per participant savings (kW)	1.00
Measure Life	10 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL AIR CONDTIONING LOAD MANAGEMENT (ACLM) PROGRAM

Savings By Year

Year	Program Name	New Participants in Year	Energy MWh Savings in Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Air Conditionong Load Management (ACLM)	5,000	55	5,000	-	-	$100	$1,621	$1,721
2012	Residential Air Conditionong Load Management (ACLM)	5,000	110	10,000	-	-	$200	$1,621	$1,821
2013	Residential Air Conditionong Load Management (ACLM)	5,000	165	15,000	-	-	$300	$1,621	$1,921
TOTAL		15,000			-	-	$600	$4,863	$5,463

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Air Conditionong Load Management (ACLM)	$2,103	0.00	$11,832	2.51	$11,857	2.46	$13,760	3.33
	TOTAL	$2,103	0.00	$11,832	2.51	$11,657	2.46	$13,760	3.33

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt)	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Air Conditionong Load Management (ACLM)	2011		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00
Residential Air Conditionong Load Management (ACLM)	2012		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00
Residential Air Conditionong Load Management (ACLM)	2013		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00

Unit variable of $200 based on switch cost and contractor installation costs
Program budget based on current switch and Contractor costs - in addition to switch installation contractor costs includes phone center and customer service calls as well as as well as historical knowledge of necessary marketing costs.
Marketing costs are based on IPL historical experience. Ongoing Program Costs are primarily related to ongoing Switch Metered Maintenance Costs.
Energy and Demand savings from Forefront Economics MPS report-July 2008 - Based on IPL Load Research Analysis
Incentives reflect annual credit to program participatants of $20
Evaluations costs from Forefront Economics MPS Report - July 2008

Eligible Customers

This program is available to residential customers with central air conditioners or heat pumps. If customers do not own their home but live in a separately metered residence with central air conditioning or heat pump they must have written consent of the property landlord to participate.

Marketing Plan

Presently, IPL and GoodCents are jointly responsible for the marketing of this program to single family residential customers. This program is marketed directly to customers through bill inserts, direct mailed materials, and through various print media resources. Information is also available on IPL's website, various articles in customer communications and promotion at special events such as Earth Day. IPL employees, primarily Customer Service Representatives, also make customers aware of this program as well. Participants in other IPL DSM programs are among the best candidates to participate and are often specifically targeted for participation.

IPL has installed switches on a few multi-family properties and will continue to evaluate this as a way to increase customer participation. IPL is responsible for the marketing and customer acquisition of Multi-family units.

Delivery Method

This program is delivered for IPL by GoodCents. Tasks performed by GoodCents include switch installation, switch maintenance and replacement, and maintaining a customer call center.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting to reduce the budget and scale of the program. Additional programs are being proposed which will complement the ACLM program.

Program 5: Residential Renewables Incentives Program

Program Description

This program was launched in June, 2010 and provides residential customers with an incentive to install a small scale renewable energy project. IPL is providing the Renewable Energy Incentive Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy generated as a credit on their next month's IPL bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program, a reservation system has been established. An Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewable Energy Incentive Program provides incentive payments of up to $4,000 per system as follows:

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	2,350
Per participant savings (kW)	1.54
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL RENEWABLES INCENTIVES PROGRAM

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Renewables Incentives Program	10	24	15	-	-	$40	$32	$72
2012	Residential Renewables Incentives Program	12	52	34	-	-	$48	$27	$75
2013	Residential Renewables Incentives Program	12	60	52	-	-	$48	$27	$75
TOTAL		34			-	-	$136	$86	$222

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Renewables Incentives Program	($65)	0.81	$37	1.18	($176)	0.58	($363)	0.50
	TOTAL	($65)	0.81	$37	1.18	($176)	0.56	($263)	0.50

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt (FTE))	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residental Renewables Incentives Program	2011	$ 6,500	$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		10	1.00
Residental Renewables Incentives Program	2012		$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		12	1.00
Residental Renewables Incentives Program	2013		$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		12	1.00

10.08.2010

All data presented as presented and approved in Cause #43623 in Petitoiners Exhibit MFR-2 - this program modified an existing Renewable Energy Education Program into an incentive based offering.

Eligible Customers

All IPL residential customers – although practically speaking customers living in non-owner occupied properties are not likely to participate because of the significant investment in the property that is required.

Marketing Plan

IPL has marketing responsibility for this program. IPL has promoted this program by doing a webinar with the Indiana Renewable Energy Association members – this includes the trade allies – who will principally drive participation in this program by promoting the program to customers. IPL also participated as an exhibitor at WINDIANA 2010, the statewide wind industry conference. Finally, IPL prominently displays information about this program on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. IPL is not requesting any changes to this program.

Program 6: Residential New Construction Energy Star Plus Program

Program Description

The New Construction Energy Star Plus Program is a continuation of a program that IPL has offered since September 2010. The program is designed to increase the percent of homes built to minimum ENERGY STAR specifications. It is available to builders of new single family homes and multifamily dwellings of up to twelve (12) attached units. This program is jointly delivered with Citizens Gas. Citizens Gas and IPL share program implementation costs as well as the costs of incentive payments required for the home to achieve an ENERGY STAR (HERS rating) qualification. Combined delivery by both utilities presents the opportunity for homes to become more efficient than a standalone program. ENERGY STAR homes have design and construction features that typically make them 20% to 30% more energy efficient than a standard new home.

Builders who choose to participate in the program will gain access to cash-back incentives designed to cover approximately 20% of the cost to upgrade and certify each home. In addition, IPL will provide rebates for the installation of higher efficiency electrical-mechanical equipment, including the installation of Electronic Commutated Fan (ECM) motors on gas furnaces and upgrades to higher efficiency Heat Pumps, Central Air Conditioners and Heat Pump water heaters.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	1,810
Per participant savings (kW)	0.22
Measure Life	25 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL NEW CONSTRUCTION ENERGY STAR PLUS PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential New Construction Energy Star Plus	42	76	9	-	-	$11	$112	$123
2012	Residential New Construction Energy Star Plus	60	185	22	-	-	$16	$112	$125
2013	Residential New Construction Energy Star Plus	60	293	36	-	-	$16	$112	$125
TOTAL		162			-	-	$44	$336	$360

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential New Construction Energy Star Plus	$1,031	7.36	$294	1.83	($783)	0.46	$248	1.52
	TOTAL	$1,031	7.36	$294	1.83	($783)	0.46	$248	1.52

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential New Construction Energy Star Plus	2011		$ 21,000	$ 21,000	$ 1,190.48	$ 20,000	$ 271.00	$ -	42	1.00
Residential New Construction Energy Star Plus	2012		$ 21,000	$ 21,000	$ 833.33	$ 20,000	$ 271.00	$ -	60	1.00
Residential New Construction Energy Star Plus	2013		$ 21,000	$ 21,000	$ 833.33	$ 20,000	$ 271.00	$ -	60	1.00

10.09.2010

Cost and Impact Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010
Annual Fixed costs include WECC direct costs and allocated Admin costs based on estimated program budget
Net to Gross ratio from Forefront Economics MPS Report-July 2008

Eligible Customers

The program is available to builders of new single family homes and of new multi-family developments of 12 total units or less. The program will target builders who do not currently meet the ENERGY STAR standards, with emphasis on the higher production builder.

Marketing Plan

The program will be marketed to builders through targeted mailings to members of the Indiana Builders Association as well as direct business to business contacts. The program administrator will promote the program through meetings with builders and trade associations and associated newsletters and publications.

Participating builders will be supported with materials to aid them in communicating the benefits of ENERGY STAR homes to their customers.

Delivery Method

This program is delivered for IPL and Citizens Gas by WECC

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 7: Residential Multi-Family Direct Install Program

Program Description

This proposed program is designed to affect the energy efficiency of rental apartment units through the installation of energy-efficient, high-performance water fixtures (i.e., showerheads and faucet aerators) and CFLs. The program will educate tenants about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption.

The program is designed to target multi-family complexes with units that are either all-electric or have natural gas-fueled storage water heaters. In the latter situation, IPL plans to partner with Citizens Gas to jointly deliver and share costs for this program.

This program will be available at no charge which is an important consideration since property owners would not typically have an incentive to make investments that provide energy efficiency benefits to the tenants who pay the utility bills.

The program will first target property-management companies as well as property owners in an effort to secure agreements to treat multiple properties through a single point of contact before targeting owners and managers of single properties.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	715
Per participant savings (kW)	0.09
Measure Life	7 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL MULTI-FAMILY DIRECT INSTALL PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Multi-Family Direct Install Program	7,500	6,363	664	-	-	$246	$179	$427
2012	Residential Multi-Family Direct Install Program	10,000	12,513	1,549	-	-	$330	$174	$504
2013	Residential Multi-Family Direct Install Program	10,000	19,663	2,434	-	-	$330	$174	$504
TOTAL		27,500			-	-	$906	$527	$1,435

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Multi-Family Direct Install Program	$14,636	0.00	$7,511	6.64	($6,382)	0.62	$9,264	19.64
	TOTAL	$14,636	0.00	$7,511	6.64	($6,382)	0.62	$9,264	19.64

Program Name	Year	Admin Costs	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Multi-Family Direct Install Program	2011	$ 23,000	$ 101,000	$ 35,000	-	$ 20,000	$ 33.00		7,500	1.00
Residential Multi-Family Direct Install Program	2012	$ 23,000	$ 92,000	$ 35,000	-	$ 24,000	$ 33.00		10,000	1.00
Residential Multi-Family Direct Install Program	2013	$ 23,000	$ 92,000	$ 35,000	-	$ 24,000	$ 33.00		10,000	1.00

10.09.2010

Cost and Impact Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010
Net to Gross ratio from Joint Operating Plan

Eligible Customers

This program is available to any multi-family complex in the IPL serving territory. IPL will fund 100% of the installed measures in complexes that are total-electric service. In complexes with gas water heat, IPL will provide funding for the installation of CFLs.

Marketing Plan

The program will be marketed through presentations to apartment associations and in face-to-face meetings with property-management firms and owners.

Delivery Method

This program will be delivered for IPL and Citizens Gas by WECC.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 8: Residential Peer Comparison Energy Reports Program

Program Description

The Peer Comparison Energy Reports Program will utilize behavioral science-based marketing to provide customized energy consumption information to IPL residential households, engage those households in their energy consumption as compared to their peers, and thus drive changes in behavior that result in measurable energy savings.

Selected households will receive a printed and mailed quarterly energy report that combines their energy usage data with demographic and housing data to provide a picture of their energy consumption trends and how those trends compare with similar households. The report will contain customized suggestions for reducing energy consumption, including information about key IPL energy efficiency programs.

By comparing a household's energy use to others, including their "most efficient" neighbors, and showing specific actions that those other households took to save energy, the reports provide both goals and a sense of competition that have shown to produce sustained energy-conservation behaviors.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	245
Per participant savings (kW)	0.03
Measure Life	3 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL PEER COMPARISON ENERGY REPORTS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Peer Comparison Energy Reports	25,000	6,120	750	-	-	$0	$381	$381
2012	Residential Peer Comparison Energy Reports	62,500	23,820	2,625	-	-	$0	$865	$865
2013	Residential Peer Comparison Energy Reports	62,500	43,918	4,500	-	-	$0	$1,390	$1,390
TOTAL		150,000			-	-	$0	$2,636	$2,636

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Peer Comparison Energy Reports Yr1	$549	0.00	$357	1.94	($156)	0.83	$393	2.03
	Residential Peer Comparison Energy Reports Yr2	$1,567	0.00	$546	1.88	($935)	0.59	$649	1.81
	Residential Peer Comparison Energy Reports Yr3	$1,802	0.00	($466)	0.61	($2,150)	0.26	($345)	0.71
	TOTAL	$3,938	0.00	$437	1.18	($3,243)	0.47	$695	1.29

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Peer Comparison Energy Reports Yr1	2011	$ 63,750	$ 90,000	$ 212,000		$ 15,000			25,000	1.00
Residential Peer Comparison Energy Reports Yr1	2012									1.00
Residential Peer Comparison Energy Reports Yr1	2013									1.00
Residential Peer Comparison Energy Reports Yr2	2011									1.00
Residential Peer Comparison Energy Reports Yr2	2012	$ 19,375	$ 65,000	$ 742,000		$ 39,000			62,500	1.00
Residential Peer Comparison Energy Reports Yr2	2013									1.00
Residential Peer Comparison Energy Reports Yr3	2011									1.00
Residential Peer Comparison Energy Reports Yr3	2012									1.00
Residential Peer Comparison Energy Reports Yr3	2013	$ 39,375	$ 65,000	$ 1,221,450		$ 64,000			62,500	1.00

Includes demand impact of .03kW per participant
10.09.2010

Participants, Energy and Demand savings from representative vendor proposal - dated October 2010
Annual Fixed Costs include cost for integration of IPL data with vendor software

Eligible Customers

IPL residential households.

Marketing Plan

The program will target high-usage single-family households who can most benefit from the energy consumption information and energy saving tips provided.

Delivery Method

IPL will engage the services of a program delivery vendor.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

<u>Program 9: Residential High Efficiency HVAC Incentives Program</u>

Program Description

The Residential High Efficiency HVAC Incentives Program provides a financial reward in the form of a prescriptive rebate for the purchase and installation of high efficiency air conditioner and heat pump systems for IPL customers and HVAC dealers. System efficiency will be as verified through the Air Conditioning, Heating and Refrigeration Institute (AHRI). Incentives will be paid to HVAC dealers and customers for the purchase and installation of high efficiency air conditioners or heat pumps. The program is available to any existing single-family, owner-occupied home served by IPL. The program will be conducted through incentive applications, documented proof of purchase, and AHRI verification of installed equipment completed and submitted by HVAC dealers.

Energy/Demand Savings and Program Budget

Residential HVAC-Central Air Conditioner

Per participant savings (kWh)	389
Per participant savings (kW)	0.40
Measure Life	20 years
Net to Gross Ratio	0.80

Residential HVAC-Heat Pump

Per participant savings (kWh)	800
Per participant savings (kW)	0.40
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN

RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL HIGH EFFICIENCY HVAC INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential High Efficiency HVAC Incentives	1,000	636	400	-	-	$260	$218	$478
2012	Residential High Efficiency HVAC Incentives	1,025	1,291	810	-	-	$268	$200	$468
2013	Residential High Efficiency HVAC Incentives	1,050	1,967	1,230	-	-	$275	$203	$478
TOTAL		3,075			-	-	$803	$621	$1,423

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential High Efficiency HVAC-Costs	$0	0.00	($293)	0.00	($293)	0.00	($293)	0.00
	Residential High Efficiency HVAC-Central AC	$667	1.75	$1,163	4.47	$163	1.12	$580	1.56
	Residential High Efficiency HVAC-Heat Pump	$3,086	2.77	$2,467	4.54	($754)	0.61	$1,528	1.60
	TOTAL	$3,755	2.42	$3,337	3.62	($885)	0.64	$1,815	1.58

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential HVAC-Costs	2011	$ 20,000	$ 40,000	$ 40,000		$ 18,000	$ -		-	1.00
Residential HVAC-Costs	2012		$ 40,000	$ 40,000		$ 17,500	$ -		-	1.00
Residential HVAC-Costs	2013		$ 40,000	$ 40,000		$ 17,500	$ -		-	1.00
Residential HVAC CAC	2011	$ -	$ -	$ -	$ 100	$ -	$ 200		400	0.60
Residential HVAC CAC	2012		$ -	$ -	$ 100	$ -	$ 200	$ -	400	0.60
Residential HVAC CAC	2013		$ -	$ -	$ 100	$ -	$ 200	$ -	400	0.60
Residential HVAC- HP	2011	$ -	$ -	$ -	$ 100	$ -	$ 300		600	0.60
Residential HVAC- HP	2012	$ -	$ -	$ -	$ 100	$ -	$ 300		625	0.60
Residential HVAC- HP	2013		$ -	$ -	$ 100	$ -	$ 300		650	0.60

10.09.2010

Demand and Energy Impacts are from engineering calculations based on Indianapolis area weather

Net To Gross ratio from Forefront Economics MPS Report - July 2008

Eligible Customers

The program is available to any existing single-family, owner-occupied home served by IPL.

Marketing Plan

The marketing plan includes program specific marketing materials that will target contractors and trade allies in the HVAC industry using direct mail, direct contact by the program vendor personnel, trade shows and trade association outreach. IPL will also consider bill inserts, IPL website, and mass market advertising.

A similar HVAC Incentive program (branded as PerfectCents) was available to IPL customers from 2004 to 2009. Due to marketplace recognition of the program name it is likely IPL will use this name again in this program re-launch.

Delivery Method

IPL will maintain responsibility for the program and may use an outside vendor to help with fulfillment and distribution of incentives, recruiting participants, educational workshops/seminars, and random verification of equipment installations.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 10: Customer Energy Management System Program

INDIANAPOLIS POWER AND LIGHT DSM PLAN
PORTFOLIO RESULTS: CORE PLUS PROGRAMS-CUSTOMER ENERGY MANAGEMENT (CEMS)

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Customer Energy Management	570	306	788	-	-	$31	$261	$312
2012	Customer Energy Management	1,330	1,020	2,626	-	-	$86	$468	$554
2013	Customer Energy Management	-	1,020	2,626	-	-	$43	$152	$195
TOTAL		1,900			-	-	$161	$901	$1,062

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
1	Marketing Costs--Customer Energy Management	$0	0.00	($95)	0.00	($95)	0.00	($95)	0.00
4	HEMS-with TOU	$536	0.00	$845	3.61	$399	1.52	$934	4.53
5	HEMS-with TOU-GiftCard	$21	0.00	($21)	0.00	($21)	0.00	$0	0.00
6	HEMS-without TOU	$712	0.00	$1,226	2.26	$723	1.49	$1,436	2.61
7	HEMS-without TOU-Gift Card	$32	0.00	($32)	0.00	($32)	0.00	$0	0.00
8	BEMS without TOU	$141	0.00	$480	5.27	$393	2.96	$533	9.14
9	BEMS without TOU -Gift Card	$5	0.00	($5)	0.00	($5)	0.00	$0	0.00
	TOTAL	$1,447	0.00	$2,393	2.53	$1,356	1.52	$2,805	3.30

Program Name	Year	Start-Up Cost	IPL Fixed Cost	Software License	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
CEMS-OUTREACH	2011	$ 75,000					$ -		-	1.00
CEMS-OUTREACH	2012	$ 25,000					$ -		-	1.00
CEMS-OUTREACH	2013						$ -		-	1.00
HEMS-with TOU	2011		$ 48,254.00					$ 20.00	135	1.00
HEMS-with TOU	2012		$ 98,576.00	$ 5,400.00				$ 20.00	315	1.00
HEMS-with TOU	2013		$ 17,885.00	$ 18,000.00				$ 20.00		1.00
HEMS-with TOU-GiftCard	2011						$ 50.00		135	1.00
HEMS-with TOU-GiftCard	2012						$ 50.00		315	1.00
HEMS-with TOU-GiftCard	2013									1.00
HEMS-without TOU	2011	$ -	$ 144,762.00					$ 20.00	405	1.00
HEMS-without TOU	2012	$ -	$ 295,729.00	$ 16,200.00				$ 20.00	945	1.00
HEMS-without TOU	2013		$ 53,654.00	$ 54,000.00				$ 20.00		1.00
HEMS-without TOU-Gift Card	2011		$ -				$ 25.00		405	1.00
HEMS-without TOU-Gift Card	2012		$ -				$ 25.00		945	1.00
HEMS-without TOU-Gift Card	2013		$ -							1.00
BEMS without TOU	2011		$ 12,833.00					$ 72.00	30	1.00
BEMS without TOU	2012		$ 26,216.00	$ 1,200.00				$ 72.00	70	1.00
BEMS without TOU	2013		$ 4,756.00	$ 4,000.00				$ 72.00	-	1.00
BEMS without TOU -Gift Card	2011						$ 50.00		30	1.00
BEMS without TOU -Gift Card	2012						$ 50.00		70	1.00
BEMS without TOU -Gift Card	2013									1.00

10.09.2010

Home Energy Management with TOU Rates - Residential

Program Description

This program will offer home energy management tools with TOU rates. This will be mirrored after the Tendril HAN/HEMS study with modifications expected after analysis is complete and with input from the OSB. A one-time participation incentive of $50 will be offered along with $5 per summer month per year.

Energy/Demand Savings and Program Budget

IPL has conservatively estimated 0.1% participation ramping up over two years. Expected energy savings of 8% are based on national studies. Demand savings of 1.1 kW are based on ACLM program plus an additional 0.5 kW per home.[13]

Per participant savings (kWh)	977
Per participant savings (kW)	1.6
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Residential Rate RS customers are eligible for this program. IPL is in the process of assessing the ability to use AMR and AMI meters to accomplish TOU billing. Also, the AMI communications system network design is in development.

Marketing Plan

IPL will develop a multi-avenue marketing strategy to include traditional and electronic communications to reach possible participants. For example, customers who have registered their email accounts for e-bill or on-line transactions may be contacted easily to invite them to participate. The IPL web-site will include links to informational pages. Possible other avenues include sharing testimonials from participants in the 2010 HEMS pilot in written or video formats. Community events and meetings may also include presentations about the HEMS program offering.

13 "The Impact of Informational Feedback on Energy Consumption – A Survey of the Experimental Evidence" by Farqui, Sergici, Sharif, The Brattle Group.

Delivery Method

IPL will contract with a third party to deliver the HEMS program using an RFQ type process.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Home Energy Management without TOU Rates - Residential

Program Description

This program will include home energy management tools but will not require participation in TOU rates. A one-time participation incentive of $25 will be offered along with $5 per summer month per year. Energy and demand savings are expected to be lower than the program option with TOU rates.

Energy/Demand Savings and Program Budget

IPL anticipates 0.3% participation ramping up over two years. Expected energy savings of 3% are estimated based on industry studies. Demand savings of 1.1 kW are based on IPL's ACLM program.[14]

Per participant savings (kWh)	366
Per participant savings (kW)	1.1
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Residential Rate RS customers are eligible for this program. IPL is assessing the ability to use AMR or AMI meters for this program to enable communications with in-home devices.

14 "Residential Energy Use Behavior Change Pilot" by Carroll, Ed; Hatton, Eric; and Brown, Mark.

Marketing Plan

Marketing efforts will mirror those for the HEMS with TOU rates.

Delivery Method

IPL will contract with a third party to deliver the HEMS program using an RFQ type process.

Business Energy Management without TOU Rates – Small C&I

Program Description

The Business Energy Management component will provide near real time data through an interface to an AMI meter. A one-time participation incentive of $50 will be offered along with $5 per air conditioning net ton per summer month per year.

Energy/Demand Savings and Program Budget

IPL assumed 0.2% participation and 3% savings from aggregate rate class 2009 data. Demand savings of 3.5 kW was based on an ACLM program report prepared by Cooper-Cannon, and was increased by 0.7 kW to account for additional demand effects as a result of awareness of consumption patterns in other areas.

Per participant savings (kWh)	864
Per participant savings (kW)	4.2
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Rate SS customers will be eligible for this program.

Marketing Plan

IPL will leverage marketing plans for the HEMS programs for the BEMS program and anticipates identifying likely participants following discussions with vendors and other utilities that are implementing similar programs based on business type.

Delivery Method

IPL will contract with a third party to delivery the BEMS program using an RFQ type process.

Program 11: Commercial and Industrial Air Conditioning Load Management ("ACLM") Program

Program Description

The Commercial and Industrial Air Conditioning Load Management ("ACLM") Program is a companion program to the Residential ACLM Program. This program (also branded as CoolCents®) was launched in June, 2010 to Rate SS and Rate SL customers. This program is expected to provide significant demand savings along with some energy savings to participating customers. Customers who enroll in the program will have an ACLM switch installed on their facility cooling equipment. This will allow IPL the opportunity to cycle the equipment during times of system peak usage. The switches are expected to be controlled at the same time as the Residential ACLM customer switches. In return for participating, a customer must agree to allow IPL to control 50% of its cooling load and will receive an incentive on the basis of net tons of controlled air conditioning load. Customers will receive a $5 credit on their utility bill during the billing months of June, July, August and September for each net ton enrolled.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	40
Per participant savings (kW)	3.5
Measure Life	10 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN

RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL AIR CONDITIONING LOAD MANAGEMENT ACLM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Air Conditioning Load Management ACLM	275	11	963	-	-	$19	$246	$266
2012	C/I Air Conditioning Load Management ACLM	275	22	1,925	-	-	$39	$246	$285
2013	C/I Air Conditioning Load Management ACLM	275	33	2,888	-	-	$58	$246	$304
TOTAL		825			-	-	$116	$739	$856

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
5	C/I Air Conditioning Load Management (ACLM)	$410	0.00	$2,534	3.03	$2,498	2.94	$2,906	4.30
	TOTAL	$410	0.00	$2,534	3.03	$2,498	2.94	$2,906	4.30

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt (FTE))	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Air Conditioning Load Management (ACLM)	2011		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00
C/I Air Conditioning Load Management (ACLM)	2012		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00
C/I Air Conditioning Load Management (ACLM)	2013		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00

Average Demand savings of 3.5 kW per participant from Cooper Power Systems experience and reflected in study provided to IPL.
Energy savings is estimated at 40 kWh per participant per year.
Incentives assumes $5 per net ton with an average of 3.5 net tons per customer for 4 summer months = $70 per year
Unit variable of $525 based on switch cost and contractor installation costs
Evaluation costs from IPL

Eligible Customers

Presently this program is available to any Commercial and Industrial customer served under Rate SS or Rate SL. It is proposed to make this offering available to all IPL C&I customers.

Marketing Plan

IPL has marketing responsibility for this program. IPL has been promoting this primarily through face to face customer contacts made by the Account Management Staff. Initial discussions have focused on customers with multiple facility locations. In 2011 IPL may do a direct mail piece to likely program participants as well. Information about the program is also predominantly displayed on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting to reduce the budget and scale of the program. Early experience with customers in marketing this program suggests customer adoption rates for this program will be lower than expected.

Program 12: Commercial and Industrial Renewables Incentives Program

Program Description

This program was launched in June, 2010 to Rate SS and Rate SL customers. It provides commercial customers with an incentive to install a small scale renewable energy project. This program is the counterpart to the similar program offered for IPL residential customers. IPL is providing the Renewables Incentives Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy generated as a credit on their next month's bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program a reservation system has been established. An Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewables Incentives Program provides incentive payments of up to $4,000 per system as follows:

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	2,350
Per participant savings (kW)	1.5
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL RENEWABLES INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings in Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Renewables Incentives Program	4	9	6	-	-	$16	$12	$28
2012	C/I Renewables Incentives Program	4	19	12	-	-	$16	$9	$25
2013	C/I Renewables Incentives Program	4	28	16	-	-	$16	$9	$25
TOTAL		12					$48	$30	$78

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Renewables Incentives Program	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49
	TOTAL	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Renewables Incentives Program	2011	$ 2,500	$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00
C/I Renewables Incentives Program	2012		$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00
C/I Renewables Incentives Program	2013		$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00

10.05.2010

All data presented as presented and approved in Cause #43623 in Petitoiners Exhibit MFR-2 - this program modified an existing Renewable Energy Education Program into an incentive based offering

Marketing Plan

IPL has marketing responsibility for this program. IPL has promoted this program by doing a webinar with the Indiana Renewable Energy Association members, which includes the trade allies who will principally drive participation in this program to promote the program. IPL also participated as an exhibitor at WINDIANA 2010, the statewide wind industry conference. Finally, IPL prominently displays information about this program on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. IPL is not requesting any changes to this program.

Program 13: Commercial and Industrial Business Energy Incentives Program

C&I New Construction Component Description

The New Construction component addresses a "lost opportunity" segment, promoting energy efficient practices at the time initial decisions are made, ensuring efficient results for the life of the measures. The focus of the program is on getting developers and designers predisposed to consider fully integrated design to incorporate relevant efficiency measures through building design and equipment specification. To overcome first cost barriers, IPL will provide incentives and assistance to design teams (architects, engineers, property managers) that develop projects that are more efficient than standard construction practices and current Indiana building code.

C&I Retro-Commissioning Component Description

The Retro-Commissioning component is designed to motivate facilities owners to reduce energy use through improvements in how their facilities' mechanical systems are operated and maintained. Most buildings have never been commissioned, so the retro-commissioning of an existing building could possibly identify and correct operating deficiencies, saving time, reducing energy consumption and improving performance and comfort. The goal of this program is to help identify high cost (kWh per square foot) buildings then identify and implement low cost tune-ups and adjustments that would improve the efficiency of existing building's operating systems. Efficiency improvements include returning systems to their intended operation or design, and adapting system settings to the buildings present use (often technology and business model changes will affect the comfort and efficiency of buildings). The goal of this program is to ensure that a building operates as efficiently and effectively as its original design.

Energy/Demand Savings and Program Budget

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL BUSINESS ENERGY INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Business Energy Incentives Program	136	4,123	621	-	-	$316	$635	$951
2012	C/I Business Energy Incentives Program	276	12,370	1,863	-	-	$633	$742	$1,376
2013	C/I Business Energy Incentives Program	276	20,617	3,105	-	-	$633	$756	$1,369
TOTAL		690			-	-	$1,582	$2,133	$3,715

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Business Energy Incentives Program	$21,678	4.77	$11,811	4.44	($12,703)	0.55	$9,170	2.16
	TOTAL	$21,678	4.77	$11,811	4.44	($12,703)	0.55	$9,170	2.16

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Business Energy Incentives Program	2011	$ 50,000	$ 209,000	$ 126,000	$ 1,319	$ 68,000	$ 2,293		138	1.00
C/I Business Energy Incentives Program	2012	$ 50,000	$ 229,000	$ 179,000	$ 688	$ 94,000	$ 2,293		276	1.00
C/I Business Energy Incentives Program	2013	$ 50,000	$ 242,000	$ 179,000	$ 688	$ 95,000	$ 2,293		276	1.00

10.09.2010

Program costs and incentives are a combination of the previously approved C&I Custom, C&I Retro Commissioning and C&I New Construction programs
Cost and Impact Data based on IPL Program Delivery Plan developed by WECC - August 2010
Customers are assumed to have a 50 / 50 cost share of technology costs
Net To Gross ratio from Forefront Economics MPS Report-July 2008

Eligible Customers

Presently this program is available to any Commercial and Industrial customer served under Rate SS or Rate SL. It is proposed to make this offering available to all IPL C&I customers.

Marketing Plan

IPL has shared marketing responsibility for this program with Citizens Gas and WECC. The initial marketing push was made in early September by WECC through informational mailings to all known trade allies. This mailing was followed up by phone calls to several hundred trade allies. IPL Account Management Staff has been promoting this through face-to-face customer contacts. Information about the program is also provided on our web site.

Delivery Method

This program is delivered for IPL and Citizens Gas by WECC

Approval Status

Each of the program components of this program were approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE COMMISSION'S INVESTIGATION, PURSUANT TO IC § 8-1-2-58, INTO THE EFFECTIVENESS OF DEMAND SIDE MANAGEMENT ("DSM") PROGRAMS CURRENTLY UTILIZED IN THE STATE OF INDIANA, INCLUDING AN EXAMINATION OF ISSUES THAT COULD IMPROVE THE EFFECTIVENESS OF DEMAND SIDE MANAGEMENT PROGRAMS IN THE STATE INCLUDING CONSIDERATION OF THE ESTABLISHMENT OF AN INDEPENDENT DSM ADMINISTRATOR MODEL ON A STATE-WIDE BASIS **RESPONDENTS: ALL JURISDICTIONAL ELECTRIC AND GAS UTILITIES IN THE STATE OF INDIANA**	)	**CAUSE NO. 42693-S1**

**INDIANAPOLIS POWER & LIGHT COMPANY'S
JULY 1, 2011 DSM ANNUAL REPORT**

Indianapolis Power & Light Company ("IPL") hereby submits the attached annual report to apprise the Indiana Utility Regulatory Commission ("Commission") of IPL's progress in developing and implementing demand side management ("DSM") programs that achieve a level of energy savings set forth in the Commission's December 9, 2009 Order in Cause No. 42693 (the "Phase II Order").[1] The attached report is being submitted to satisfy requirements in the Phase II Order, as clarified by the May 14, 2010 Docket Entry in this Cause.

IPL has taken significant steps to satisfy the energy savings targets set forth in the Phase II Order. IPL has implemented the Core and Core Plus DSM programs approved by the Commission's February 10, 2010 Order in Cause No. 43623 and November 4, 2010 Order in

[1] IPL submitted its first annual report on July 1, 2010.

Cause No. 43911. IPL has proposed to expand its existing DSM programs in Cause No. 43960 to add new programs and bolster existing programs as necessary to achieve the Phase II Order's energy savings targets. The evidentiary hearing in Cause No. 43960 was held on June 29, 2011. IPL has also worked through the Demand Side Management Coordination Committee ("DSMCC") to obtain approval of the selected statewide third party administer ("TPA") that will provide the Core Programs.

Despite these efforts, IPL's July 1, 2011 Scorecard demonstrates that IPL will not achieve the goals in the Phase II Order through 2013. The 3-Year Plan IPL developed was projected to achieve the energy savings goals of the Phase II Order, but these projections assumed that the TPA would be engaged by January 1, 2011 and also that IPL would be authorized to provide its expanded Core Plus Programs earlier than approval will be received in Cause No. 43960. This has delayed IPL's expanded DSM program by one year, resulting in a deficit through 2013. A review of IPL's July 1, 2011 Scorecard demonstrates that IPL would meet the targets if it had been able to implement its 3-Year DSM Plan earlier. IPL has also proposed to count energy purchased pursuant to its Rate REP (Renewable Energy Production) towards the energy savings targets. Projected energy savings for Rate REP have not been estimated for purposes of the July 1, 2011 Scorecard because that request is currently pending in Cause No. 44018. If IPL's proposal is approved, the energy savings it projects to achieve would be greater.

The report reflects a good faith effort to forecast program expenditures and energy savings for IPL's Core and Core Plus DSM programs. The sources of the forecast are noted in the attached report and assume approval of the TPA selected by the DSMCC and approval of the

Core and Core Plus Programs as proposed by the Stipulation and Settlement Agreement presented in Cause No. 43960.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that on July 1, 2011, a copy of the foregoing was served by email transmission or by United States Mail, first class, postage prepaid (where noted) on the following counsel of record:

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Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

	End Notes (page 2)	Gross MWh Savings (a) (b)					Program Expenditures (000's) (c) excluding lost revenues and/or performance incentives					Gross MWh Savings By Program
CORE PROGRAMS		2010	2011 Actual Thru 5/31/11	2011 Forecast Year End	2012	2013	2010	Actual thru 5/31/11	2011 Forecast Year End	2012	2013	
Prescriptive Lighting (d)	1	1,735	6,266	10,509	13,009	14,008	$114	$195	$415	$1,085	$988	39,261
On-Site Audit with Direct Install (d)	2	678	1,949	4,298	10,969	15,626	$127	$541	$1,081	$4,142	$5,554	31,571
Low and Moderate Income Weatherization (d)	3	375	112	531	570	802	$289	$166	$916	$564	$723	2,278
Energy Efficiency Schools - Kits	4	1,686	0	3,713	2,855	2,864	$147	$1	$132	$800	$711	11,118
C&I Prescriptive (d)	5	675	8,576	21,592	32,331	37,334	$141	$418	$1,423	$4,300	$4,675	91,932
C&I Energy Efficiency Schools - Audits	6	0	0	0	0	0	$0	$4	$48	$301	$262	0
Total Core Programs By Year		5,149	16,904	40,642	59,734	70,634	$818	$1,326	$4,015	$11,192	$12,913	176,160

CORE PLUS PROGRAMS		2010	2011 Actual Thru 5/31/11	2011 Forecast Year End	2012	2013	2010	Actual thru 5/31/11	2011 Forecast Year End	2012	2013	
Residential-Second Refrigerator Pickup and Recycling	7	760	184	806	4,268	4,268	$122	$43	$231	$654	$654	10,102
Residential-Room AC Pickup and Recycling	8	0	0	0	36	36	$0	$0	$0	$16	$16	72
Residential-New Construction Energy Star Plus	9	67	48	157	76	109	$46	$14	$113	$123	$128	409
Residential-Energy Assessment	10	1,398	1,123	1,341	1,392	1,392	$120	$240	$267	$233	$233	5,523
Residential-Renewables Incentive	11	5	0	27	24	28	$32	$5	$72	$72	$75	84
Res-Air Conditioning Load Management	12	41	10	54	55	55	$1,338	$324	$1,569	$1,721	$1,821	206
Residential-High Eff HVAC Incentives	13	0	0	0	1,021	1,041	$0	$0	$0	$748	$738	2,062
Residential-Peer Comparison Energy Reports	14	0	0	0	6,120	17,700	$0	$0	$0	$381	$865	23,820
Residential-Multi-Family Direct Install	15	0	0	9,493	5,363	7,150	$0	$8	$534	$427	$504	22,006
C&I Custom	16	0	1,222	6,680	4,123	8,247	$49	$105	$685	$951	$1,375	19,050
C&I Air Conditioning Load Management	17	1	1	11	11	11	$21	$7	$210	$266	$285	34
C&I Renewables Incentives	18	10	0	14	9	9	$7	$5	$36	$28	$25	42
On-line Energy Feedback	19	0	0	0	0	0	$0	$0	$0	$612	$178	0
Indirect Costs attributable to all Core Plus programs	20	0	0	0	0	0	$212	$78	$450	$895	$934	0
Total Core Plus Programs By Year		2,282	2,589	18,583	22,498	40,046	$1,947	$828	$4,167	$7,127	$7,831	83,409

Portfolio Summary		**2010**	**2011 Actual Thru 5/31/11**	**2011 Forecast Year End**	**2012**	**2013**	**2011 - 2013 Summary View**
Total Gross MWh Core & Core Plus	21	7,431	19,492	59,226	82,232	110,680	259,569
Core & Core Plus MWh Generic Target		44,892	NA	83,830	111,042	140,185	335,057
Total Program Expenditures Core & Core Plus		$2,765	$2,154	$8,182	$18,319	$20,744	$47,244

Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

General Notes	
(a)	2011 Forecast Year End reflects the Gross MWh Savings reported in Cause No. 43623-DSM-2 and DSM-3 where appropriate. Savings from Wisconsin Energy Conservation Corporation ("WECC") administered programs reflect estimates from Oversight Board ("OSB") approved program plans.
(b)	2012-2013 Gross MWh Savings are as filed in Exhibit LHA-3 of Cause No. 43960, filed in October 2010 for Program Year 1 and Program Year 2, respectively. If approved in Cause No. 44018, IPL also intends to submit energy from any participation in its Rate REP (Renewable Energy Program) feed-in-tariff towards compliance with energy savings targets as approved in the Commission's Generic Order in Cause No. 42693.
(c)	2011 Forecast Year End reflects the projected Program Expenditures reported in Cause No. 43623-DSM-2 and DSM-3, excluding performance incentives where appropriate. Expenditures for WECC administered programs reflect cost estimates from OSB approved program plans. 2012-2013 Program Expenditures are as filed in Exhibit LHA-3 of Cause No. 43960 filed in October 2010 for Program Year 1 and Program Year 2, respectively.
(d)	These Core Programs have been administered by WECC since September 1, 2010 and will continue to be until such time as the programs are transferred to the Statewide Third Party Administrator ("TPA").

Note #	Core Programs	
	Program Name	**Comment**
1	**Prescriptive Lighting**	Provides incentives for residential customers to purchase Energy Star compact fluorescent light bulbs ("CFLs"). Status: There has been very strong participation in this program which is expected to continue through the remainder of the program. The original target number of CFLs to be incentivized prior to transition of this Core Program to the TPA was 48,000. Due to strong customer interest, IPL expects to have over 200,000 CFLs deployed prior to this Core Program's transition to the TPA.
2	**On-Site Audit with Direct Install**	Provides residential customers a walk-through examination of their home by trained energy auditors. Status: The response to recruitment mailings for this program has been between 3%-4%. The response rate has not diminished during the program and is expected to continue with possibly higher acceptance rates as "word of mouth" marketing prompts customers to participate. Using the current program design, it is anticipated that approximately 2,800 audits will be completed in 2011. Plans from the TPA indicate much higher participation levels, which are indicated in the 2012-2013 forecast.
3	**Low and Moderate Income Weatherization**	Provides comprehensive weatherization services for homes of low to moderate income homeowners. Purpose is to reduce energy consumption and lower electric bills for income-qualified customers. Status: This program is an ongoing extension of the program approved in Cause Nos. 42639, 43018 and 43252. Currently, this program is being delivered jointly with Citizens Gas.
4	**Energy Efficient Schools-Kits**	Presentations are given in schools to educate students on sources and forms of energy and how to use it wisely. Students are provided with an energy efficiency kit. The program is designed to empower students and their families to save energy at home and at school. Status: This program is an ongoing extension of the program approved in Cause Nos. 42639, 43018 and 43252. Currently, this program is being delivered jointly with Citizens Gas.
5	**C&I Prescriptive**	Provides monetary incentives to commercial and industrial customers for specific energy efficient equipment. Status: This program began to experience significant levels of participation during the first half of 2011. IPL anticipates maintaining similar activity levels until this Core Program is transitioned to the TPA.
6	**C&I Energy Efficiency Schools - Audits**	Provides schools (grades K-12) the opportunity to request and receive from IPL representatives, a detailed school building energy audit that will provide schools with a report that identifies and prioritizes energy savings opportunities. Status: IPL began implementation in the first half of 2011. As of May 31, 2011 eight (8) school audits have been completed.

Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

Note #	Core Plus Programs	
7	**Residential-Second Refrigerator Pickup and Recycling**	Provides for the removal and disposal of operable, inefficient secondary refrigerators and freezers in an environmentally sound manner. Status: This program exceeded Program Year 1 targets established in Cause No. 43623. On track to meet Program Year 2 targets as well.
8	**Residential Room AC Pickup and Recycling**	This program is intended as a complement to the Second Refrigerator Pick Up and Recycling Program. A customer that schedules a pick up of a refrigerator or freezer unit may also have an older, inefficient room air conditioner picked up and recycled. Status: As proposed in Cause No. 43960 filed in October 2010.
9	**Residential-New Construction Energy Star Plus**	Provides incentives and training for builders to construct new homes that are more energy efficient than the standard practice. Status: As of May 31, 2011 incentives have been paid on 23 homes constructed under this program. Currently, this program is being delivered jointly with Citizens Gas.
10	**Residential-Energy Assessment**	Customers who complete an online energy audit of their home will receive a free energy efficiency kit. The kit includes several energy efficiency measures such as CFLs, low flow showerheads, faucet aerators and temperature gauges. Status: This program has successfully met targets. IPL intends to have this program available to customers, but will focus future efforts on the Multi-Family Direct Install Program. Currently, this program is being delivered jointly with Citizens Gas.
11	**Residential-Renewables Incentive**	IPL provides an incentive of up to $4,000 to customers who install small renewable energy systems. The program is available to all residential and most commercial and industrial customers. Status: Since February 10, 2010 there has been 1 incentive paid under the residential program. There has been a significant amount of customer interest.
12	**Res-Air Conditioning Load Management**	IPL has delivered the ACLM program to residential customers on a continuous basis since receiving Commission approval in 2003. The program allows IPL to temporarily reduce the run time of a customer's air conditioning unit during periods of peak summer demand. Enrolled customers receive monthly bill credits of $5 during the summer months of June through September. Status: In Program Year 1 of the current approval, just over 4,600 switches were installed. In total there are approximately 33,000 residential program participants.
13	**Residential-High Efficiency HVAC Incentives**	Provides a financial reward in the form of a prescriptive rebate for the purchase and installation of high efficiency air conditioner or heat pump systems. Status: As proposed in Cause No. 43960 filed in October 2010.
14	**Residential-Peer Comparison Energy Reports**	Will utilize behavioral science-based marketing to provide customized energy consumption information to IPL residential households, engage those households in their energy consumption as compared to their peers, and thus drive changes in behavior that result in measurable energy savings. Status: As proposed in Cause No. 43960 filed in October 2010.
15	**Residential-Multi-Family Direct Install**	Targeting multi-family units for the installation of energy efficiency measures, such as low flow water measures and CFLs. Tenants will be educated about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption. Status: As proposed in Cause No. 43960 filed in October 2010. With approval of the DSM Oversight Board, funds were shifted to begin implementation in March 2011. Currently, this program is being delivered jointly with Citizens Gas.
16	**C&I-Custom**	Provides financial incentives for custom energy efficiency measures that are not included in IPL's C&I Prescriptive Program. Customers must make application and receive approval prior to project start. Status: Implementation began in September 2010. Marketed as C&I Custom-Business Solutions, this program combines the programs previously identified separately as C&I Retro-Commissioning Pilot and C&I New Construction. Currently, this program is being delivered jointly with Citizens Gas.
17	**C&I-Air Conditioning Load Management**	This is a companion program to the Residential ACLM Program. The program provides significant demand savings by allowing IPL to temporarily reduce the run time of a customer's air conditioning unit during periods of peak summer demand. Enrolled customers receive monthly bill credits of $5 per net ton provided during the summer months of June through September. Status: Implementation began in June 2010.
18	**C&I-Renewables Incentives**	Provides incentives to Commercial and Industrial customers looking to install small scale renewable energy systems on their facilities. Status: Since February 10, 2010 two incentives have been paid to commercial customers under this program.
19	**Online Energy Feedback**	Daily energy consumption and a historical view of energy use will be available and displayed on a one-day delay basis through a web-portal for participating customers. Status: As proposed in Cause No. 43960 filed in October 2010.
20	**Indirect Costs allocable to all Core Plus Programs**	In addition to awareness and education, indirect expenses include appropriate training and development for program staff, memberships in relevant organizations, including those that can cost-effectively provide research into DSM-related subjects.
21	**Portfolio Summary**	MWh savings achieved in 2010 are included in the total savings reported in the 2011-2013 Summary View column.

INTEGRATED RESOURCE PLAN
MODELING SUMMARY

REDACTED

Prepared for:
Indianapolis Power & Light Company

Date Submitted:
August 31, 2011

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Attachment VIII – Forecasting Data Sets

IPL Forecasting Data Sets Are Provided Electronically

Folder A – Itron's Statistically Adjusted End-Use Models

Folder B – IPL Sales Forecast

Folder C – Independent Variables

Folder D – Sales Models

Folder E – Peak Forecast

Folder F – Model Performance

Folder G – Forecast Error Analysis

MidwestISO
Energizing the Heartland

March 31, 2011

Federal Energy Regulatory Commission
Secretary of the Commission
Form No. 715
888 First Street, NE
Washington, D.C. 20426

RE: FERC-715 - Annual Transmission Planning and Evaluation Report

Dear Secretary Bose:

Pursuant to Sections 213(b), 307(a) and 311 of the Federal Power Act and 18 CFR § 141.300 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, enclosed for filing is the FERC Form 715 Response for Transmission Owning Members of the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") that elected to have a regional filing of their FERC Form 715 response. A listing of those Transmitting Utilities for which this data is supplied is included as Attachment #1.[1] A summary of the information submitted in compliance with Part 1 through Part 6, Appendix A of Form 715 is included as Attachment #2.

This filing, submitted via FERC eFiling, contains Critical Energy Infrastructure Information ("CEII"). Thus, this filing is made pursuant to the Commission's regulations 18 CFR § 388.112(b)(2)(ii) (A) and contains the following:

1) The electronic media of all six parts of Form 715 with all pages marked "Critical Energy Infrastructure Information - Do Not Release;" and

2) A cover letter with two Attachments identifying the Respondents and a summary of the filing content with all pages marked "Critical Infrastructure Information - Do Not Release."

REDACTED

1 The responding Transmitting Utilities are now Transmission Owners of the Midwest ISO, and therefore, the Midwest ISO will now be filing FERC Form 715 on their behalf.

Midwest Independent Transmission System Operator, Inc. | P.O. Box 4202 Carmel, IN 46082-4202 | 1125 Energy Park Drive St. Paul, MN 55108 | www.midwestmarket.org 317-249-5400

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
01/01/2010	$ 17.21	$ 14.86	$ 13.91	$ 17.64	$ 18.40	$ 19.17	$ 18.92	$ 17.90	$ 18.61	$ 21.92	$ 21.38	$ 20.06	$ 18.54	$ 18.21	$ 12.75	$ 11.63	$ 24.31	$ 33.42	$ 37.20	$ 15.43	$ 36.47	$ 37.15	$ 33.49	$ 21.15
01/02/2010	20.02	26.61	27.36	26.75	28.07	20.20	16.12	15.94	11.17	11.66	14.55	15.15	15.35	15.60	15.76	16.00	15.89	17.11	20.27	19.55	33.19	31.09	22.23	$ 23.40
01/03/2010	23.31	23.44	23.43	23.14	23.37	20.18	23.21	19.56	20.47	24.58	34.60	34.65	34.90	34.71	34.73	34.59	34.65	34.77	35.24	35.19	35.40	35.22	24.68	$ 30.04
01/04/2010	28.97	15.20	14.81	24.77	28.51	35.37	35.11	27.51	23.51	28.25	29.68	23.83	23.19	23.18	29.56	33.17	30.79	31.95	34.86	34.65	34.33	35.41	34.28	$ 32.95
01/05/2010	25.54	26.77	25.80	23.18	37.53	37.86	122.31	196.48	111.28	39.52	36.33	35.46	35.21	35.50	32.31	32.65	33.81	31.28	31.48	30.80	30.63	29.58	30.74	$ 32.20
01/06/2010	32.31	30.43	32.84	30.74	31.07	22.57	31.64	32.04	32.97	34.70	41.05	38.83	36.66	30.61	28.58	33.34	19.08	16.81	32.76	30.83	32.81	37.97	40.08	$ 33.85
01/07/2010	20.73	14.06	13.76	14.01	14.57	20.62	24.43	26.77	21.60	15.66	19.86	30.84	32.86	25.12	22.67	21.70	20.88	23.78	21.91	20.57	21.33	20.88	25.43	$ 23.45
01/08/2010	17.92	14.39	13.69	13.92	14.39	14.62	17.58	20.68	27.44	20.67	20.98	29.06	29.35	31.28	31.62	31.78	31.96	32.13	31.77	24.98	24.30	20.94	22.82	$ 16.68
01/09/2010	15.11	20.05	26.27	26.84	26.88	26.35	30.09	30.21	30.59	31.86	29.81	20.66	20.40	31.92	30.65	29.77	31.47	32.35	35.87	31.20	23.28	26.61	30.36	$ 31.47
01/10/2010	26.79	30.32	27.82	27.61	27.32	28.60	27.80	28.58	30.21	24.22	29.61	30.84	29.62	29.17	25.01	20.90	24.02	25.92	28.54	28.72	28.47	28.26	28.76	$ 26.60
01/11/2010	19.86	26.42	27.66	31.61	25.91	23.84	48.58	78.91	79.75	97.33	38.02	40.41	37.54	35.74	35.15	36.03	36.51	37.67	37.45	37.63	39.33	37.12	35.13	$ 31.34
01/12/2010	26.97	25.64	25.48	25.54	25.93	29.01	57.97	84.01	84.14	42.88	34.45	36.32	35.10	35.59	36.58	34.35	37.03	36.39	35.14	34.22	36.45	35.18	34.21	$ 33.70
01/13/2010	29.63	24.96	32.26	31.80	34.13	35.38	36.38	36.98	37.42	33.27	33.32	31.72	33.41	33.25	36.72	33.72	34.39	36.68	37.09	32.76	32.32	32.89	34.35	$ 28.01
01/14/2010	20.10	13.69	23.54	26.12	26.42	26.64	27.36	26.58	26.86	27.23	27.85	28.39	27.43	26.54	28.37	28.49	28.52	28.35	17.43	15.07	14.86	13.82	11.29	$ 13.77
01/15/2010	15.19	12.21	9.19	11.03	11.12	11.25	11.43	11.68	11.74	11.74	16.75	27.52	30.17	29.52	31.51	31.77	27.71	23.36	31.00	32.01	32.34	32.45	32.34	$ 31.09
01/16/2010	28.77	29.95	30.19	30.46	31.86	26.41	22.48	24.10	25.45	23.74	22.67	22.07	21.54	23.62	31.96	31.23	31.43	29.90	25.49	14.24	13.20	12.95	16.83	$ 22.20
01/17/2010	11.50	11.15	11.14	11.13	11.15	11.31	21.35	31.53	33.12	32.65	32.51	32.46	36.11	34.13	32.57	32.50	32.90	32.41	33.67	32.84	33.98	33.55	33.19	$ 20.07
01/18/2010	11.38	11.14	11.12	11.21	11.33	11.70	23.69	33.69	36.13	35.34	34.46	33.45	34.37	34.08	35.74	35.25	34.79	34.86	33.43	32.24	33.03	32.29	31.96	$ 31.34
01/19/2010	32.29	25.98	21.43	22.54	23.38	23.09	31.77	33.55	30.30	29.95	26.77	17.30	26.35	28.29	22.58	34.23	34.08	34.51	35.15	35.11	34.24	33.88	29.55	$ 16.18
01/20/2010	14.38	13.81	13.68	12.88	10.76	11.51	13.03	13.37	13.23	13.29	13.65	14.23	14.79	17.82	20.00	21.30	21.58	23.92	26.11	29.73	29.12	28.08	20.82	$ 19.82
01/21/2010	15.59	18.08	21.15	23.51	23.42	28.10	29.80	31.47	31.88	31.93	31.47	32.77	33.29	33.77	34.87	33.56	32.16	31.73	33.35	31.41	31.12	31.24	27.75	$ 17.85
01/22/2010	11.73	11.17	14.94	15.97	16.19	16.85	21.35	28.21	31.60	31.85	32.34	32.34	32.17	31.98	32.26	25.12	24.19	29.62	31.62	31.86	31.81	31.97	30.96	$ 23.01
01/23/2010	19.16	19.99	20.57	21.91	21.24	22.62	24.21	25.36	27.69	26.89	27.51	24.23	25.11	24.13	27.32	28.23	25.22	29.90	30.46	31.86	29.30	28.52	19.54	$ 14.41
01/24/2010	12.33	14.81	11.74	12.51	12.56	13.74	13.00	13.27	13.25	14.34	20.72	23.33	25.09	23.92	28.12	29.02	23.48	25.83	28.28	17.66	17.70	18.11	18.65	$ 14.83
01/25/2010	11.33	11.15	11.21	11.17	12.49	13.79	11.39	14.24	28.05	30.91	31.55	33.23	35.22	34.28	35.98	34.30	34.43	33.50	35.62	35.03	35.22	32.16	32.83	$ 20.08
01/26/2010	11.17	11.26	11.23	11.22	11.53	20.49	28.53	28.68	31.19	32.87	30.89	31.28	34.73	35.75	32.85	35.92	34.80	33.73	34.77	34.73	35.21	33.57	25.43	$ 14.82
01/27/2010	13.64	13.60	13.57	13.60	14.05	15.02	25.04	23.11	21.39	22.39	22.13	26.39	25.47	25.49	23.51	22.22	23.32	25.23	27.02	21.66	22.39	22.04	22.81	$ 22.26
01/28/2010	21.87	20.85	21.31	20.70	20.57	23.55	21.96	22.54	27.77	29.61	29.68	29.41	29.22	29.70	29.25	29.31	29.15	29.32	29.25	28.41	28.96	29.26	28.08	$ 27.48
01/29/2010	31.93	31.54	31.80	28.18	23.96	22.85	25.78	26.57	33.03	32.49	31.49	30.52	30.22	31.67	34.77	34.80	31.41	30.44	28.87	27.73	22.21	22.83	24.48	$ 16.97
01/30/2010	11.41	11.21	11.14	11.14	11.21	11.29	13.46	27.61	28.69	31.84	25.96	28.96	29.25	27.26	18.25	27.88	28.83	23.81	25.37	29.34	27.26	26.20	23.47	$ 24.69
01/31/2010	18.25	16.43	16.45	16.50	21.45	20.92	21.64	29.68	24.82	24.69	24.65	24.72	28.10	23.94	23.83	22.71	21.13	20.79	25.49	24.28	26.74	26.44	26.97	$ 23.71

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

02/01/2010	16.84	13.88	13.92	20.44	21.29	19.85	21.90	28.09	30.09	31.44	31.48	30.65	24.82	35.47	31.29	29.96	26.57	25.94	27.21	29.46	30.37	27.87	17.31	$ 11.48
02/02/2010	11.28	11.10	11.10	11.07	11.24	11.48	23.82	28.98	31.40	29.66	25.76	28.12	31.95	31.25	29.90	31.55	23.35	25.71	23.12	21.15	26.18	31.96	22.35	$ 14.92
02/03/2010	11.28	11.16	11.11	11.10	11.09	11.22	11.44	14.56	21.85	34.36	38.25	37.77	29.46	22.96	25.50	30.82	28.30	27.71	29.03	30.65	23.25	13.60	11.73	$ 11.86
02/04/2010	11.76	11.63	11.50	11.37	11.24	11.11	10.35	10.33	11.03	11.01	11.04	11.06	11.27	11.25	11.28	11.43	11.41	11.47	11.53	11.62	15.93	21.14	22.06	$ 19.88
02/05/2010	18.46	18.14	18.36	18.40	19.31	25.64	25.59	25.39	23.29	24.18	28.47	28.19	22.88	22.73	23.95	24.47	30.84	28.12	23.70	22.56	28.27	31.99	31.97	$ 26.06
02/06/2010	13.91	11.18	11.13	11.15	11.15	11.45	11.47	11.39	12.15	21.98	30.97	31.06	33.30	33.98	32.67	31.42	30.29	19.51	23.29	29.81	29.84	29.80	29.74	$ 22.43
02/07/2010	12.17	11.17	11.11	11.09	11.07	11.51	11.25	11.31	14.73	22.60	27.68	29.73	31.13	30.26	27.44	23.23	20.30	18.17	19.26	21.84	27.29	29.83	29.90	$ 24.21
02/08/2010	12.78	11.19	11.18	11.20	11.46	12.15	20.72	30.14	30.97	31.38	31.03	31.71	35.65	36.57	33.66	33.89	34.44	32.77	32.84	36.27	37.76	36.14	34.97	$ 29.57
02/09/2010	13.19	11.18	11.16	11.15	11.15	11.24	11.46	18.91	33.30	34.19	47.90	40.18	33.53	33.44	34.98	35.15	33.65	32.81	33.67	33.58	33.75	33.45	31.20	$ 23.32
02/10/2010	17.23	14.36	11.52	11.93	15.07	16.24	19.50	27.02	32.70	35.02	35.84	36.43	36.43	35.09	35.61	36.70	34.71	33.15	15.81	16.65	22.54	26.55	26.18	$ 26.50
02/11/2010	26.48	26.35	26.27	26.23	26.37	25.52	25.37	23.79	27.05	22.31	16.75	17.46	17.54	22.92	24.10	27.20	27.48	27.35	23.11	18.76	19.13	19.80	23.12	$ 30.12
02/12/2010	17.94	16.88	16.59	16.78	16.88	17.17	23.57	28.59	30.06	28.00	27.31	23.44	18.52	16.85	15.90	15.41	22.39	27.40	26.92	28.48	28.64	28.46	28.65	$ 26.68
02/13/2010	21.19	20.84	21.06	25.17	22.06	21.12	24.73	23.51	23.51	24.50	25.62	29.32	29.46	28.83	28.06	29.42	26.27	23.78	25.73	29.30	29.70	29.13	25.19	$ 24.70
02/14/2010	23.48	23.35	23.19	23.30	22.70	21.07	21.29	16.87	17.03	20.83	28.16	23.32	11.14	11.10	11.11	11.16	11.08	10.27	11.03	11.12	11.15	11.30	11.43	$ 11.55
02/15/2010	11.76	13.68	13.86	14.15	13.92	13.37	13.96	13.46	14.07	13.81	27.18	32.66	29.18	17.85	20.69	10.64	12.74	23.16	28.64	28.91	29.47	30.33	28.28	$ 27.94
02/16/2010	27.64	27.43	26.92	27.51	27.68	27.16	27.39	28.63	29.36	30.09	29.66	29.31	29.33	28.61	28.48	29.58	29.49	26.64	23.69	27.26	31.45	31.43	31.02	$ 19.63
02/17/2010	11.60	11.52	11.35	11.29	11.32	12.30	18.90	17.88	19.96	27.56	30.56	31.81	32.50	33.15	33.28	22.61	8.52	10.63	8.75	10.71	11.29	11.35	11.45	$ 11.53
02/18/2010	11.53	11.37	11.38	11.38	11.38	11.35	11.57	26.05	31.61	32.70	33.37	32.71	30.62	30.22	30.05	28.78	28.57	24.03	26.42	29.86	30.34	31.29	26.38	$ 18.10
02/19/2010	12.14	11.25	11.76	11.25	11.42	22.31	14.71	11.18	11.23	11.27	11.18	11.19	11.27	11.98	19.94	22.91	21.97	15.41	21.36	24.34	21.20	19.88	20.11	$ 19.49
02/20/2010	11.78	11.19	11.17	11.20	11.24	11.22	11.22	11.19	11.21	11.29	11.16	12.00	11.62	11.16	11.16	11.15	11.14	11.14	11.15	11.15	11.23	17.49	19.94	$ 20.46
02/21/2010	19.33	19.12	22.51	22.95	20.69	22.87	21.51	24.82	24.05	21.57	19.51	18.17	17.80	17.44	17.43	19.53	22.67	23.45	24.62	25.93	23.14	24.88	23.20	$ 19.06
02/22/2010	14.75	15.12	14.83	16.08	18.29	19.98	24.01	27.61	30.68	28.90	26.31	21.16	20.35	29.21	32.37	22.11	24.26	24.21	25.57	20.80	15.89	11.11	11.00	$ 11.03
02/23/2010	11.05	11.05	11.05	11.05	11.05	11.07	11.13	11.33	12.99	11.67	11.68	11.48	13.46	11.43	11.91	19.71	22.85	25.84	31.91	30.26	32.03	32.42	32.62	$ 31.93
02/24/2010	31.46	20.29	11.12	12.08	16.50	27.64	16.46	13.14	15.49	16.42	14.02	11.33	11.43	11.39	11.35	11.54	16.14	23.48	26.25	26.20	26.54	17.03	11.37	$ 11.34
02/25/2010	11.45	12.59	10.93	11.16	11.17	12.05	12.21	12.65	18.43	15.97	18.09	26.09	26.39	26.07	24.27	25.91	26.88	27.44	25.41	26.39	27.40	27.15	24.96	$ 25.44
02/26/2010	20.60	22.71	19.94	18.99	17.58	19.15	22.48	28.17	34.59	35.11	35.59	28.01	27.52	30.63	26.65	25.01	22.30	25.23	21.09	17.42	21.55	30.77	33.31	$ 30.36
02/27/2010	16.54	13.15	11.32	11.31	11.30	11.38	21.77	11.49	14.09	29.33	31.07	35.40	36.16	24.03	26.29	27.56	29.28	18.52	16.10	26.80	35.42	33.63	25.77	$ 17.22
02/28/2010	14.62	13.01	15.45	23.35	26.86	27.67	28.20	25.48	23.54	11.11	11.49	11.18	11.34	11.44	17.78	25.04	26.65	27.51	27.04	30.04	33.56	33.15	27.20	$ 27.09

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

03/01/2010	26.41	24.69	23.73	24.86	23.52	26.00	26.08	33.64	25.59	20.35	23.24	13.26	15.73	15.18	15.03	11.29	38.69	36.93	34.62	35.19	29.13	15.85	11.36	$ 11.34
03/02/2010	11.31	12.68	12.17	12.04	11.04	11.10	11.93	24.31	25.93	26.03	24.10	23.56	29.75	30.45	31.29	146.87	114.50	45.58	34.37	35.42	35.06	35.56	35.30	$ 34.05
03/03/2010	31.27	33.31	33.33	31.34	30.74	28.03	29.15	34.12	33.31	29.67	20.88	20.89	20.86	22.55	27.43	33.87	34.42	34.10	28.02	21.34	15.75	15.19	15.07	$ 12.30
03/04/2010	11.24	11.15	11.14	11.27	11.34	12.02	15.51	16.08	16.57	16.72	16.60	17.42	21.60	26.44	26.70	63.58	77.70	30.74	20.38	27.68	31.94	24.32	12.73	$ 11.61
03/05/2010	12.48	11.66	11.44	11.39	11.77	17.47	28.23	29.90	29.90	28.15	26.84	17.19	15.81	15.59	15.93	17.10	22.72	24.00	21.29	18.93	13.71	12.78	14.50	$ 25.95
03/06/2010	24.85	25.30	26.63	26.94	26.93	28.00	29.15	30.15	28.33	28.82	29.86	28.73	28.18	27.31	25.49	24.43	26.25	25.46	27.65	26.77	28.67	29.95	19.16	$ 11.23
03/07/2010	13.17	13.21	13.04	13.05	11.90	13.89	16.28	12.65	12.51	11.54	16.64	23.21	23.78	23.76	23.01	20.81	27.56	23.62	27.00	32.09	38.40	32.22	31.49	$ 19.26
03/08/2010	18.09	14.76	13.61	13.61	13.70	19.30	20.21	25.19	29.66	24.28	26.62	25.35	26.43	27.85	23.60	28.79	29.28	24.99	28.01	28.94	28.97	33.13	29.55	$ 15.97
03/09/2010	11.38	11.08	11.06	11.09	15.09	26.27	27.04	27.43	27.12	32.00	20.57	29.41	20.62	21.93	19.32	23.55	26.98	27.21	25.18	24.85	25.08	19.65	21.51	$ 11.91
03/10/2010	11.24	11.13	11.10	11.10	11.17	11.21	11.43	21.38	36.13	30.92	29.97	28.10	26.94	26.85	26.82	29.88	28.56	34.45	37.41	29.18	29.30	29.26	28.18	$ 26.89
03/11/2010	26.19	15.03	11.29	11.30	11.35	11.54	12.93	12.29	19.33	17.67	17.89	62.59	32.34	28.86	32.80	23.21	24.41	29.31	29.62	29.96	29.76	29.05	28.95	$ 27.74
03/12/2010	26.58	20.85	15.12	15.95	15.50	12.32	21.38	26.82	26.01	23.57	24.47	24.99	22.76	27.95	33.44	25.34	28.93	25.68	24.07	32.07	32.36	31.09	23.33	$ 13.26
03/13/2010	11.67	12.56	11.32	11.70	11.64	12.76	18.07	21.60	31.14	30.88	30.63	31.19	31.15	32.04	31.84	31.75	31.74	30.59	30.36	31.84	31.85	31.91	31.01	$ 14.27
03/14/2010	11.33	11.15	11.13	11.20	11.26	11.35	14.83	17.63	30.81	31.70	31.71	31.82	32.05	31.93	32.23	31.73	28.08	28.45	32.11	32.17	28.90	26.02	24.05	$ 22.73
03/15/2010	20.24	20.48	13.51	18.44	21.03	25.25	21.51	22.71	13.99	11.34	11.37	12.07	11.47	11.45	11.73	23.26	26.22	14.16	14.13	14.27	14.27	14.25	13.37	$ 12.14
03/16/2010	11.21	11.11	11.11	11.14	11.62	14.31	15.19	17.42	30.16	25.61	25.45	27.86	30.63	28.72	21.01	14.86	14.77	20.08	27.05	33.37	35.36	34.38	25.21	$ 12.86
03/17/2010	11.35	11.34	11.39	14.82	24.82	31.04	32.93	34.23	36.00	22.40	14.23	14.66	14.69	14.59	14.17	14.61	14.67	14.80	17.61	29.47	28.69	21.84	14.84	$ 11.96
03/18/2010	11.24	11.24	11.08	11.13	11.24	11.55	13.26	23.15	22.57	28.53	32.87	30.44	28.61	25.74	27.54	23.08	24.11	28.61	28.52	28.57	28.52	28.07	26.72	$ 20.62
03/19/2010	11.26	11.14	11.14	11.23	11.30	12.90	19.56	22.24	28.62	25.84	28.30	26.31	29.47	29.20	28.00	21.76	18.99	15.02	21.51	23.33	29.70	24.97	14.17	$ 12.08
03/20/2010	11.23	11.22	11.34	12.15	11.18	11.80	18.77	29.66	25.75	27.64	25.74	30.69	28.83	30.57	29.07	29.02	30.03	18.36	25.40	31.26	31.68	28.75	20.00	$ 15.30
03/21/2010	12.21	11.13	11.14	11.23	11.14	11.30	15.71	20.95	22.76	24.05	27.30	29.53	24.93	31.97	22.54	15.57	14.17	24.96	25.14	29.60	30.25	23.10	13.50	$ 11.37
03/22/2010	11.14	11.02	11.07	11.16	11.33	17.02	20.51	26.61	32.31	32.18	32.26	32.36	32.29	32.25	31.91	30.97	32.27	32.27	32.25	32.20	32.16	29.37	18.29	$ 12.66
03/23/2010	11.14	11.13	11.13	11.35	11.78	18.35	28.18	33.57	36.05	40.96	40.32	34.88	15.67	27.20	13.25	19.04	30.50	26.58	18.65	24.87	26.56	20.85	14.75	$ 13.45
03/24/2010	13.38	13.25	13.02	13.03	13.28	14.55	27.34	37.97	30.00	32.28	31.20	18.34	15.84	15.25	12.02	17.00	25.66	26.52	26.99	32.30	31.39	29.50	12.35	$ 11.34
03/25/2010	11.10	11.06	11.04	11.02	11.00	10.60	11.08	13.04	11.31	11.62	13.52	14.08	16.56	17.57	24.90	36.49	33.25	33.82	25.66	17.36	12.20	13.84	10.35	$ 10.85
03/26/2010	11.26	8.49	7.91	8.16	10.31	11.52	13.46	15.42	15.78	16.00	16.97	17.93	23.39	26.38	27.06	27.70	28.52	23.09	23.06	24.73	21.66	29.58	29.18	$ 18.04
03/27/2010	17.66	18.19	15.94	21.88	26.29	19.82	22.67	24.75	24.99	25.28	27.12	27.72	25.94	26.77	20.53	18.53	18.45	18.55	18.50	24.32	28.76	20.85	15.28	$ 11.28
03/28/2010	11.11	11.08	11.06	11.05	11.06	11.09	11.06	11.06	11.66	11.01	11.03	11.73	11.10	15.49	20.88	18.35	18.41	18.45	18.95	23.01	31.68	30.46	18.22	$ 13.87
03/29/2010	11.05	10.23	11.39	11.70	14.55	25.92	30.09	30.92	26.19	26.24	26.62	16.22	19.98	24.07	22.03	22.60	23.45	21.79	24.46	22.18	23.10	23.31	14.01	$ 11.64
03/30/2010	14.59	13.76	8.91	11.65	13.31	14.38	18.32	19.82	21.02	19.81	18.18	19.00	29.76	23.27	27.18	11.57	16.19	18.32	25.23	26.31	27.04	27.08	28.65	$ 34.14
03/31/2010	40.63	19.98	11.51	11.13	11.16	12.70	23.51	25.06	24.21	23.80	36.44	29.71	18.97	20.13	21.71	25.87	20.77	19.82	18.84	22.57	22.29	19.85	20.72	$ 12.69

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

04/01/2010	11.09	11.07	11.05	11.07	11.09	11.13	11.51	12.64	16.04	19.43	19.76	18.09	18.40	19.34	21.77	22.91	23.29	21.41	18.69	23.13	25.98	14.99	14.36	$ 14.33
04/02/2010	11.45	10.83	12.22	12.62	10.99	11.29	11.13	11.23	13.24	20.47	21.11	21.85	21.83	21.59	22.22	21.62	21.99	20.49	17.41	16.62	15.85	14.52	11.79	$ 10.53
04/03/2010	8.57	10.92	13.04	12.40	12.82	12.81	12.52	13.65	18.08	24.96	26.00	26.05	26.75	22.56	20.73	19.01	19.55	19.39	19.18	19.98	21.27	23.62	16.55	$ 13.68
04/04/2010	13.72	13.28	12.99	11.73	11.12	12.56	24.15	15.40	21.30	26.36	26.83	24.37	19.01	14.73	15.01	26.05	17.91	16.71	15.81	14.18	19.97	23.36	14.65	$ 12.23
04/05/2010	13.31	12.24	12.44	11.56	11.73	20.11	30.52	30.13	29.99	30.21	30.23	29.91	29.58	29.61	34.54	35.57	35.83	35.04	35.50	35.37	33.06	27.39	19.07	$ 12.61
04/06/2010	11.27	11.28	11.28	11.26	11.26	11.27	11.33	11.25	12.70	12.84	22.35	31.59	31.30	30.57	32.19	29.94	31.88	30.77	29.62	33.50	35.30	29.19	23.11	$ 14.83
04/07/2010	15.96	14.62	13.19	12.99	13.05	23.38	25.49	24.81	29.90	46.56	44.09	31.03	30.72	31.62	31.10	36.40	35.75	31.50	31.50	34.08	33.34	29.59	23.92	$ 26.79
04/08/2010	25.12	26.09	26.21	26.56	27.27	27.56	24.58	32.67	29.95	32.68	34.85	29.81	30.25	31.86	24.49	21.17	30.04	29.88	29.47	30.62	32.50	29.43	28.03	$ 27.02
04/09/2010	23.85	19.92	23.33	17.53	22.86	24.40	21.82	29.36	30.68	31.65	30.31	29.72	29.67	29.59	25.44	29.61	29.60	29.32	28.09	29.83	30.62	28.02	28.32	$ 27.06
04/10/2010	26.68	26.68	26.68	26.81	21.83	27.04	29.01	29.76	29.64	30.11	30.50	29.46	29.45	31.37	29.84	29.64	30.70	30.16	29.74	28.57	29.65	29.62	29.28	$ 25.25
04/11/2010	22.79	22.49	15.37	15.91	19.20	27.84	28.87	20.98	28.76	29.54	20.06	30.14	29.92	30.29	30.58	30.38	30.69	29.75	29.85	29.72	30.15	29.03	26.33	$ 25.14
04/12/2010	19.34	22.33	25.90	24.46	23.02	21.59	20.15	18.72	17.28	15.84	14.41	12.97	11.54	10.21	10.77	11.40	15.62	22.81	26.40	13.83	15.10	12.77	11.37	$ 11.44
04/13/2010	11.47	11.54	16.43	19.53	24.96	27.32	26.10	28.00	29.61	31.70	31.55	31.07	31.65	31.33	31.23	29.58	22.75	15.78	13.60	15.15	18.86	14.81	15.18	$ 16.89
04/14/2010	19.11	16.80	14.45	14.32	16.33	20.47	23.24	15.98	14.81	14.92	31.13	32.15	33.97	31.31	31.30	28.72	28.45	30.72	29.83	27.83	30.86	29.35	25.11	$ 20.47
04/15/2010	17.35	24.76	14.17	13.72	15.50	17.91	15.63	21.43	30.89	32.86	32.30	31.89	31.15	31.66	32.22	30.71	31.13	30.06	29.57	28.82	31.64	30.18	28.16	$ 23.31
04/16/2010	24.69	16.95	14.22	20.98	22.36	22.84	26.38	29.67	32.69	32.84	33.40	32.38	33.13	32.66	32.64	32.53	32.41	32.46	32.36	30.44	31.84	27.49	20.97	$ 14.37
04/17/2010	14.28	13.47	13.17	12.76	13.42	26.12	27.34	27.76	28.31	28.26	28.14	28.15	29.52	28.44	29.39	27.85	27.83	27.99	27.91	27.36	29.01	28.75	26.71	$ 26.19
04/18/2010	17.63	16.64	24.64	15.79	13.88	16.69	14.43	14.27	30.08	24.74	29.34	29.47	22.41	22.56	25.43	25.41	24.10	27.69	16.14	21.11	30.37	25.35	18.24	$ 13.68
04/19/2010	14.02	14.64	22.88	12.49	13.27	20.46	27.98	34.37	36.86	36.29	28.75	34.76	36.44	35.82	36.42	61.73	64.32	35.97	33.68	30.79	33.11	31.79	25.44	$ 27.06
04/20/2010	26.65	20.46	15.43	11.78	20.89	30.02	31.43	36.16	34.50	36.12	35.68	36.03	52.60	32.93	32.70	32.55	32.53	32.51	32.40	32.17	30.05	27.76	21.90	$ 19.58
04/21/2010	11.79	11.10	11.09	11.11	20.35	27.53	15.57	24.24	36.13	38.26	35.64	36.15	19.75	11.14	11.14	11.33	12.62	14.17	15.12	15.03	15.28	15.05	14.12	$ 12.62
04/22/2010	11.87	11.20	15.15	13.99	15.57	15.66	15.60	15.39	15.56	15.03	15.64	16.52	16.72	16.75	18.08	29.88	31.77	31.61	31.32	31.31	31.64	31.76	24.46	$ 22.83
04/23/2010	22.35	21.27	22.79	24.33	19.70	13.42	13.94	14.92	15.15	15.30	15.42	15.74	15.88	15.86	14.11	13.85	13.91	13.92	13.86	13.37	13.66	13.68	13.74	$ 13.72
04/24/2010	13.60	13.81	14.01	14.13	13.74	13.02	13.80	13.81	13.88	16.73	27.29	29.75	29.70	28.52	28.67	28.80	25.36	31.27	19.16	13.56	16.72	16.21	15.78	$ 13.45
04/25/2010	12.09	13.11	14.09	13.77	14.68	14.98	14.06	15.24	15.25	11.80	11.33	13.53	18.60	21.86	27.51	28.54	28.14	27.74	27.33	27.05	28.91	25.42	20.50	$ 15.35
04/26/2010	13.54	15.26	15.65	12.50	11.83	13.94	22.78	29.76	29.90	13.17	12.80	25.14	33.39	32.94	32.43	31.35	31.99	31.68	31.65	30.92	29.08	20.53	11.16	$ 11.12
04/27/2010	11.16	11.13	11.09	11.17	14.93	15.65	14.36	14.90	27.87	32.22	32.17	31.60	30.91	30.80	31.11	27.51	27.77	28.73	27.17	26.46	29.60	26.97	22.05	$ 16.77
04/28/2010	14.86	14.55	15.52	16.13	19.42	12.80	15.81	16.74	26.16	31.03	31.29	30.49	26.51	18.13	21.15	30.96	25.44	17.52	24.88	17.18	27.54	23.52	23.34	$ 25.74
04/29/2010	17.07	17.21	17.33	16.88	16.72	17.59	22.09	29.01	31.66	31.31	30.25	31.56	31.94	31.07	29.91	27.97	30.25	25.04	26.29	27.91	28.65	23.07	12.80	$ 11.17
04/30/2010	11.13	11.25	11.13	11.08	11.15	19.79	20.14	11.51	13.68	19.81	35.47	34.43	23.81	12.59	12.16	17.81	20.66	18.04	26.28	23.86	26.37	26.41	26.55	$ 26.53

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

05/01/2010	26.55	26.53	27.43	26.06	25.22	21.76	16.09	15.64	16.38	24.34	25.08	26.65	25.74	26.88	26.05	21.62	20.49	20.37	23.87	22.64	30.53	26.81	18.26	$ 16.45
05/02/2010	14.66	13.79	11.93	11.20	11.27	11.28	11.28	11.22	11.38	17.55	14.19	14.60	18.17	29.86	24.74	21.03	30.10	29.74	30.17	29.79	30.43	30.25	27.83	$ 20.48
05/03/2010	14.39	14.21	14.04	11.22	11.63	13.62	16.38	30.00	23.12	27.62	34.68	36.04	39.91	35.64	77.65	83.11	51.37	93.56	35.51	141.75	94.14	58.57	28.62	$ 26.87
05/04/2010	26.50	17.71	11.98	12.84	14.99	69.41	33.09	31.85	31.60	31.49	31.37	30.62	33.01	35.03	35.46	26.53	29.43	26.13	28.70	28.81	30.79	28.31	23.48	$ 16.44
05/05/2010	15.88	14.24	14.76	15.84	16.09	16.34	16.58	16.83	19.55	27.18	27.58	28.05	27.98	28.07	29.04	29.36	32.19	30.98	32.06	31.04	29.62	28.21	20.55	$ 16.65
05/06/2010	17.47	17.37	17.22	16.40	17.66	25.16	26.96	36.62	33.78	32.83	137.15	77.81	34.52	118.84	135.32	102.63	73.38	69.95	97.82	107.24	39.58	32.15	28.92	$ 16.37
05/07/2010	11.09	11.06	13.08	24.84	25.63	28.48	29.78	109.45	106.72	41.15	72.82	110.13	118.37	103.77	137.33	81.53	26.35	30.56	35.64	68.81	40.14	17.91	15.69	$ 13.01
05/08/2010	11.50	12.16	13.52	13.81	13.42	15.52	21.32	22.47	22.46	28.16	28.82	30.28	29.48	28.35	17.63	14.52	13.59	14.17	20.43	26.86	27.66	27.83	25.65	$ 20.23
05/09/2010	14.83	11.07	10.86	10.65	10.86	12.86	14.35	17.08	16.89	24.68	18.33	16.33	13.87	13.21	13.35	15.80	15.64	16.56	14.70	13.81	13.66	13.56	14.23	$ 15.79
05/10/2010	12.49	13.63	13.63	13.61	13.62	13.15	13.16	14.04	17.34	31.07	29.67	23.87	28.55	26.50	26.07	17.85	21.06	31.36	28.59	27.70	30.66	19.23	13.74	$ 11.57
05/11/2010	11.35	11.40	12.42	15.88	22.49	28.61	27.24	27.79	29.47	30.36	30.10	30.66	31.50	31.46	31.21	30.96	30.71	30.46	30.20	29.95	29.70	28.73	27.03	$ 25.34
05/12/2010	23.65	21.95	20.26	18.56	16.92	17.44	19.08	20.72	22.36	24.01	25.65	27.29	28.90	29.46	29.47	29.48	29.50	29.51	29.52	29.54	29.54	29.39	29.17	$ 28.95
05/13/2010	28.73	28.51	28.29	28.06	27.86	28.09	28.50	28.91	29.32	29.73	30.15	30.56	30.94	30.83	30.53	30.23	29.94	29.64	29.34	29.04	28.67	27.15	25.23	$ 23.31
05/14/2010	21.39	19.47	17.55	15.63	13.95	15.55	18.19	20.84	23.48	26.12	28.76	31.40	33.84	33.88	33.20	32.52	31.84	31.16	30.48	29.80	29.05	27.44	25.58	$ 23.73
05/15/2010	21.87	20.01	18.15	16.29	14.65	15.52	17.12	18.71	20.31	21.91	23.50	25.10	26.59	26.95	26.99	27.04	27.08	27.13	27.17	27.21	26.73	24.80	22.78	$ 20.76
05/16/2010	18.75	16.73	14.71	12.70	11.60	12.96	14.45	15.94	17.43	18.91	20.40	21.89	22.92	22.78	22.57	22.36	22.16	21.95	21.74	21.53	20.98	19.71	18.42	$ 17.13
05/17/2010	15.83	14.54	13.25	11.96	11.77	13.73	15.74	17.76	19.77	21.79	23.81	25.82	27.43	28.23	29.01	29.79	30.57	31.35	32.13	32.91	32.61	30.32	27.99	$ 25.65
05/18/2010	23.32	20.98	18.65	16.31	15.76	18.29	20.88	23.47	26.05	28.64	31.23	33.82	34.77	34.09	33.40	32.71	32.03	31.34	30.65	29.97	28.61	26.59	24.58	$ 22.56
05/19/2010	20.54	18.53	16.51	14.49	14.74	17.09	19.45	21.80	24.15	26.50	28.86	31.21	32.13	31.77	31.40	31.04	30.67	30.30	29.94	29.57	28.18	26.11	24.03	$ 21.95
05/20/2010	19.87	17.79	15.72	14.25	16.09	18.41	20.73	23.06	25.38	27.70	30.03	31.93	31.82	31.44	31.06	30.69	30.31	29.93	29.55	28.93	27.14	25.19	23.24	$ 21.29
05/21/2010	19.34	17.39	15.45	14.14	15.72	17.66	19.60	21.53	23.47	25.41	27.35	28.78	28.25	27.52	26.79	26.06	25.32	24.59	23.86	22.71	19.94	17.00	14.72	$ 14.46
05/22/2010	14.33	14.20	14.08	13.95	13.83	13.70	13.69	13.90	16.31	14.77	18.55	22.26	25.97	29.68	31.22	29.38	27.49	25.60	23.71	21.82	19.94	18.05	16.51	$ 15.50
05/23/2010	14.50	13.50	12.51	11.51	12.42	14.89	17.36	19.83	22.30	24.77	27.24	29.71	30.58	30.18	29.77	29.37	28.97	28.57	28.17	27.76	26.58	24.81	23.04	$ 21.27
05/24/2010	19.50	17.73	15.96	14.22	14.74	16.63	18.52	20.41	22.30	24.20	26.09	34.34	39.51	31.53	33.67	50.73	51.43	47.89	59.68	54.91	50.13	45.35	40.58	$ 35.80
05/25/2010	31.02	26.48	26.26	27.65	29.03	30.42	31.81	33.19	34.58	35.94	36.94	37.80	38.66	39.13	38.68	38.77	37.77	35.21	32.65	30.08	27.51	24.94	22.37	$ 19.81
05/26/2010	17.95	17.06	16.18	15.30	14.42	13.54	12.65	11.78	13.17	16.35	19.53	22.72	25.90	29.08	32.27	35.32	34.19	31.03	27.86	24.70	21.53	18.37	15.21	$ 12.13
05/27/2010	11.25	11.33	11.42	11.50	11.58	11.66	11.74	11.95	14.44	17.77	21.10	24.43	27.76	34.30	43.64	34.95	37.15	28.94	26.35	23.76	21.17	18.58	15.99	$ 13.40
05/28/2010	11.96	14.11	16.51	18.91	21.31	23.71	26.12	28.52	30.44	30.98	31.42	31.87	32.31	32.76	33.21	33.65	32.91	29.73	26.48	23.22	19.96	16.71	13.53	$ 13.62
05/29/2010	15.41	17.20	18.99	20.78	22.57	24.36	26.12	27.11	27.78	28.45	29.12	29.79	30.46	31.13	31.59	30.13	28.19	26.26	24.32	22.39	20.45	18.51	16.71	$ 16.06
05/30/2010	15.67	15.29	14.91	14.52	14.14	13.75	13.61	15.49	17.85	20.20	22.55	24.90	27.26	29.61	31.53	30.87	29.77	28.67	27.57	26.47	25.37	24.27	23.19	$ 22.25
05/31/2010	21.33	20.40	19.48	18.56	17.64	16.72	16.32	18.16	20.24	22.33	24.42	26.51	28.60	30.68	31.78	30.15	28.38	26.60	24.83	23.05	21.27	19.50	18.07	$ 17.48

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

06/01/2010	16.91	16.35	15.78	15.22	14.65	14.09	15.18	19.84	24.61	29.39	34.17	38.94	41.61	39.37	36.93	34.49	34.66	31.96	46.58	30.41	28.51	26.61	24.71	$ 22.80
06/02/2010	20.90	19.00	17.24	17.86	19.37	20.87	22.38	23.89	25.39	26.90	28.40	29.81	31.19	37.89	36.32	28.55	28.83	29.10	29.37	29.65	29.92	30.19	30.34	$ 29.86
06/03/2010	29.29	28.73	28.16	27.59	27.03	26.46	26.19	27.14	28.23	29.32	30.40	31.49	32.58	33.67	34.11	32.15	29.97	27.78	25.59	23.41	21.22	19.03	17.31	$ 17.08
06/04/2010	16.95	16.83	16.70	16.58	16.45	16.33	18.62	28.39	38.70	49.01	59.32	69.52	72.73	71.66	69.36	59.90	49.28	39.00	35.45	37.10	32.60	30.64	28.68	$ 26.72
06/05/2010	24.76	22.80	20.84	19.23	20.57	22.58	24.59	26.61	28.62	30.63	32.65	34.35	33.94	33.13	32.32	31.50	30.69	29.88	29.06	28.08	26.15	24.08	22.00	$ 19.93
06/06/2010	17.86	15.78	13.71	12.11	12.91	14.06	15.21	16.35	17.50	18.64	19.79	20.90	21.84	22.77	23.69	24.62	25.55	26.47	27.40	27.68	25.72	23.58	21.43	$ 19.29
06/07/2010	17.15	15.00	12.86	11.82	14.37	17.20	20.03	22.85	25.68	28.51	31.34	33.65	34.36	34.96	35.56	36.15	36.75	27.48	16.84	16.54	16.23	15.93	15.63	$ 15.32
06/08/2010	15.02	15.57	17.98	20.46	22.94	25.42	27.89	30.37	32.85	34.58	34.76	35.01	35.49	35.04	34.91	34.56	34.53	34.76	34.55	32.97	27.42	19.39	20.33	$ 21.33
06/09/2010	26.12	24.52	14.61	21.10	23.88	24.94	27.98	30.25	31.20	28.83	28.99	31.43	31.99	32.18	32.66	33.57	33.61	31.79	31.15	31.92	36.25	34.69	31.84	$ 15.84
06/10/2010	11.86	11.42	11.33	11.33	11.33	19.67	11.59	36.52	34.03	40.42	38.65	36.10	35.61	35.48	42.14	42.17	38.08	36.22	25.74	21.56	31.49	29.11	21.51	$ 24.74
06/11/2010	14.79	20.88	15.40	15.34	17.45	25.57	24.51	23.24	27.66	33.52	45.10	19.80	14.81	15.69	15.12	14.33	14.81	14.86	18.50	28.86	31.68	31.09	31.36	$ 30.41
06/12/2010	18.59	18.09	19.26	15.02	15.16	15.68	17.48	25.74	26.06	27.30	30.83	31.77	30.65	28.65	31.85	31.29	31.44	31.45	28.37	27.06	26.83	23.30	18.15	$ 18.73
06/13/2010	19.41	24.40	17.49	14.01	13.62	13.60	13.75	20.39	26.25	26.33	26.42	27.29	27.03	28.61	30.41	29.73	29.58	28.37	27.38	25.72	26.47	26.60	20.50	$ 11.15
06/14/2010	11.17	11.10	11.61	15.84	16.00	16.08	22.94	28.11	28.05	30.73	36.21	34.72	33.67	34.49	32.81	46.16	39.54	31.67	28.36	28.53	29.12	28.42	15.89	$ 20.36
06/15/2010	11.18	11.13	11.40	11.14	11.13	11.26	11.31	12.61	25.29	43.32	95.49	95.46	95.51	95.13	95.12	95.15	69.81	30.25	30.30	30.07	30.38	30.76	30.12	$ 17.88
06/16/2010	11.19	11.13	11.11	11.15	11.24	11.52	16.87	14.15	19.10	20.61	26.86	30.44	34.99	32.87	35.86	36.17	35.55	35.32	34.08	28.93	30.06	28.36	26.87	$ 26.70
06/17/2010	26.76	26.68	18.39	17.34	26.68	26.47	11.93	13.61	23.41	11.26	11.07	11.07	11.16	25.43	32.50	35.34	31.45	31.56	27.23	23.17	21.98	16.99	17.11	$ 14.13
06/18/2010	13.78	14.79	15.29	15.23	15.09	15.12	15.33	15.69	18.92	18.36	29.88	27.53	32.93	33.59	24.67	34.63	35.04	33.26	33.46	33.11	28.84	22.07	15.37	$ 15.22
06/19/2010	18.10	15.32	13.63	13.38	13.14	12.89	12.64	12.39	12.14	11.89	11.64	11.39	24.08	25.82	29.36	28.28	21.61	20.59	23.06	26.69	25.84	29.25	21.27	$ 14.39
06/20/2010	12.43	11.20	11.44	11.74	12.03	12.33	12.63	12.92	13.22	13.09	13.23	13.41	17.35	17.31	25.08	38.41	33.47	35.05	35.12	33.85	34.24	30.41	11.94	$ 13.65
06/21/2010	17.28	22.17	14.87	13.70	13.11	11.21	15.71	21.89	27.00	28.05	32.50	32.49	33.47	31.74	16.76	14.81	14.75	20.92	30.86	29.13	28.17	29.64	29.35	$ 23.83
06/22/2010	19.60	13.91	13.37	12.64	11.52	10.95	13.46	14.24	14.82	23.10	27.84	29.03	26.77	28.85	29.20	29.90	29.31	29.09	27.49	28.34	30.53	30.43	29.99	$ 28.67
06/23/2010	28.69	28.77	27.09	22.86	18.61	14.60	14.08	15.33	15.97	29.82	30.26	32.61	34.43	36.06	41.16	38.04	44.41	45.58	34.09	34.16	34.74	34.24	32.92	$ 19.17
06/24/2010	13.52	11.90	11.67	12.15	14.08	22.72	27.06	31.83	32.69	35.00	34.96	35.52	35.18	34.81	35.29	35.26	35.05	35.09	34.83	34.19	24.06	14.46	13.20	$ 12.27
06/25/2010	14.27	14.99	15.09	15.19	15.20	14.38	15.04	23.59	31.90	30.85	31.56	33.51	36.74	34.95	34.37	35.15	34.04	33.12	34.09	30.54	14.29	14.51	16.74	$ 24.36
06/26/2010	24.24	19.68	26.08	25.05	24.53	15.69	27.85	28.69	28.87	30.94	33.59	34.52	34.65	35.80	35.46	34.18	34.69	35.28	35.18	35.22	33.86	34.21	32.50	$ 30.97
06/27/2010	23.30	19.94	17.68	20.16	15.50	16.50	13.58	11.27	18.43	29.16	31.22	31.63	32.15	30.76	25.17	17.79	26.48	27.32	28.38	29.68	28.56	29.08	24.30	$ 23.17
06/28/2010	16.20	14.92	12.17	12.85	14.97	15.56	15.47	15.10	15.79	17.03	19.91	24.75	25.69	28.43	31.72	31.40	30.77	30.19	29.80	20.69	16.43	16.92	17.27	$ 17.26
06/29/2010	16.01	16.33	17.30	17.32	16.95	16.58	18.58	18.69	30.17	24.53	21.25	33.17	32.25	32.56	32.56	47.90	72.63	59.55	39.08	36.57	33.64	31.62	30.16	$ 21.20
06/30/2010	17.46	17.45	17.42	17.42	17.42	17.42	17.41	16.78	21.14	22.23	22.01	26.65	34.67	36.32	36.81	36.91	37.69	32.99	29.99	29.88	19.40	21.83	12.83	$ 11.57

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

07/01/2010	13.33	13.45	13.61	15.26	13.44	12.98	13.36	13.26	18.89	20.85	29.65	32.87	39.53	32.74	29.32	32.15	32.36	34.27	34.11	28.44	33.59	26.58	14.15	$ 14.62
07/02/2010	13.08	12.91	13.35	14.46	14.19	13.36	14.96	15.44	14.02	16.95	26.00	23.73	33.00	24.24	23.95	33.01	31.33	50.88	61.08	32.19	33.72	27.88	15.72	$ 13.41
07/03/2010	13.65	13.15	13.00	12.57	13.30	13.26	13.17	13.46	13.12	13.07	22.52	23.64	35.55	32.52	34.08	35.59	17.91	11.51	19.56	23.97	16.45	13.98	18.70	$ 15.06
07/04/2010	15.53	13.13	12.84	12.55	12.26	11.97	11.68	11.39	11.82	14.59	24.33	28.30	30.46	31.82	29.75	19.39	16.05	16.72	16.71	17.15	19.38	22.93	23.15	$ 19.33
07/05/2010	15.10	14.59	14.32	14.30	14.50	14.59	14.70	15.83	23.69	29.83	33.51	36.83	35.46	38.34	34.29	18.18	15.54	15.91	16.37	16.94	17.31	18.28	18.86	$ 17.44
07/06/2010	16.70	16.23	16.03	16.01	16.01	16.02	16.41	19.11	19.14	26.69	28.67	29.07	33.13	35.14	30.78	34.08	37.76	33.89	35.20	34.31	52.91	31.53	27.03	$ 24.61
07/07/2010	27.41	21.58	16.92	16.57	18.66	17.32	25.95	25.55	27.88	29.96	52.25	35.19	59.54	40.16	60.88	68.05	55.52	74.75	37.39	33.43	37.28	31.18	29.46	$ 30.10
07/08/2010	28.96	25.76	29.28	28.87	24.82	26.24	24.21	29.04	31.26	30.74	31.25	32.08	35.42	35.27	55.15	42.95	57.25	30.29	30.08	31.02	31.89	30.92	24.67	$ 27.68
07/09/2010	27.49	21.77	18.00	23.93	17.79	29.63	31.42	32.93	32.19	33.72	34.33	34.39	33.51	34.49	34.59	32.62	31.31	31.04	31.13	32.51	31.75	31.47	28.08	$ 28.78
07/10/2010	28.53	16.85	16.06	15.80	15.60	15.44	15.44	19.27	30.09	28.56	27.67	30.60	28.88	29.28	29.43	30.83	30.23	32.21	31.89	32.20	29.83	29.93	26.35	$ 18.97
07/11/2010	14.03	15.46	15.29	15.25	15.25	15.26	15.30	25.25	28.25	29.79	30.68	32.03	31.91	35.00	35.15	35.02	34.90	31.87	18.01	15.93	15.49	15.37	13.75	$ 12.88
07/12/2010	11.36	14.51	13.77	15.32	18.35	31.56	27.02	30.36	32.87	31.60	34.73	36.97	38.63	37.98	32.38	26.97	18.65	25.96	30.84	32.86	34.36	32.95	31.35	$ 22.56
07/13/2010	19.90	17.59	17.42	25.21	25.47	14.01	25.64	24.38	16.52	14.03	17.98	30.61	32.28	32.56	32.66	34.47	34.41	34.37	34.06	34.17	34.40	29.38	16.82	$ 15.47
07/14/2010	15.46	15.44	15.41	15.41	15.42	14.56	14.91	23.61	32.01	31.44	33.32	34.71	34.51	35.26	34.12	32.00	34.12	33.20	32.71	32.54	32.59	33.50	33.64	$ 34.12
07/15/2010	16.86	11.18	15.11	22.47	27.30	30.66	28.45	31.89	33.88	35.89	36.73	39.75	41.81	39.47	40.81	34.45	35.46	36.19	35.11	35.20	33.54	32.15	30.42	$ 31.60
07/16/2010	19.49	14.55	14.63	15.13	14.13	16.62	26.98	27.94	27.57	32.99	33.38	33.44	34.29	34.17	37.34	35.58	32.39	32.12	32.18	32.07	31.73	31.70	31.04	$ 17.81
07/17/2010	24.08	21.18	20.03	15.77	25.17	26.96	24.14	18.52	16.17	16.89	28.13	33.66	35.42	34.65	35.25	33.13	33.43	35.78	31.88	32.39	20.96	23.97	28.15	$ 25.69
07/18/2010	19.73	20.85	15.58	17.93	16.62	14.08	14.22	21.16	27.92	25.48	15.15	21.53	21.64	30.97	31.77	31.76	37.36	35.18	32.12	32.21	28.95	30.70	29.11	$ 24.35
07/19/2010	17.45	16.14	11.88	12.92	13.58	24.48	22.83	28.63	34.10	34.36	33.57	34.43	33.46	35.09	32.53	35.33	35.37	35.39	35.39	33.84	33.42	16.19	13.96	$ 20.93
07/20/2010	12.01	11.47	11.71	11.30	11.23	23.91	21.29	23.88	18.87	23.21	29.56	30.28	32.59	32.41	33.12	33.89	32.48	34.02	35.08	33.55	33.70	32.66	32.82	$ 16.25
07/21/2010	12.22	11.48	11.15	11.11	11.11	11.18	12.65	17.87	29.83	29.71	31.33	31.64	31.85	32.05	32.26	32.46	32.67	32.87	32.40	30.34	28.22	26.10	23.98	$ 21.86
07/22/2010	19.74	17.62	16.80	18.65	20.59	22.52	24.45	26.39	28.32	30.25	31.22	31.19	31.16	31.13	31.10	31.07	31.04	31.01	30.22	28.65	27.09	25.53	23.97	$ 22.40
07/23/2010	20.84	19.28	18.30	17.81	17.32	16.83	16.34	15.85	15.36	14.89	24.79	43.34	61.89	35.26	16.58	16.60	16.62	16.64	16.66	16.67	16.69	16.69	16.39	$ 15.99
07/24/2010	15.59	15.19	14.69	14.01	13.34	12.66	11.99	11.77	15.44	19.99	24.55	29.11	33.66	38.22	40.90	34.86	32.87	30.51	27.14	23.73	20.33	16.92	13.52	$ 11.35
07/25/2010	11.59	11.89	12.19	12.49	12.79	13.09	13.39	13.68	13.96	14.23	14.51	14.79	15.06	15.34	15.62	16.41	18.06	19.72	21.38	23.04	24.70	26.36	28.02	$ 28.23
07/26/2010	26.33	24.41	22.49	20.57	18.65	16.74	14.82	15.16	18.72	22.30	25.88	29.47	33.05	36.63	40.07	40.34	39.31	38.29	37.26	36.23	35.21	34.18	33.16	$ 32.21
07/27/2010	31.27	30.33	29.39	28.45	27.72	27.59	27.49	27.40	27.31	27.22	27.13	27.03	27.02	27.25	27.49	27.73	27.97	28.21	28.45	28.69	28.85	28.77	28.68	$ 28.60
07/28/2010	28.51	28.42	28.33	28.24	28.61	29.99	31.40	32.82	34.23	35.64	37.59	40.28	44.99	50.24	55.48	60.73	65.97	71.22	33.07	27.19	25.39	23.58	21.78	$ 19.98
07/29/2010	18.18	16.38	16.59	20.34	24.16	27.97	31.79	35.61	39.42	43.23	44.08	42.71	41.35	39.98	38.62	37.25	35.88	34.41	31.70	28.64	25.57	22.50	19.43	$ 16.36
07/30/2010	13.29	12.47	16.54	20.79	25.03	29.28	33.52	37.77	42.01	43.50	41.84	40.18	38.52	36.87	35.21	33.55	31.89	30.05	28.02	26.00	23.97	21.94	19.92	$ 17.89
07/31/2010	15.87	15.31	16.11	16.90	17.70	18.50	19.29	20.09	20.89	22.22	23.91	25.61	27.30	29.00	30.70	32.39	32.42	30.28	28.14	25.99	23.85	21.70	19.56	$ 17.42

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

08/01/2010	16.08	15.78	15.49	15.20	14.91	14.62	14.33	14.04	15.61	19.54	23.47	27.41	31.34	32.11	29.72	27.32	24.93	22.53	20.13	17.74	15.34	12.95	12.13	$ 14.28
08/02/2010	16.51	18.74	20.96	23.19	25.42	27.64	29.00	28.95	28.87	28.79	28.71	28.64	28.56	28.48	29.07	30.70	32.35	33.97	34.00	33.14	32.27	31.41	30.55	$ 29.68
08/03/2010	28.82	27.98	28.23	29.05	29.86	30.67	31.48	32.29	33.10	33.85	33.57	32.94	32.30	31.67	31.03	30.40	29.76	29.15	28.81	28.56	28.31	28.06	27.81	$ 27.55
08/04/2010	27.30	27.07	26.96	26.88	26.81	26.73	21.90	27.06	29.57	31.66	32.50	34.83	63.92	87.50	94.26	79.41	78.16	76.63	59.18	35.82	32.20	31.89	30.29	$ 26.05
08/05/2010	16.06	15.88	14.80	14.77	15.19	15.95	23.14	28.25	29.95	30.09	32.09	31.85	34.24	34.44	35.01	35.13	34.92	34.95	33.15	29.89	21.03	24.13	17.34	$ 16.02
08/06/2010	13.85	23.25	20.39	14.31	14.96	15.07	13.28	17.56	26.88	27.97	23.97	32.25	31.25	33.43	28.37	18.66	22.11	33.66	33.76	33.24	33.09	24.82	21.32	$ 14.86
08/07/2010	14.37	12.96	13.42	13.50	27.24	27.99	16.34	13.81	14.97	21.23	25.87	33.45	33.58	34.71	35.68	32.10	31.96	28.82	29.70	29.16	29.66	25.97	21.29	$ 14.38
08/08/2010	15.38	13.90	13.19	12.11	12.14	11.85	12.21	13.83	15.84	16.32	14.90	14.76	28.91	31.03	32.12	35.74	33.86	34.56	34.64	34.72	29.96	28.99	24.86	$ 21.53
08/09/2010	19.31	16.39	15.65	15.07	15.01	16.06	16.41	20.69	29.79	34.18	84.77	78.74	35.78	30.12	28.83	23.80	32.42	31.49	31.98	32.46	32.37	31.14	31.20	$ 30.08
08/10/2010	24.31	20.66	23.05	27.40	27.93	29.46	27.88	34.13	38.07	32.76	32.63	37.72	51.18	58.45	90.95	84.47	86.43	55.53	30.32	30.68	29.57	30.67	28.32	$ 21.71
08/11/2010	24.54	12.05	11.83	11.80	16.89	29.57	29.50	29.78	30.62	43.39	87.16	111.96	36.28	33.32	70.15	74.01	39.96	39.78	34.17	35.48	31.28	27.79	21.14	$ 11.13
08/12/2010	11.13	11.17	12.01	20.76	28.25	29.07	29.55	29.36	29.37	28.76	32.69	31.43	34.75	45.74	17.25	17.23	14.55	13.01	11.30	11.91	13.43	16.01	17.17	$ 16.06
08/13/2010	13.16	11.41	11.21	11.08	10.96	11.10	11.27	14.02	14.25	12.78	22.23	22.69	17.13	25.91	25.56	27.08	27.21	22.26	19.90	19.99	21.36	20.02	12.66	$ 13.76
08/14/2010	18.09	22.42	23.16	25.90	25.85	19.75	18.16	17.26	22.35	23.90	23.61	23.67	26.17	26.15	25.86	25.66	25.77	26.09	25.61	26.04	26.06	26.02	26.04	$ 26.06
08/15/2010	23.47	18.24	11.24	17.02	19.13	18.05	13.88	15.42	22.27	25.68	26.66	27.49	28.99	29.52	26.86	26.66	27.25	27.12	26.87	26.23	25.94	25.86	25.89	$ 26.01
08/16/2010	25.95	24.11	14.33	15.59	22.60	25.64	25.11	26.27	26.50	26.97	26.72	26.78	26.30	26.53	26.27	26.61	26.60	26.23	26.36	26.31	26.17	22.68	18.38	$ 16.06
08/17/2010	13.16	11.68	11.63	11.68	15.07	15.90	15.96	16.58	25.91	40.95	40.67	37.62	37.23	33.85	29.93	29.00	28.93	29.06	30.69	31.26	30.79	28.27	16.97	$ 16.91
08/18/2010	27.44	13.31	11.38	11.35	22.07	28.11	28.14	24.29	28.39	28.97	28.68	29.39	33.56	33.55	34.18	34.11	30.24	29.70	29.87	29.31	28.57	28.22	28.53	$ 18.55
08/19/2010	14.02	13.31	11.35	18.34	22.93	26.42	28.26	25.88	26.72	27.11	28.95	30.64	29.28	32.64	35.15	33.13	34.35	36.45	35.01	34.98	34.97	34.64	33.47	$ 33.59
08/20/2010	29.78	21.38	17.44	12.66	28.09	28.23	28.23	28.35	29.06	29.57	30.82	29.67	30.22	30.04	30.76	30.62	30.74	29.95	29.39	16.92	11.16	11.14	11.17	$ 15.71
08/21/2010	23.09	28.50	28.34	28.27	28.35	28.28	28.32	33.59	29.75	28.83	28.91	28.77	29.39	32.62	28.92	28.95	29.17	28.84	28.87	28.75	28.80	28.80	28.80	$ 28.80
08/22/2010	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	$ 28.80
08/23/2010	28.80	28.80	28.80	28.80	28.80	28.80	29.20	28.67	29.58	29.47	27.00	11.16	11.20	10.26	10.61	11.03	11.06	11.07	11.19	11.06	11.04	11.03	11.10	$ 11.07
08/24/2010	11.08	11.07	11.13	11.18	11.19	11.28	12.23	11.39	12.00	12.62	12.44	17.95	12.07	18.54	15.89	13.84	16.81	18.93	20.92	20.95	25.28	25.39	25.38	$ 23.24
08/25/2010	16.99	12.95	11.32	11.32	11.28	11.40	15.67	18.65	28.00	30.28	30.68	31.32	34.27	30.96	30.89	30.27	29.94	29.87	30.83	29.82	29.22	27.18	15.19	$ 12.39
08/26/2010	10.96	11.98	11.88	12.24	17.13	16.20	17.19	15.40	12.01	11.18	17.90	23.37	29.15	29.57	29.50	27.55	29.22	29.45	27.22	29.72	30.65	29.04	26.20	$ 17.20
08/27/2010	15.96	16.86	14.98	13.91	16.99	13.79	13.03	12.09	12.55	14.76	16.27	20.14	20.91	21.01	21.12	21.37	21.35	22.03	21.71	20.34	20.94	17.94	14.67	$ 14.03
08/28/2010	13.26	13.04	12.45	13.03	10.65	11.21	11.34	13.32	13.76	14.21	14.79	15.25	18.58	31.16	157.25	154.87	96.19	29.10	29.14	19.95	21.03	20.28	17.65	$ 14.24
08/29/2010	14.14	14.04	22.40	15.60	9.44	10.44	13.48	13.61	13.97	14.55	23.91	33.20	33.21	32.11	32.29	34.14	33.83	34.02	32.91	32.81	35.13	34.72	29.52	$ 16.34
08/30/2010	11.78	11.01	12.22	13.25	13.51	19.57	20.04	25.23	13.48	25.29	30.11	28.28	30.89	31.73	34.70	31.29	34.69	34.79	33.81	34.88	39.61	39.14	33.64	$ 30.80
08/31/2010	21.00	12.87	11.09	11.07	11.10	11.19	11.47	20.11	18.52	24.34	20.94	27.81	33.95	39.58	57.88	36.07	35.27	36.76	34.34	34.67	34.13	34.38	31.77	$ 22.10

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

09/01/2010	16.96	14.38	13.15	13.40	13.67	15.04	14.24	28.82	32.04	31.93	31.73	31.74	33.42	31.44	33.67	34.70	35.20	33.87	33.23	33.29	31.27	23.95	17.01	$ 15.16
09/02/2010	13.44	12.80	12.80	14.19	14.37	15.57	16.87	23.44	28.92	30.63	33.64	35.16	34.49	35.09	34.91	35.30	38.88	38.11	36.26	27.89	18.43	20.34	15.00	$ 13.92
09/03/2010	13.60	13.60	13.59	13.89	14.74	17.83	17.93	16.36	16.55	27.25	29.30	26.94	16.18	22.02	17.42	14.38	14.22	14.30	13.17	14.14	13.94	13.93	13.37	$ 11.23
09/04/2010	10.78	11.50	12.05	12.60	10.92	10.87	10.78	11.69	13.20	13.26	12.96	12.60	12.18	11.21	12.44	13.42	13.48	13.46	13.23	13.67	14.42	14.60	24.44	$ 13.31
09/05/2010	11.20	11.23	11.14	11.12	10.99	10.55	10.11	10.26	10.99	11.02	17.55	19.61	14.03	13.60	13.60	13.60	13.65	13.61	13.61	13.51	13.33	13.54	18.51	$ 12.99
09/06/2010	10.40	7.22	7.21	7.21	7.21	7.26	7.25	7.32	7.37	7.41	7.68	8.63	9.62	10.60	20.57	22.77	25.90	26.54	19.42	21.27	23.43	25.70	26.87	$ 20.92
09/07/2010	12.71	12.20	11.62	11.15	12.74	12.47	13.76	13.63	13.59	13.80	12.91	11.92	14.13	17.50	33.64	33.19	32.32	29.24	30.57	27.01	25.04	15.21	14.90	$ 15.28
09/08/2010	16.11	9.60	10.88	11.00	11.02	11.13	11.56	11.45	25.06	25.00	25.99	28.79	29.19	28.55	28.98	29.37	29.20	29.30	27.81	29.16	24.48	16.79	14.16	$ 14.90
09/09/2010	23.30	12.98	13.12	12.52	12.96	14.32	22.97	16.47	16.39	16.75	20.96	16.40	17.07	19.23	22.83	27.64	21.99	22.79	26.04	28.11	27.86	14.63	14.84	$ 14.82
09/10/2010	16.66	15.06	12.39	14.99	16.08	16.50	22.63	25.96	25.90	21.91	17.81	26.90	27.08	27.93	20.91	18.39	18.42	17.12	15.65	13.83	16.35	16.79	16.32	$ 15.72
09/11/2010	13.65	13.56	13.59	13.60	13.87	13.81	13.58	14.12	11.46	12.57	13.68	14.80	15.51	15.64	16.02	17.59	17.94	18.13	17.75	18.02	18.16	17.01	15.20	$ 12.73
09/12/2010	12.15	11.91	11.79	12.30	11.91	11.93	12.52	14.01	14.59	15.47	15.40	16.17	13.01	16.81	18.71	20.57	22.78	30.36	25.93	19.38	19.01	18.53	16.59	$ 16.37
09/13/2010	16.74	11.28	10.78	11.08	11.15	11.21	11.64	13.94	15.59	15.64	15.99	18.02	18.60	16.44	15.95	22.51	22.80	20.12	28.36	27.42	25.86	19.12	20.47	$ 20.42
09/14/2010	20.24	14.88	17.04	17.96	18.83	18.65	15.19	20.02	17.77	18.05	19.15	24.72	25.41	21.49	26.76	28.86	28.58	28.12	28.92	26.56	19.44	17.24	13.83	$ 11.10
09/15/2010	11.02	11.03	11.93	14.48	13.97	15.06	16.00	20.31	18.90	19.01	20.34	23.76	31.51	32.33	29.98	29.22	23.95	20.46	24.18	18.48	14.92	18.25	21.42	$ 17.74
09/16/2010	12.24	11.99	14.22	16.90	14.89	16.15	15.35	20.97	25.48	32.21	31.87	31.95	29.14	28.86	31.72	28.75	26.89	27.19	26.42	26.60	29.13	22.91	20.52	$ 12.31
09/17/2010	11.11	11.05	11.04	11.03	11.03	11.07	11.17	11.25	18.27	30.94	26.88	27.72	29.87	31.83	29.71	31.85	32.02	32.10	29.00	28.33	26.60	18.75	16.08	$ 13.94
09/18/2010	13.45	13.31	13.24	13.21	13.01	13.40	12.97	13.30	15.22	15.28	16.88	21.04	24.24	23.98	25.62	26.07	31.76	31.70	29.47	22.39	22.93	20.84	19.28	$ 16.18
09/19/2010	13.57	13.50	13.56	13.44	12.33	11.66	13.99	14.84	14.50	15.49	16.37	20.41	22.77	23.69	22.82	22.16	21.12	24.10	21.52	25.47	30.78	26.78	18.13	$ 14.98
09/20/2010	16.51	17.98	19.02	22.08	17.43	16.44	15.72	15.84	19.05	28.98	31.59	23.82	30.65	32.13	30.42	27.95	29.53	29.92	30.13	25.16	21.76	20.61	17.18	$ 15.09
09/21/2010	16.37	17.09	13.18	13.61	13.37	14.98	15.24	14.97	22.12	17.97	21.44	27.03	32.19	46.04	33.66	27.86	27.89	28.18	28.49	28.58	28.44	23.66	18.74	$ 21.08
09/22/2010	15.23	15.86	14.86	15.28	15.04	17.18	22.40	20.96	24.95	26.58	27.54	28.71	30.10	29.21	30.46	29.69	29.13	27.68	29.74	31.83	24.37	23.29	17.09	$ 15.35
09/23/2010	14.52	12.02	11.02	11.05	12.86	16.97	15.23	17.53	24.60	28.33	31.44	24.37	26.23	26.80	30.60	28.28	28.19	28.45	28.00	36.87	21.69	25.76	16.77	$ 13.43
09/24/2010	14.51	14.25	13.46	14.55	15.38	18.58	28.29	26.01	27.82	26.23	25.58	28.71	28.59	28.59	28.98	27.58	26.07	17.50	16.46	17.28	14.50	14.34	13.84	$ 13.90
09/25/2010	13.26	13.01	11.60	11.06	11.03	11.04	11.04	11.07	11.10	11.15	15.93	21.90	18.71	21.02	27.77	30.46	24.11	18.00	16.51	31.02	21.54	15.01	13.75	$ 13.58
09/26/2010	12.91	12.55	12.65	11.91	13.04	12.75	12.36	11.90	12.29	13.40	14.07	14.13	13.91	13.78	14.22	14.06	14.37	17.07	15.61	18.76	18.63	17.13	16.64	$ 15.94
09/27/2010	13.37	12.54	11.68	10.82	10.36	11.26	12.72	12.60	13.80	15.12	16.42	23.66	31.79	24.30	23.20	22.25	29.06	29.21	31.98	34.23	30.04	23.34	14.60	$ 14.58
09/28/2010	12.90	11.93	12.52	12.47	11.80	13.14	14.05	14.49	28.30	28.59	28.92	28.97	29.37	29.56	25.31	29.66	30.61	22.85	14.99	20.05	21.65	16.12	13.98	$ 12.83
09/29/2010	11.76	13.94	11.57	11.05	11.51	14.40	13.92	16.75	17.99	18.25	20.46	18.52	19.67	18.00	19.77	19.74	29.14	23.27	18.93	29.43	25.38	21.86	15.70	$ 14.15
09/30/2010	13.68	13.32	12.99	12.23	10.57	12.63	13.32	21.87	26.37	24.96	22.22	27.01	27.50	27.47	22.20	25.48	27.16	27.49	27.76	28.44	26.40	17.70	16.79	$ 15.49

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

10/01/2010	13.34	11.41	11.55	11.09	11.09	13.23	13.97	19.10	22.95	29.62	26.85	24.19	22.46	28.13	30.21	23.34	21.45	16.68	14.13	14.57	15.64	15.31	14.71	$ 14.19
10/02/2010	13.50	13.26	12.94	12.15	12.38	13.68	11.78	11.25	11.41	14.78	17.26	14.81	14.72	14.85	14.33	14.11	14.19	14.60	14.33	15.34	16.83	17.45	14.37	$ 13.55
10/03/2010	12.46	11.98	11.31	11.47	11.59	12.87	13.01	13.30	13.30	16.93	26.59	21.27	19.03	17.03	14.69	15.12	18.09	16.23	17.47	28.01	20.85	18.75	14.53	$ 13.79
10/04/2010	13.38	13.13	12.66	11.84	14.02	15.31	13.03	20.20	24.67	24.93	25.99	27.72	26.15	25.56	22.12	28.76	26.17	24.86	22.83	26.30	24.51	19.35	15.66	$ 13.65
10/05/2010	13.69	13.66	13.66	13.89	18.75	20.84	18.36	20.05	17.55	26.78	23.81	22.01	22.47	27.72	21.50	21.67	21.60	22.10	18.30	20.16	17.76	17.19	17.06	$ 17.00
10/06/2010	16.96	16.94	16.91	16.90	16.89	16.90	16.93	16.91	16.94	17.16	19.72	20.80	22.62	25.86	23.65	27.88	29.67	29.34	28.29	27.96	24.57	26.33	26.11	$ 25.94
10/07/2010	25.73	24.82	25.88	26.10	26.35	23.41	19.56	17.33	21.09	25.00	20.00	21.70	22.25	27.37	27.87	28.14	24.62	23.17	28.25	28.26	28.30	24.85	22.00	$ 20.00
10/08/2010	17.60	17.45	17.41	17.40	17.83	18.52	22.62	29.95	25.50	25.22	24.59	22.75	21.30	19.33	20.47	20.54	20.57	20.73	19.16	20.21	18.34	18.25	17.67	$ 20.87
10/09/2010	15.57	13.42	13.64	13.97	14.17	14.72	15.19	15.39	15.50	15.61	15.74	15.88	16.43	16.16	16.44	16.49	16.54	16.55	16.47	16.53	16.44	16.28	15.77	$ 14.84
10/10/2010	13.85	13.31	13.18	13.14	13.88	14.31	14.52	14.57	14.65	15.44	16.75	17.12	17.37	17.43	18.66	20.65	17.97	17.31	17.52	17.64	17.46	17.17	16.13	$ 15.65
10/11/2010	15.65	15.74	15.84	15.73	15.71	16.00	16.54	16.64	17.10	23.78	30.57	31.99	30.35	30.78	30.75	29.51	28.99	24.78	25.44	28.94	27.14	20.24	17.46	$ 16.95
10/12/2010	15.79	15.77	16.20	16.35	17.34	17.33	21.60	21.24	17.48	18.94	19.41	22.92	23.04	24.04	26.23	22.90	22.56	20.38	21.20	20.38	19.65	18.38	17.47	$ 17.43
10/13/2010	17.45	17.32	17.18	17.41	16.60	17.04	23.40	23.79	27.44	29.84	24.82	22.76	21.92	25.49	20.00	18.58	17.81	18.26	21.65	20.52	18.64	18.93	13.14	$ 12.54
10/14/2010	11.05	11.88	11.46	11.68	13.51	17.06	15.68	18.15	16.84	18.48	23.84	31.40	22.85	17.84	17.01	17.05	17.34	17.42	16.26	22.01	25.94	16.59	13.53	$ 13.71
10/15/2010	14.45	13.26	16.59	16.60	16.62	16.63	16.54	16.50	19.06	20.69	27.77	23.43	21.61	16.53	18.24	22.03	21.86	20.24	26.38	26.59	21.89	17.55	11.77	$ 13.15
10/16/2010	13.80	12.09	11.91	14.54	13.52	13.88	15.29	16.59	18.76	20.65	23.52	21.73	19.79	19.54	16.62	16.78	16.62	16.50	18.71	20.63	17.82	14.24	14.22	$ 14.27
10/17/2010	12.98	12.56	12.97	13.26	12.77	11.84	13.80	13.90	18.98	25.41	28.45	28.63	28.72	19.21	21.41	25.22	26.57	23.36	18.19	20.51	18.44	15.47	16.11	$ 13.78
10/18/2010	11.82	11.46	11.05	11.04	11.70	13.02	13.83	18.76	19.67	20.39	20.92	25.72	28.14	29.88	26.06	21.01	31.95	28.97	28.48	28.83	22.02	17.75	18.72	$ 14.63
10/19/2010	14.77	11.60	11.03	11.78	11.56	14.33	22.45	20.41	14.91	29.24	71.44	40.19	17.68	22.01	21.40	17.19	17.58	20.46	22.87	28.06	22.97	18.26	14.31	$ 12.33
10/20/2010	10.71	11.08	13.34	12.82	12.80	11.09	23.29	15.89	17.01	37.91	47.92	30.74	26.30	21.49	16.94	19.08	20.55	18.55	20.49	20.93	20.58	20.60	14.88	$ 13.78
10/21/2010	13.46	13.30	13.09	12.54	13.12	17.11	26.88	19.02	24.73	28.92	26.86	23.14	26.47	27.79	19.42	20.34	20.56	19.18	26.00	26.50	24.19	21.64	16.34	$ 14.21
10/22/2010	11.34	11.06	12.40	11.56	13.00	20.82	25.78	23.68	28.58	28.21	26.48	17.94	16.84	17.32	18.24	17.70	17.13	16.71	17.24	17.41	16.90	16.09	11.33	$ 11.16
10/23/2010	11.19	11.25	11.18	11.17	11.21	11.24	14.84	16.63	17.78	20.51	20.70	19.85	18.13	17.77	16.18	14.25	16.09	16.50	17.79	20.63	20.49	15.44	13.69	$ 11.81
10/24/2010	11.11	11.17	11.09	11.08	11.09	11.09	11.12	11.13	11.71	14.63	15.64	17.80	21.74	20.46	18.85	15.06	17.92	20.88	20.13	24.58	27.87	24.60	14.13	$ 12.25
10/25/2010	12.42	11.21	12.62	12.47	12.24	14.76	14.82	17.33	20.94	21.27	20.58	20.48	20.21	20.66	26.01	20.25	17.42	19.97	26.25	27.54	26.11	24.08	14.21	$ 13.53
10/26/2010	13.10	12.09	12.01	12.66	12.84	13.19	12.61	12.40	17.52	19.78	21.91	22.87	19.78	20.77	17.42	25.39	21.36	16.33	18.48	17.38	20.62	15.26	11.08	$ 11.05
10/27/2010	9.90	9.42	12.01	14.53	14.55	15.95	24.66	18.24	19.38	21.21	21.01	20.93	20.83	20.84	18.52	18.53	19.86	20.24	20.53	25.32	26.76	22.49	13.82	$ 13.92
10/28/2010	11.42	11.39	12.44	12.85	12.45	21.61	24.51	33.29	33.64	33.97	31.46	32.77	30.79	31.54	29.13	31.19	29.71	29.32	21.98	13.22	14.58	14.83	14.76	$ 13.95
10/29/2010	13.49	11.13	11.86	13.33	13.83	14.22	16.10	15.57	11.95	14.40	14.52	14.70	26.48	29.78	18.28	15.74	18.41	17.66	16.24	11.46	14.82	13.41	12.64	$ 13.13
10/30/2010	20.95	18.28	21.61	25.64	25.18	25.14	25.52	32.13	29.73	14.61	14.62	14.82	20.02	24.03	22.68	25.10	16.94	20.22	19.82	19.37	18.93	18.49	18.04	$ 17.60
10/31/2010	17.16	16.71	16.27	15.83	15.39	14.94	14.50	14.15	14.34	14.42	14.48	14.54	14.60	14.65	14.71	14.77	14.82	14.88	14.93	15.17	16.45	16.51	16.58	$ 16.78

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

11/01/2010	16.83	16.85	16.82	16.65	17.12	20.91	26.29	29.04	28.78	29.17	29.59	30.63	33.05	32.87	32.83	33.01	32.88	33.04	33.16	33.51	33.02	32.64	25.56	$ 15.02
11/02/2010	13.57	14.24	14.55	14.94	15.78	21.68	26.20	29.21	30.06	33.06	29.28	18.08	27.95	22.94	18.82	24.25	28.00	18.88	15.46	22.61	21.45	19.10	15.80	$ 14.58
11/03/2010	19.28	16.43	17.12	18.42	20.41	23.78	25.94	26.83	29.46	30.09	31.52	30.67	31.28	31.17	25.60	24.33	20.36	19.96	19.82	23.69	23.70	17.60	16.14	$ 15.35
11/04/2010	13.95	13.96	15.10	14.97	15.81	23.68	31.43	32.01	31.90	31.80	32.44	31.47	31.72	28.28	25.17	24.51	32.75	24.48	17.21	15.73	15.19	14.65	14.12	$ 13.58
11/05/2010	13.04	12.50	11.97	13.74	16.59	18.11	24.64	32.75	32.15	32.86	31.54	31.93	30.29	32.17	30.14	31.79	32.82	32.81	30.59	32.75	27.87	32.41	30.83	$ 16.06
11/06/2010	14.29	14.19	14.21	14.69	30.21	17.56	30.77	32.97	34.38	34.04	33.12	33.40	32.81	28.71	20.83	31.99	24.90	20.99	32.02	32.72	29.55	27.44	27.88	$ 22.42
11/07/2010	23.03	22.07	22.73	22.54	18.24	17.04	20.78	25.86	30.31	35.64	26.92	22.52	22.09	17.24	17.22	20.82	16.52	14.95	29.03	35.78	35.23	24.47	16.59	$ 16.57
11/08/2010	15.81	15.58	15.07	14.82	15.08	15.44	18.19	25.16	34.79	33.89	27.77	27.12	31.01	26.46	16.01	15.16	14.79	16.91	27.66	28.37	28.34	23.09	16.03	$ 15.56
11/09/2010	21.94	14.52	17.72	16.04	14.99	15.80	22.75	25.87	25.94	32.72	31.68	32.71	30.76	24.66	24.44	19.66	16.70	17.74	27.53	21.88	22.83	18.29	16.65	$ 16.27
11/10/2010	15.85	16.00	14.94	14.09	15.32	15.24	17.39	16.69	19.85	15.34	14.58	14.84	17.15	20.94	24.73	27.93	29.58	30.49	31.94	32.77	29.52	28.87	22.24	$ 23.32
11/11/2010	27.03	14.86	19.36	14.32	18.21	15.21	15.85	16.14	17.64	44.75	24.43	21.68	25.70	21.91	20.97	21.05	20.92	20.37	21.02	21.10	21.08	24.45	20.21	$ 15.75
11/12/2010	14.49	13.77	13.76	13.33	13.85	13.87	15.69	16.87	20.16	24.48	16.89	18.64	21.11	21.51	20.98	20.54	16.17	15.46	18.47	16.10	14.81	16.36	14.97	$ 14.02
11/13/2010	13.91	14.02	14.40	14.17	14.26	15.05	15.02	15.46	18.72	20.23	23.05	18.63	16.10	15.28	15.25	15.60	14.67	15.91	16.44	14.91	14.86	14.82	14.74	$ 14.74
11/14/2010	14.67	14.37	14.51	14.16	13.68	13.83	15.11	13.88	15.69	17.54	15.15	14.92	14.70	15.28	15.66	16.12	16.49	17.37	20.93	23.45	22.94	20.35	20.55	$ 17.24
11/15/2010	13.97	13.61	13.57	13.55	13.54	14.04	14.95	18.62	21.95	21.25	28.84	28.54	32.90	33.07	32.94	29.85	27.98	20.81	20.49	20.60	30.74	28.00	23.10	$ 18.02
11/16/2010	14.71	13.74	14.24	14.45	14.86	20.87	66.64	24.32	20.34	15.33	15.04	14.99	14.74	15.27	15.72	16.09	16.35	18.31	23.97	27.50	26.44	24.34	17.42	$ 16.33
11/17/2010	15.09	14.09	15.64	15.09	14.83	14.40	15.96	20.48	20.68	23.43	28.34	32.05	31.98	34.38	33.93	26.02	24.86	20.87	28.97	32.48	33.79	31.18	29.23	$ 24.29
11/18/2010	15.02	13.41	15.53	15.94	16.25	14.80	16.40	23.94	27.14	30.77	26.24	31.15	50.53	32.59	31.65	27.31	30.08	23.53	28.07	26.27	32.89	30.67	15.91	$ 15.19
11/19/2010	15.87	15.84	16.20	17.31	20.29	17.00	18.15	25.41	34.69	34.46	33.22	35.29	34.62	35.18	32.08	30.03	23.99	21.30	28.96	21.22	25.37	22.36	17.67	$ 16.05
11/20/2010	16.00	15.71	15.63	15.60	15.69	15.81	15.77	15.95	18.43	21.92	23.72	23.93	19.49	24.73	25.76	17.25	21.89	21.52	22.03	28.18	26.10	23.76	18.16	$ 16.97
11/21/2010	16.76	16.41	14.71	15.83	16.08	15.86	15.87	14.47	12.53	11.26	11.29	11.75	13.12	14.59	16.05	17.51	18.97	20.44	20.82	19.31	12.54	12.92	12.27	$ 11.61
11/22/2010	11.19	11.23	11.29	11.33	11.33	11.44	11.72	11.62	11.46	11.30	11.15	9.44	8.48	7.71	8.32	11.16	10.82	11.11	11.21	11.22	11.08	11.19	11.11	$ 10.27
11/23/2010	7.95	8.40	9.48	10.56	11.15	11.07	11.11	8.69	11.71	13.21	10.02	7.80	10.37	10.85	10.99	11.18	11.17	11.01	10.75	9.12	10.00	11.10	12.02	$ 12.67
11/24/2010	11.40	11.54	11.49	11.46	11.57	11.55	11.48	11.31	11.33	16.06	26.62	22.82	27.64	28.71	28.47	26.52	22.88	19.27	15.69	14.59	14.70	14.73	14.06	$ 12.84
11/25/2010	11.65	11.33	11.40	11.42	12.86	12.69	11.55	12.68	11.51	11.63	13.47	12.35	11.79	11.70	12.27	11.69	11.71	12.50	13.76	14.19	14.00	14.33	17.50	$ 15.22
11/26/2010	14.50	13.01	12.96	12.79	12.93	12.98	13.03	14.00	14.55	15.52	15.72	15.54	15.36	15.60	15.72	15.59	15.93	16.12	15.98	15.33	15.52	16.07	16.21	$ 16.19
11/27/2010	11.99	11.65	11.63	11.46	12.45	15.92	16.33	16.84	17.37	19.53	19.35	23.04	23.65	20.99	14.92	14.43	15.80	14.49	12.86	12.58	11.96	13.91	12.41	$ 11.83
11/28/2010	11.94	12.05	13.02	11.88	13.44	13.93	15.25	16.20	21.72	26.69	27.68	18.20	16.58	22.54	25.62	16.17	26.47	28.95	28.37	31.98	20.03	14.35	14.55	$ 14.34
11/29/2010	14.16	14.02	14.25	13.11	11.69	14.28	26.12	21.36	27.88	32.47	29.51	33.07	31.85	30.21	25.55	17.93	17.69	17.95	16.75	16.58	17.14	17.29	14.55	$ 13.65
11/30/2010	11.49	11.08	11.10	11.27	11.29	11.24	11.64	12.21	11.37	17.91	25.01	22.82	16.14	15.66	15.67	15.44	15.66	17.55	25.69	26.79	26.40	19.49	12.09	$ 12.98

IPL Control Area Hourly System Lambdas For Calendar Year 2010, $/MWHR

12/01/2010	11.86	11.72	11.54	11.47	11.40	11.34	17.97	22.39	26.83	23.70	28.39	28.72	29.95	35.42	37.99	31.95	30.79	29.87	32.55	32.78	31.86	31.87	32.26	$ 29.41
12/02/2010	20.87	19.33	20.87	19.07	18.31	20.25	22.87	68.28	35.60	35.35	34.54	33.58	34.26	34.55	34.34	33.89	33.58	31.47	33.44	34.43	34.31	32.06	28.81	$ 27.51
12/03/2010	15.55	15.86	18.69	17.49	16.88	17.56	22.75	49.60	33.83	33.76	33.50	30.69	30.41	30.25	32.01	22.18	24.74	24.00	26.98	29.17	33.16	34.50	27.20	$ 21.61
12/04/2010	18.81	21.39	24.85	20.02	21.19	20.56	18.27	18.40	23.28	25.84	27.19	31.11	34.84	37.28	34.93	30.81	34.33	35.25	40.38	36.81	34.71	30.76	24.29	$ 22.37
12/05/2010	19.08	24.02	21.89	18.61	19.15	18.06	18.26	21.45	26.62	31.13	33.06	34.84	32.22	31.29	33.60	30.44	20.65	18.47	33.44	33.28	31.35	33.06	29.30	$ 26.65
12/06/2010	21.49	19.67	18.74	21.79	25.63	25.05	23.95	21.36	20.62	21.05	34.00	35.31	33.39	24.98	22.83	87.89	20.77	73.01	25.49	28.21	28.08	28.07	24.21	$ 20.91
12/07/2010	11.56	11.21	11.19	11.17	11.16	11.28	13.41	20.19	30.73	32.72	32.20	33.90	36.15	37.12	37.09	33.15	33.01	52.72	55.52	34.86	36.24	35.01	34.31	$ 26.91
12/08/2010	11.30	11.21	11.20	11.22	11.39	25.66	35.44	40.05	24.05	34.83	40.96	47.77	85.01	82.63	44.01	31.56	33.93	59.96	46.32	34.64	39.90	27.42	24.68	$ 24.60
12/09/2010	13.99	11.17	11.16	11.17	11.44	17.31	18.80	30.49	34.19	32.82	24.07	28.43	19.10	21.09	25.20	27.99	18.42	9.72	12.15	16.65	16.47	18.52	33.07	$ 25.53
12/10/2010	14.05	14.88	14.67	13.73	12.46	11.83	11.86	11.25	11.58	11.36	12.62	14.25	14.50	13.98	14.06	14.42	14.39	14.60	19.11	20.28	19.66	19.10	18.74	$ 16.05
12/11/2010	14.29	14.04	12.59	11.21	11.34	11.33	11.33	11.32	11.37	11.52	11.48	11.42	11.44	11.43	11.42	11.42	11.43	11.50	11.64	18.56	25.64	13.78	11.87	$ 11.96
12/12/2010	11.32	11.83	13.21	13.11	13.07	13.06	12.68	12.98	13.61	14.17	14.54	14.68	14.56	15.85	12.12	11.31	11.74	15.19	30.18	20.21	20.64	20.78	25.22	$ 18.49
12/13/2010	20.58	18.68	15.54	17.62	16.04	19.74	20.76	29.41	34.47	33.67	30.40	32.66	35.49	35.00	32.57	30.58	30.67	35.37	56.98	80.84	51.35	73.52	42.46	$ 28.73
12/14/2010	20.86	32.58	34.66	32.65	25.36	34.22	35.22	41.29	53.44	70.70	80.87	75.20	77.83	54.34	35.87	41.12	42.04	81.14	82.35	80.22	73.62	47.31	27.45	$ 21.02
12/15/2010	16.46	16.05	16.25	16.87	24.65	30.99	33.63	38.88	35.64	31.78	23.80	26.43	31.45	31.79	31.44	33.47	31.98	32.04	37.29	37.18	37.97	33.50	35.39	$ 35.02
12/16/2010	28.66	19.02	13.16	12.44	12.53	13.39	15.17	28.78	30.84	34.23	32.85	35.36	34.21	34.13	34.80	35.24	40.28	62.40	36.40	34.19	34.59	33.85	32.42	$ 26.95
12/17/2010	19.41	13.58	13.08	13.76	14.05	14.47	14.57	16.65	28.53	33.81	37.47	36.71	36.58	36.30	36.33	32.59	32.64	32.15	32.60	33.01	33.14	22.60	20.66	$ 28.12
12/18/2010	23.94	17.89	13.41	13.67	14.67	24.88	29.79	30.99	32.64	33.13	32.32	27.63	16.65	14.31	20.34	27.50	29.13	18.42	13.63	14.04	14.40	14.34	13.80	$ 13.39
12/19/2010	13.42	13.93	14.90	13.10	14.97	18.40	19.38	23.73	26.35	26.53	26.34	26.30	26.18	25.95	23.84	25.36	26.23	26.33	26.73	26.92	26.99	27.09	26.18	$ 20.05
12/20/2010	16.52	15.01	17.12	20.47	20.29	20.19	20.30	23.94	27.26	26.76	25.77	26.49	26.91	26.74	26.54	25.41	25.84	25.56	26.28	26.67	26.83	26.54	21.35	$ 14.68
12/21/2010	13.84	12.87	13.48	13.75	14.22	14.80	19.91	26.21	37.64	36.89	34.56	40.84	40.43	33.05	38.50	37.45	36.63	38.95	36.99	30.50	27.18	27.52	27.82	$ 25.62
12/22/2010	14.32	13.40	13.42	14.33	14.28	14.81	16.29	18.02	22.38	30.03	36.07	37.09	36.77	37.32	34.54	31.17	30.10	30.26	36.34	37.09	34.07	32.77	29.43	$ 14.63
12/23/2010	16.84	15.16	14.64	14.70	14.80	16.30	21.02	21.56	19.79	30.27	32.63	31.07	30.03	28.43	22.80	20.74	21.03	25.42	33.28	25.55	21.23	21.80	20.73	$ 16.23
12/24/2010	14.28	14.09	14.11	14.08	15.71	19.81	16.96	18.71	20.93	26.17	25.96	26.28	27.77	26.11	21.06	25.04	26.47	25.66	23.26	21.71	20.96	19.37	26.48	$ 26.66
12/25/2010	23.26	14.30	13.88	13.59	13.73	13.43	13.43	13.71	17.57	14.74	16.64	17.45	16.12	15.78	27.64	17.83	18.69	19.18	24.41	21.47	26.05	28.03	23.34	$ 23.40
12/26/2010	18.16	14.87	15.01	14.96	14.63	14.88	15.10	21.39	25.25	21.81	25.35	22.91	25.40	24.51	22.77	17.94	14.81	19.97	27.13	24.36	28.75	28.78	18.97	$ 16.31
12/27/2010	19.92	17.30	19.61	23.72	21.07	21.03	20.88	26.15	28.10	27.83	28.34	31.41	34.17	32.81	32.00	33.65	29.76	39.36	84.11	42.02	29.99	32.71	30.95	$ 15.90
12/28/2010	13.33	13.22	13.18	14.38	14.15	26.56	22.59	63.15	42.47	29.58	27.46	27.52	28.04	28.93	28.19	27.87	27.92	27.94	29.34	26.72	27.44	28.07	28.20	$ 27.24
12/29/2010	16.07	11.44	11.08	15.00	15.92	23.65	28.68	28.07	32.46	31.02	30.95	29.90	26.16	20.64	18.78	16.61	16.71	16.76	21.52	27.11	27.36	14.83	14.87	$ 14.75
12/30/2010	14.57	14.53	13.70	13.47	13.47	13.93	14.41	13.80	12.98	12.17	11.52	11.60	11.44	11.45	11.59	12.38	12.14	13.75	16.62	17.51	26.82	22.32	12.15	$ 11.19
12/31/2010	$ 11.06	$ 11.11	$ 13.29	$ 13.20	$ 12.32	$ 13.33	$ 13.21	$ 13.60	$ 14.25	$ 16.00	$ 17.13	$ 13.70	$ 17.32	$ 15.48	$ 16.46	$ 14.58	$ 12.71	$ 11.44	$ 11.33	$ 12.18	$ 14.26	$ 14.77	$ 14.33	$ 14.10

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
1/1/2010	1899	1902	1901	1918	1936	1983	2028	2065	2039	2038	2044	2021	2001	1964	1916	1914	1958	2110	2218	2222	2219	2182	2140	2102
1/2/2010	2056	2026	2007	2000	2014	2036	2090	2161	2171	2178	2164	2112	2076	2036	1997	1995	2043	2199	2362	2382	2389	2372	2312	2257
1/3/2010	2208	2179	2162	2173	2178	2201	2226	2263	2266	2276	2249	2183	2113	2057	2047	2031	2097	2240	2351	2347	2317	2257	2161	2077
1/4/2010	2026	1991	1976	1977	2019	2124	2326	2474	2435	2384	2431	2403	2395	2363	2322	2279	2313	2421	2529	2527	2506	2435	2320	2216
1/5/2010	2156	2117	2105	2120	2147	2254	2441	2565	2547	2528	2503	2468	2444	2385	2352	2317	2350	2436	2523	2499	2471	2374	2257	2158
1/6/2010	2086	2048	2026	2023	2060	2178	2362	2474	2457	2434	2410	2358	2329	2306	2279	2222	2192	2248	2360	2405	2395	2351	2242	2116
1/7/2010	2020	1958	1935	1928	1957	2074	2243	2354	2340	2337	2346	2331	2297	2243	2249	2261	2314	2417	2544	2543	2508	2421	2309	2213
1/8/2010	2137	2094	2087	2092	2128	2226	2378	2488	2476	2439	2415	2364	2308	2295	2266	2247	2228	2273	2330	2296	2262	2191	2110	2015
1/9/2010	1946	1911	1895	1891	1901	1948	2006	2083	2116	2158	2181	2145	2092	2024	1998	2015	2044	2145	2266	2259	2240	2196	2123	2065
1/10/2010	2020	1992	1971	1976	2004	2045	2073	2126	2145	2162	2096	2027	1985	1946	1914	1891	1932	2069	2243	2278	2285	2235	2149	2060
1/11/2010	2002	1963	1935	1936	1960	2067	2239	2356	2330	2307	2303	2278	2258	2236	2227	2212	2191	2288	2390	2376	2335	2248	2131	2009
1/12/2010	1919	1867	1841	1843	1866	1976	2146	2269	2243	2193	2150	2079	2044	2012	1994	2004	2004	2083	2206	2214	2207	2156	2071	1981
1/13/2010	1930	1921	1919	1936	1978	2101	2292	2411	2366	2278	2204	2129	2053	1999	1938	1892	1875	1942	2092	2097	2076	2003	1901	1805
1/14/2010	1729	1704	1692	1711	1755	1884	2081	2194	2167	2100	2050	1977	1961	1910	1840	1832	1827	1877	1994	1977	1937	1855	1736	1626
1/15/2010	1540	1499	1472	1477	1500	1614	1789	1919	1916	1907	1936	1931	1910	1897	1865	1847	1845	1879	1932	1898	1867	1809	1724	1648
1/16/2010	1580	1541	1524	1519	1523	1564	1629	1709	1760	1808	1854	1839	1807	1764	1729	1701	1718	1771	1829	1812	1768	1714	1658	1594
1/17/2010	1540	1486	1460	1447	1466	1494	1535	1596	1640	1683	1708	1726	1721	1706	1685	1681	1717	1795	1902	1897	1876	1834	1775	1709
1/18/2010	1647	1614	1602	1613	1640	1715	1829	1941	1967	2001	2040	2044	2038	2020	1995	1984	1995	2039	2095	2074	2025	1949	1849	1728
1/19/2010	1652	1607	1591	1586	1619	1733	1924	2047	2039	2021	2029	2020	2000	1978	1950	1917	1904	1950	2042	2035	2014	1956	1858	1753
1/20/2010	1686	1650	1636	1643	1679	1824	2017	2149	2143	2124	2143	2144	2138	2104	2069	2066	2064	2114	2164	2140	2100	2023	1904	1788
1/21/2010	1714	1667	1648	1641	1672	1794	1986	2089	2095	2087	2096	2103	2109	2092	2053	2028	2032	2055	2084	2064	2027	1944	1828	1700
1/22/2010	1623	1565	1545	1550	1588	1705	1894	2007	1996	1993	2007	1989	1966	1946	1917	1892	1878	1904	1956	1932	1901	1844	1753	1650
1/23/2010	1570	1519	1496	1480	1480	1516	1570	1639	1677	1706	1741	1739	1720	1690	1668	1634	1627	1674	1738	1724	1701	1649	1566	1487
1/24/2010	1424	1381	1339	1320	1327	1345	1395	1447	1490	1525	1564	1571	1555	1537	1515	1474	1483	1511	1615	1657	1658	1629	1561	1507
1/25/2010	1444	1421	1422	1460	1509	1633	1858	1997	2002	2012	2033	2017	2018	2044	2039	2042	2052	2093	2191	2182	2153	2091	1995	1880
1/26/2010	1811	1778	1774	1792	1829	1962	2155	2275	2272	2274	2295	2271	2261	2240	2244	2252	2252	2273	2369	2357	2319	2246	2125	2017
1/27/2010	1933	1914	1904	1913	1950	2079	2267	2375	2342	2278	2229	2201	2148	2084	2039	2045	2039	2079	2166	2150	2124	2054	1939	1826
1/28/2010	1732	1694	1675	1698	1773	1942	2169	2323	2321	2285	2278	2244	2204	2169	2134	2117	2135	2223	2381	2416	2409	2359	2255	2159
1/29/2010	2089	2062	2038	2032	2058	2162	2338	2465	2424	2409	2414	2365	2311	2264	2235	2192	2205	2250	2348	2330	2307	2253	2172	2088
1/30/2010	2023	1988	1962	1963	1964	2001	2069	2150	2185	2170	2162	2080	2010	1973	1902	1849	1851	1923	2079	2127	2122	2085	2026	1948
1/31/2010	1898	1884	1893	1916	1944	1996	2051	2114	2117	2063	1992	1922	1872	1821	1782	1741	1746	1820	1995	2055	2053	2010	1942	1878

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
2/1/2010	1823	1810	1815	1837	1888	1989	2169	2295	2242	2180	2144	2095	2023	1964	1926	1869	1851	1905	2039	2053	2025	1950	1842	1737
2/2/2010	1660	1628	1605	1605	1644	1763	1950	2070	2044	2031	1997	1970	1953	1944	1945	1934	1912	1958	2045	2040	2007	1943	1831	1724
2/3/2010	1651	1610	1593	1617	1661	1796	2006	2143	2149	2153	2165	2129	2102	2077	2053	2027	2003	2007	2115	2146	2137	2066	1952	1843
2/4/2010	1773	1747	1744	1743	1786	1911	2088	2206	2173	2143	2139	2080	2037	1996	1967	1931	1911	1916	2026	2046	2029	1958	1848	1736
2/5/2010	1647	1607	1576	1577	1612	1734	1917	2037	2033	2046	2080	2096	2106	2105	2082	2061	2060	2079	2151	2144	2092	2035	1947	1857
2/6/2010	1787	1766	1741	1745	1758	1803	1862	1921	1965	2017	2000	1963	1908	1857	1813	1777	1779	1834	1990	2046	2043	2028	1971	1921
2/7/2010	1866	1843	1831	1845	1863	1906	1960	2022	2032	1988	1925	1866	1832	1796	1764	1743	1754	1805	1909	1926	1945	1931	1962	1906
2/8/2010	1865	1853	1865	1890	1940	2036	2199	2310	2273	2207	2152	2087	2038	1990	1954	1939	1986	2045	2155	2187	2176	2103	1995	1885
2/9/2010	1813	1774	1776	1785	1819	1934	2090	2170	2155	2156	2143	2086	2072	2071	2039	2070	2074	2144	2326	2412	2407	2347	2238	2144
2/10/2010	2080	2044	2015	1993	1982	2057	2216	2321	2330	2317	2307	2265	2204	2172	2169	2140	2135	2179	2298	2322	2285	2184	2079	1967
2/11/2010	1882	1846	1837	1839	1876	1988	2168	2269	2250	2189	2122	2076	2028	1993	1940	1896	1888	1920	2071	2163	2166	2134	2058	1972
2/12/2010	1924	1918	1933	1972	2030	2168	2355	2467	2452	2387	2267	2154	2063	2001	1938	1919	1904	1932	2045	2078	2065	2038	1982	1920
2/13/2010	1878	1865	1853	1846	1854	1893	1969	2039	2086	2072	2003	1927	1851	1795	1751	1712	1706	1766	1919	1998	2000	1984	1934	1890
2/14/2010	1844	1834	1839	1863	1894	1937	1991	2035	2044	2012	1938	1846	1786	1733	1675	1651	1660	1728	1853	1940	1956	1927	1878	1810
2/15/2010	1755	1720	1716	1730	1769	1870	2011	2105	2142	2186	2218	2195	2164	2132	2092	2117	2126	2165	2254	2281	2253	2162	2051	1941
2/16/2010	1859	1836	1822	1824	1855	1969	2141	2235	2229	2242	2254	2255	2234	2204	2169	2164	2153	2179	2251	2280	2240	2143	2021	1904
2/17/2010	1819	1779	1761	1776	1815	1947	2159	2258	2233	2186	2126	2059	2037	2015	2002	1992	2006	2032	2138	2180	2146	2079	1965	1852
2/18/2010	1778	1734	1721	1720	1749	1863	2045	2138	2123	2113	2087	2060	2020	2001	1987	1965	1960	1929	2030	2105	2092	2037	1948	1854
2/19/2010	1797	1775	1780	1803	1863	1996	2197	2303	2248	2152	2079	1990	1923	1875	1830	1762	1726	1731	1851	1928	1926	1885	1818	1720
2/20/2010	1642	1604	1585	1571	1587	1633	1698	1765	1818	1850	1837	1805	1759	1704	1672	1667	1677	1708	1780	1822	1789	1749	1678	1602
2/21/2010	1534	1497	1462	1451	1460	1487	1536	1583	1608	1638	1659	1667	1680	1664	1647	1644	1656	1696	1781	1828	1796	1745	1664	1576
2/22/2010	1513	1486	1477	1487	1535	1659	1840	1946	1928	1931	1944	1945	1960	1953	1943	1938	1937	1949	2029	2049	2014	1947	1828	1725
2/23/2010	1647	1607	1586	1591	1628	1743	1926	2039	2042	2032	2031	2025	2018	1999	1993	2002	2007	2017	2083	2105	2077	2010	1901	1799
2/24/2010	1733	1708	1693	1692	1739	1871	2082	2190	2162	2148	2112	2118	2105	2089	2079	2087	2097	2116	2206	2272	2240	2163	2061	1944
2/25/2010	1868	1846	1822	1825	1852	1963	2132	2210	2183	2137	2061	2012	1989	1984	1970	1937	1933	1968	2058	2138	2137	2082	1993	1898
2/26/2010	1841	1824	1818	1838	1882	1996	2199	2280	2225	2164	2122	2084	2048	2015	1962	1921	1898	1912	1977	2049	2032	1985	1910	1824
2/27/2010	1755	1719	1700	1700	1715	1746	1804	1855	1898	1938	1946	1937	1915	1895	1863	1858	1856	1885	1937	1949	1925	1874	1803	1728
2/28/2010	1661	1628	1608	1596	1598	1620	1663	1698	1729	1744	1759	1754	1742	1718	1703	1703	1715	1750	1826	1879	1857	1800	1713	1620

IPL System Loads For Calendar Year 2010, MW

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
3/1/2010	1557	1530	1523	1533	1579	1713	1893	1984	1979	1975	1974	1952	1911	1869	1839	1825	1828	1840	1900	1972	1959	1885	1808	1712
3/2/2010	1660	1629	1619	1621	1670	1787	1985	2089	2065	2044	2008	1934	1873	1839	1807	1783	1771	1779	1851	1948	1951	1900	1819	1718
3/3/2010	1662	1647	1652	1671	1712	1830	2023	2100	2085	2080	2076	2048	2002	1965	1951	1947	1941	1943	1973	2025	2004	1949	1856	1755
3/4/2010	1697	1678	1665	1684	1729	1860	2059	2129	2078	1999	1949	1891	1852	1821	1772	1729	1705	1699	1786	1906	1925	1882	1797	1706
3/5/2010	1643	1620	1621	1633	1684	1823	2032	2111	2050	1985	1925	1867	1815	1767	1724	1673	1631	1619	1680	1786	1791	1773	1709	1645
3/6/2010	1586	1578	1567	1581	1612	1681	1769	1823	1814	1771	1714	1663	1602	1540	1486	1448	1430	1444	1515	1646	1652	1642	1609	1564
3/7/2010	1522	1513	1517	1527	1558	1599	1659	1681	1678	1654	1599	1551	1516	1470	1453	1475	1515	1564	1631	1693	1676	1627	1549	1462
3/8/2010	1404	1366	1365	1387	1459	1600	1811	1882	1860	1811	1775	1743	1704	1682	1645	1617	1580	1554	1600	1706	1703	1640	1532	1440
3/9/2010	1375	1348	1336	1356	1406	1534	1746	1813	1786	1751	1739	1715	1706	1705	1691	1685	1654	1645	1674	1740	1713	1637	1525	1411
3/10/2010	1338	1288	1260	1268	1296	1415	1603	1679	1680	1688	1699	1701	1676	1675	1651	1631	1596	1557	1559	1656	1642	1570	1460	1347
3/11/2010	1264	1208	1194	1197	1217	1342	1539	1640	1677	1681	1706	1700	1676	1658	1655	1634	1609	1617	1661	1697	1670	1598	1491	1375
3/12/2010	1295	1245	1224	1221	1245	1351	1555	1630	1666	1681	1718	1695	1689	1686	1673	1660	1643	1613	1639	1657	1622	1570	1480	1389
3/13/2010	1306	1257	1225	1215	1231	1269	1340	1397	1475	1538	1589	1600	1592	1575	1564	1549	1557	1572	1603	1650	1621	1575	1510	1432
3/14/2010	1374	1329	1315	1322	1339	1379	1449	1492	1541	1582	1577	1575	1552	1557	1571	1582	1612	1629	1688	1726	1680	1605	1509	1428
3/15/2010	1370	1352	1351	1382	1495	1694	1827	1850	1841	1855	1848	1827	1802	1782	1769	1762	1764	1769	1784	1821	1766	1649	1524	1444
3/16/2010	1391	1370	1360	1399	1532	1733	1875	1871	1815	1786	1746	1706	1685	1646	1610	1574	1537	1524	1540	1642	1612	1515	1414	1336
3/17/2010	1297	1293	1312	1358	1486	1715	1847	1836	1782	1746	1706	1684	1660	1628	1612	1565	1528	1512	1518	1622	1600	1505	1408	1333
3/18/2010	1308	1300	1309	1353	1485	1699	1838	1817	1773	1740	1714	1690	1664	1639	1602	1560	1521	1493	1514	1612	1591	1489	1379	1301
3/19/2010	1252	1242	1255	1292	1404	1617	1753	1736	1708	1691	1671	1656	1642	1614	1567	1522	1480	1447	1445	1531	1507	1419	1332	1252
3/20/2010	1207	1184	1178	1193	1229	1301	1389	1433	1463	1480	1471	1444	1411	1387	1358	1351	1338	1347	1374	1452	1423	1366	1288	1226
3/21/2010	1189	1168	1172	1181	1216	1279	1343	1397	1449	1481	1484	1460	1429	1421	1416	1419	1447	1475	1509	1597	1561	1488	1411	1347
3/22/2010	1312	1294	1300	1339	1457	1676	1810	1847	1850	1868	1871	1879	1870	1853	1843	1836	1824	1824	1846	1874	1803	1699	1569	1481
3/23/2010	1429	1399	1399	1431	1552	1767	1875	1872	1836	1796	1746	1710	1677	1649	1606	1560	1524	1498	1507	1621	1595	1511	1409	1331
3/24/2010	1289	1281	1286	1325	1449	1652	1790	1779	1764	1766	1733	1712	1684	1636	1589	1547	1513	1509	1520	1610	1572	1463	1346	1261
3/25/2010	1210	1188	1179	1213	1319	1500	1618	1633	1631	1647	1668	1676	1672	1666	1687	1707	1726	1764	1788	1821	1779	1688	1591	1525
3/26/2010	1490	1480	1475	1515	1627	1819	1935	1926	1901	1889	1845	1799	1761	1715	1643	1589	1540	1516	1537	1655	1680	1628	1553	1490
3/27/2010	1451	1433	1432	1455	1501	1574	1650	1677	1688	1652	1596	1536	1478	1428	1379	1360	1358	1369	1408	1489	1474	1413	1336	1269
3/28/2010	1224	1204	1196	1196	1215	1262	1310	1353	1400	1444	1458	1469	1464	1457	1449	1451	1469	1485	1510	1565	1542	1481	1407	1347
3/29/2010	1322	1324	1350	1394	1523	1688	1798	1812	1837	1811	1767	1723	1695	1643	1602	1561	1515	1503	1508	1604	1603	1526	1440	1358
3/30/2010	1329	1324	1340	1381	1502	1681	1791	1786	1755	1728	1693	1663	1633	1590	1557	1523	1487	1467	1468	1550	1542	1460	1359	1287
3/31/2010	1248	1237	1239	1274	1370	1530	1641	1649	1638	1643	1637	1616	1604	1603	1598	1566	1539	1500	1475	1554	1539	1433	1328	1235

IPL System Loads For Calendar Year 2010, MW

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
4/1/2010	1177	1143	1124	1143	1224	1365	1469	1511	1547	1601	1628	1637	1661	1668	1662	1639	1610	1582	1554	1610	1586	1492	1363	1269
4/2/2010	1193	1146	1125	1125	1180	1287	1364	1403	1476	1533	1562	1576	1579	1584	1564	1554	1535	1503	1468	1519	1502	1424	1319	1228
4/3/2010	1153	1111	1083	1066	1085	1126	1166	1216	1311	1370	1397	1388	1369	1348	1326	1324	1325	1313	1304	1372	1396	1340	1264	1188
4/4/2010	1138	1106	1087	1081	1097	1151	1180	1230	1278	1293	1291	1293	1281	1266	1258	1255	1258	1265	1288	1381	1413	1343	1245	1163
4/5/2010	1119	1086	1095	1118	1223	1401	1525	1559	1610	1663	1701	1732	1749	1756	1750	1728	1704	1726	1710	1693	1640	1544	1426	1324
4/6/2010	1237	1197	1181	1190	1281	1456	1557	1608	1661	1726	1751	1781	1817	1814	1808	1787	1765	1726	1687	1729	1715	1597	1446	1333
4/7/2010	1269	1230	1203	1223	1299	1482	1604	1635	1664	1715	1725	1720	1724	1697	1661	1638	1608	1595	1612	1661	1579	1457	1332	1244
4/8/2010	1167	1138	1123	1137	1237	1408	1546	1574	1588	1630	1629	1617	1626	1596	1571	1548	1541	1549	1544	1630	1631	1529	1430	1349
4/9/2010	1305	1295	1292	1332	1438	1634	1719	1715	1690	1685	1670	1641	1616	1577	1544	1497	1454	1425	1408	1475	1500	1444	1360	1292
4/10/2010	1258	1236	1239	1253	1290	1359	1398	1429	1440	1442	1426	1396	1373	1351	1336	1332	1332	1327	1313	1372	1386	1320	1245	1170
4/11/2010	1117	1092	1078	1079	1102	1145	1163	1215	1267	1293	1315	1327	1331	1339	1349	1365	1381	1390	1389	1458	1479	1380	1269	1166
4/12/2010	1119	1079	1079	1105	1203	1397	1489	1513	1548	1592	1615	1631	1639	1648	1640	1616	1596	1585	1557	1595	1596	1468	1326	1224
4/13/2010	1157	1130	1118	1135	1223	1421	1517	1541	1562	1610	1637	1676	1708	1720	1730	1718	1691	1662	1627	1655	1635	1503	1358	1245
4/14/2010	1176	1138	1120	1142	1234	1414	1507	1526	1543	1611	1647	1685	1722	1755	1767	1776	1743	1730	1696	1689	1710	1577	1417	1304
4/15/2010	1227	1185	1166	1170	1254	1431	1512	1567	1637	1713	1769	1816	1825	1831	1827	1791	1775	1778	1729	1736	1722	1588	1440	1323
4/16/2010	1257	1210	1184	1196	1287	1464	1553	1596	1649	1708	1761	1778	1768	1734	1671	1591	1531	1499	1464	1479	1485	1401	1285	1184
4/17/2010	1128	1086	1074	1077	1106	1175	1213	1279	1339	1374	1381	1365	1345	1328	1307	1306	1297	1295	1293	1348	1396	1341	1270	1209
4/18/2010	1169	1149	1139	1143	1166	1216	1228	1281	1328	1335	1335	1330	1319	1305	1295	1302	1307	1314	1327	1390	1426	1352	1251	1177
4/19/2010	1142	1130	1133	1180	1295	1490	1568	1596	1604	1621	1613	1618	1616	1602	1586	1545	1502	1488	1476	1536	1543	1425	1299	1210
4/20/2010	1170	1149	1143	1172	1275	1453	1552	1568	1579	1603	1607	1614	1616	1619	1594	1566	1543	1512	1487	1533	1540	1430	1293	1201
4/21/2010	1157	1132	1123	1155	1263	1456	1547	1572	1586	1618	1629	1637	1647	1648	1633	1608	1577	1549	1524	1559	1565	1449	1319	1217
4/22/2010	1157	1134	1124	1147	1252	1425	1512	1551	1578	1615	1631	1653	1690	1684	1679	1655	1615	1571	1548	1583	1587	1478	1344	1253
4/23/2010	1187	1155	1140	1151	1235	1406	1491	1547	1583	1631	1644	1646	1633	1610	1589	1563	1517	1488	1466	1499	1479	1402	1304	1210
4/24/2010	1150	1121	1107	1099	1128	1190	1240	1304	1372	1417	1441	1450	1439	1410	1402	1403	1426	1415	1401	1424	1421	1350	1264	1186
4/25/2010	1133	1097	1076	1079	1083	1114	1136	1187	1263	1313	1343	1360	1362	1355	1352	1357	1377	1382	1398	1436	1440	1358	1262	1181
4/26/2010	1135	1109	1114	1144	1249	1434	1547	1576	1611	1645	1639	1643	1638	1609	1587	1554	1523	1525	1517	1532	1547	1448	1319	1230
4/27/2010	1191	1173	1167	1198	1296	1488	1585	1605	1598	1625	1625	1616	1609	1589	1563	1531	1499	1483	1467	1517	1561	1474	1352	1275
4/28/2010	1230	1221	1232	1262	1391	1579	1672	1675	1587	1646	1652	1632	1626	1610	1586	1549	1519	1490	1472	1505	1547	1448	1319	1238
4/29/2010	1192	1173	1169	1207	1308	1495	1573	1604	1607	1636	1652	1658	1657	1655	1655	1618	1581	1570	1551	1561	1605	1493	1357	1255
4/30/2010	1192	1152	1137	1151	1242	1404	1485	1558	1612	1667	1704	1738	1738	1726	1708	1678	1645	1621	1597	1625	1631	1540	1429	1339

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
5/1/2010	1255	1218	1196	1168	1178	1220	1252	1314	1389	1451	1484	1493	1476	1461	1452	1441	1443	1432	1430	1466	1493	1422	1345	1257
5/2/2010	1194	1153	1133	1119	1131	1150	1162	1239	1322	1382	1433	1475	1482	1484	1488	1500	1520	1532	1528	1549	1596	1501	1370	1265
5/3/2010	1203	1150	1136	1147	1238	1402	1491	1584	1636	1704	1739	1754	1770	1779	1787	1774	1751	1713	1648	1627	1610	1485	1355	1247
5/4/2010	1180	1152	1129	1149	1247	1403	1495	1571	1628	1678	1709	1738	1762	1770	1766	1757	1740	1714	1680	1667	1682	1565	1404	1282
5/5/2010	1205	1161	1140	1154	1248	1416	1505	1579	1644	1715	1758	1800	1859	1886	1901	1887	1874	1843	1786	1761	1716	1579	1423	1310
5/6/2010	1224	1179	1152	1160	1238	1381	1472	1536	1595	1650	1667	1687	1700	1705	1718	1710	1693	1672	1631	1610	1635	1516	1373	1254
5/7/2010	1189	1150	1130	1151	1236	1408	1495	1558	1621	1695	1770	1824	1870	1883	1870	1808	1763	1716	1684	1665	1618	1472	1320	1213
5/8/2010	1136	1099	1078	1077	1102	1139	1174	1264	1341	1388	1415	1408	1385	1368	1343	1337	1349	1360	1370	1411	1442	1383	1319	1250
5/9/2010	1198	1179	1160	1165	1187	1208	1232	1297	1319	1333	1322	1308	1283	1265	1252	1252	1254	1257	1269	1306	1389	1343	1249	1183
5/10/2010	1139	1130	1137	1174	1293	1463	1565	1591	1597	1623	1627	1617	1622	1609	1587	1550	1509	1500	1500	1541	1549	1440	1315	1221
5/11/2010	1183	1160	1155	1186	1281	1464	1566	1609	1633	1675	1696	1713	1721	1720	1713	1698	1670	1642	1622	1617	1640	1542	1391	1269
5/12/2010	1201	1158	1140	1151	1244	1406	1508	1586	1651	1680	1678	1698	1709	1707	1688	1652	1621	1606	1591	1613	1645	1552	1401	1288
5/13/2010	1208	1173	1153	1170	1277	1454	1570	1646	1715	1814	1871	1913	1951	1957	1959	1951	1936	1906	1865	1865	1898	1767	1611	1494
5/14/2010	1399	1323	1288	1282	1349	1474	1550	1604	1662	1709	1729	1737	1756	1756	1748	1724	1692	1645	1596	1555	1581	1491	1366	1258
5/15/2010	1188	1151	1112	1107	1121	1149	1190	1289	1372	1434	1469	1463	1448	1430	1397	1407	1405	1391	1373	1390	1424	1360	1269	1192
5/16/2010	1139	1097	1081	1073	1083	1102	1116	1186	1254	1309	1343	1367	1370	1363	1366	1372	1391	1394	1397	1418	1445	1374	1275	1189
5/17/2010	1136	1105	1103	1128	1223	1398	1507	1563	1597	1636	1665	1674	1664	1646	1623	1612	1596	1587	1581	1580	1576	1476	1345	1249
5/18/2010	1203	1174	1158	1180	1269	1443	1537	1583	1615	1641	1653	1668	1665	1651	1630	1604	1573	1546	1547	1554	1564	1474	1345	1248
5/19/2010	1204	1167	1164	1180	1270	1434	1518	1563	1603	1639	1647	1647	1646	1635	1623	1582	1549	1543	1525	1537	1572	1477	1352	1247
5/20/2010	1197	1164	1153	1178	1271	1421	1514	1584	1628	1683	1695	1712	1719	1688	1676	1647	1601	1580	1583	1605	1596	1499	1377	1285
5/21/2010	1222	1188	1167	1191	1275	1436	1532	1612	1657	1720	1736	1753	1756	1737	1719	1675	1639	1606	1563	1550	1580	1522	1404	1302
5/22/2010	1225	1173	1142	1136	1159	1187	1235	1329	1412	1471	1508	1537	1558	1569	1589	1607	1625	1628	1609	1578	1604	1545	1433	1315
5/23/2010	1235	1174	1148	1122	1125	1120	1150	1257	1365	1483	1580	1687	1777	1855	1911	1970	2009	2022	2020	2002	2025	1929	1776	1630
5/24/2010	1519	1431	1390	1385	1470	1596	1727	1860	1976	2109	2209	2329	2392	2441	2456	2447	2413	2379	2319	2227	2178	2041	1833	1655
5/25/2010	1535	1460	1411	1405	1470	1596	1719	1844	1955	2069	2172	2257	2333	2387	2422	2434	2407	2374	2305	2239	2205	2068	1867	1704
5/26/2010	1582	1495	1448	1429	1515	1625	1757	1887	2017	2155	2264	2325	2407	2449	2485	2499	2478	2443	2369	2289	2258	2094	1884	1723
5/27/2010	1593	1517	1471	1447	1520	1629	1757	1890	2018	2176	2301	2407	2463	2506	2521	2505	2452	2342	2191	2104	2064	1921	1754	1564
5/28/2010	1443	1365	1321	1304	1371	1468	1576	1709	1823	1942	2020	2108	2182	2241	2274	2298	2308	2274	2215	2118	2086	1969	1789	1640
5/29/2010	1504	1417	1349	1312	1307	1290	1347	1479	1630	1783	1900	1992	2065	2111	2154	2184	2196	2181	2127	2046	1994	1912	1752	1606
5/30/2010	1474	1388	1321	1283	1266	1251	1275	1394	1521	1669	1820	1944	2032	2103	2169	2211	2224	2201	2162	2090	2059	1981	1845	1697
5/31/2010	1570	1501	1456	1440	1449	1439	1454	1524	1645	1838	1984	2070	2120	2152	2184	2203	2118	1967	1860	1791	1776	1705	1557	1443

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
6/1/2010	1373	1324	1313	1321	1406	1523	1639	1742	1834	1960	2075	2169	2254	2314	2345	2373	2364	2334	2287	2202	2173	2048	1853	1676
6/2/2010	1571	1486	1446	1434	1522	1669	1734	1776	1822	1905	1949	2058	2165	2251	2286	2248	2272	2269	2192	2113	2094	1990	1817	1662
6/3/2010	1556	1474	1431	1432	1518	1660	1746	1814	1913	2034	2125	2203	2294	2341	2308	2205	2108	2051	2006	1955	1969	1894	1738	1601
6/4/2010	1489	1423	1385	1383	1450	1563	1668	1823	1950	2101	2211	2291	2363	2408	2438	2444	2434	2394	2326	2235	2215	2116	1955	1814
6/5/2010	1684	1609	1558	1539	1550	1556	1603	1688	1787	1840	1916	1990	1995	2037	2085	2093	2116	2129	2105	2051	2046	1971	1833	1711
6/6/2010	1631	1559	1512	1484	1465	1372	1332	1366	1417	1472	1516	1574	1634	1678	1717	1747	1771	1767	1739	1679	1666	1614	1486	1364
6/7/2010	1269	1228	1200	1211	1282	1384	1496	1605	1687	1778	1844	1897	1943	1978	2011	2011	1989	1963	1906	1834	1823	1733	1571	1438
6/8/2010	1348	1294	1272	1278	1356	1457	1574	1643	1727	1837	1883	1905	1939	1958	1920	1866	1807	1769	1743	1737	1768	1695	1572	1450
6/9/2010	1368	1324	1299	1328	1416	1564	1682	1783	1843	1910	1960	2037	2135	2197	2239	2231	2217	2168	2091	1988	1949	1866	1701	1545
6/10/2010	1433	1358	1321	1309	1377	1467	1599	1728	1826	1951	2049	2113	2205	2260	2278	2308	2309	2274	2195	2107	2079	1987	1811	1642
6/11/2010	1542	1460	1419	1417	1494	1598	1709	1861	1986	2162	2326	2443	2530	2605	2544	2342	2306	2231	2170	2116	2074	1985	1845	1697
6/12/2010	1594	1517	1475	1454	1461	1502	1548	1642	1720	1824	1925	2024	2127	2223	2291	2322	2374	2357	2298	2159	2014	1884	1753	1627
6/13/2010	1537	1460	1411	1383	1379	1361	1388	1465	1571	1701	1812	1924	2021	2100	2179	2215	2204	2210	2170	2036	1959	1857	1721	1588
6/14/2010	1503	1432	1408	1428	1504	1620	1738	1844	2025	2160	2260	2379	2484	2539	2386	2361	2382	2379	2319	2232	2118	1973	1813	1676
6/15/2010	1570	1510	1474	1475	1555	1677	1784	1876	1957	2049	2145	2236	2355	2464	2523	2521	2460	2391	2304	2132	2012	1891	1726	1602
6/16/2010	1514	1456	1423	1433	1529	1646	1758	1887	1995	2112	2194	2250	2311	2343	2353	2356	2331	2298	2226	2145	2076	1975	1779	1605
6/17/2010	1491	1411	1363	1358	1418	1515	1657	1790	1899	2023	2125	2195	2269	2341	2385	2413	2404	2378	2316	2225	2156	2056	1865	1692
6/18/2010	1552	1464	1399	1393	1452	1544	1673	1817	1970	2132	2248	2368	2502	2592	2636	2665	2652	2611	2556	2458	2260	2049	1887	1733
6/19/2010	1629	1539	1472	1433	1437	1447	1482	1590	1759	1907	2034	2123	2177	2227	2267	2297	2300	2267	2235	2153	2080	2005	1857	1715
6/20/2010	1591	1507	1440	1396	1381	1341	1400	1540	1709	1857	1993	2102	2198	2281	2352	2400	2421	2412	2381	2332	2292	2226	2058	1883
6/21/2010	1757	1671	1620	1609	1662	1754	1890	2049	2122	2113	2104	2163	2260	2352	2404	2451	2470	2472	2440	2376	2350	2239	2043	1752
6/22/2010	1598	1520	1464	1441	1506	1646	1764	1815	1874	2004	2122	2236	2349	2371	2385	2416	2420	2421	2361	2292	2253	2159	1992	1840
6/23/2010	1723	1639	1604	1605	1683	1792	1933	2064	2240	2412	2548	2666	2742	2790	2822	2817	2805	2757	2694	2608	2563	2432	2198	1947
6/24/2010	1792	1698	1636	1623	1677	1779	1883	1972	2070	2186	2246	2298	2355	2388	2409	2417	2410	2374	2308	2209	2143	2046	1860	1691
6/25/2010	1559	1471	1415	1395	1447	1529	1636	1770	1892	2026	2116	2212	2276	2343	2389	2416	2397	2366	2295	2182	2109	2009	1837	1682
6/26/2010	1552	1473	1416	1380	1390	1385	1438	1546	1693	1869	2033	2178	2298	2376	2438	2482	2494	2476	2436	2366	2315	2246	2094	1955
6/27/2010	1828	1728	1652	1594	1577	1555	1592	1726	1931	2098	2241	2357	2420	2443	2440	2445	2455	2409	2270	2140	2083	1990	1853	1734
6/28/2010	1641	1574	1543	1553	1635	1747	1848	1944	2022	2153	2279	2368	2430	2470	2506	2485	2454	2388	2288	2183	2120	2001	1823	1661
6/29/2010	1542	1455	1414	1404	1474	1560	1681	1814	1909	1980	2044	2085	2132	2175	2195	2197	2167	2121	2051	1950	1888	1799	1625	1473
6/30/2010	1370	1305	1266	1255	1326	1400	1493	1606	1692	1784	1844	1891	1940	1975	1998	2032	2041	2018	1972	1891	1849	1768	1606	1452

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
7/1/2010	1360	1284	1256	1251	1312	1386	1492	1587	1693	1781	1843	1907	1955	1998	2018	2044	2046	2024	1972	1896	1836	1748	1576	1429
7/2/2010	1334	1266	1224	1230	1273	1346	1446	1557	1649	1740	1796	1853	1906	1931	1975	1999	2006	1991	1935	1853	1780	1706	1549	1408
7/3/2010	1313	1240	1198	1169	1175	1158	1195	1300	1431	1549	1652	1738	1807	1888	1972	2043	2105	2116	2090	2016	1953	1886	1749	1626
7/4/2010	1509	1419	1366	1327	1301	1279	1310	1447	1619	1805	1974	2128	2210	2275	2321	2346	2351	2316	2261	2171	2110	2053	1982	1868
7/5/2010	1741	1644	1574	1534	1523	1501	1529	1640	1820	1993	2140	2241	2306	2327	2345	2390	2404	2387	2340	2261	2203	2104	1933	1772
7/6/2010	1640	1548	1500	1464	1518	1600	1729	1882	2042	2221	2363	2471	2564	2616	2661	2679	2670	2635	2573	2473	2400	2275	2076	1895
7/7/2010	1756	1656	1598	1572	1611	1693	1817	1949	2123	2292	2452	2581	2668	2713	2747	2757	2744	2701	2632	2536	2473	2338	2155	1967
7/8/2010	1834	1728	1657	1634	1694	1786	1895	2041	2212	2402	2541	2664	2733	2793	2734	2518	2385	2312	2251	2187	2168	2095	1950	1816
7/9/2010	1715	1638	1598	1596	1659	1779	1879	1940	2000	2077	2128	2216	2307	2358	2406	2433	2427	2335	2250	2178	2122	2027	1850	1701
7/10/2010	1570	1486	1416	1377	1373	1370	1400	1509	1641	1809	1960	2052	2102	2128	2119	2095	2123	2142	2101	2031	1965	1894	1742	1604
7/11/2010	1483	1411	1357	1321	1308	1287	1310	1440	1595	1750	1903	2026	2120	2201	2252	2276	2274	2230	2179	2112	2111	2034	1893	1731
7/12/2010	1660	1572	1518	1507	1561	1660	1756	1844	1936	2051	2171	2274	2379	2455	2504	2539	2539	2513	2450	2354	2300	2185	1998	1815
7/13/2010	1684	1601	1542	1537	1591	1713	1809	1862	1919	1994	2076	2198	2254	2169	2141	2213	2284	2304	2282	2197	2148	2045	1874	1708
7/14/2010	1590	1515	1470	1466	1523	1623	1740	1900	2055	2211	2348	2460	2545	2614	2669	2687	2681	2648	2590	2487	2430	2323	2131	1958
7/15/2010	1825	1735	1668	1642	1693	1793	1891	2008	2178	2382	2548	2669	2771	2835	2858	2767	2503	2369	2296	2235	2221	2111	1949	1804
7/16/2010	1704	1633	1573	1559	1625	1722	1813	1902	2064	2214	2321	2424	2496	2563	2605	2619	2611	2570	2495	2386	2316	2189	2023	1841
7/17/2010	1714	1606	1554	1509	1526	1528	1577	1736	1920	2098	2228	2316	2392	2442	2476	2513	2535	2516	2437	2338	2267	2111	1928	1772
7/18/2010	1645	1538	1471	1424	1414	1398	1417	1522	1663	1847	2017	2140	2167	2046	1962	2028	2047	2035	2006	1977	1992	1940	1799	1663
7/19/2010	1569	1501	1473	1485	1572	1690	1803	1892	2001	2147	2277	2419	2520	2595	2634	2588	2503	2397	2307	2220	2197	2067	1902	1741
7/20/2010	1628	1569	1507	1497	1554	1664	1749	1835	1915	2028	2135	2221	2271	2303	2327	2290	2207	2146	2109	2070	2063	1971	1819	1660
7/21/2010	1566	1503	1462	1474	1552	1685	1790	1883	2007	2172	2294	2419	2505	2562	2590	2580	2566	2552	2471	2389	2354	2229	2040	1876
7/22/2010	1744	1650	1597	1576	1634	1748	1846	1989	2131	2275	2414	2487	2475	2509	2592	2598	2581	2543	2482	2420	2390	2298	2112	1975
7/23/2010	1869	1802	1757	1746	1809	1923	2021	2160	2310	2464	2597	2720	2800	2852	2872	2863	2831	2783	2702	2618	2586	2475	2297	2118
7/24/2010	1989	1902	1831	1783	1776	1778	1796	1934	2103	2276	2405	2512	2553	2599	2650	2663	2664	2635	2581	2520	2499	2389	2176	2004
7/25/2010	1863	1772	1683	1627	1619	1620	1604	1720	1872	1950	1999	2084	2199	2280	2338	2386	2395	2373	2331	2239	2211	2101	1927	1767
7/26/2010	1641	1562	1503	1500	1561	1671	1756	1870	1989	2122	2235	2330	2428	2480	2528	2556	2538	2514	2434	2330	2249	2122	1905	1742
7/27/2010	1616	1527	1475	1467	1524	1635	1729	1839	1970	2147	2297	2442	2523	2580	2618	2640	2636	2607	2550	2474	2441	2293	2117	1954
7/28/2010	1825	1748	1698	1687	1745	1870	1961	2099	2261	2413	2535	2662	2745	2752	2792	2797	2763	2718	2663	2562	2519	2326	2065	1905
7/29/2010	1792	1714	1683	1656	1734	1853	1919	1981	2077	2206	2300	2391	2454	2500	2509	2514	2474	2420	2337	2218	2174	2030	1843	1682
7/30/2010	1555	1474	1415	1400	1472	1592	1659	1734	1842	1927	2038	2143	2204	2229	2251	2266	2247	2165	2077	2021	2001	1909	1767	1640
7/31/2010	1547	1475	1426	1401	1414	1435	1441	1536	1630	1712	1758	1759	1746	1757	1778	1801	1806	1790	1760	1734	1748	1678	1572	1488

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
8/1/2010	1399	1348	1304	1285	1272	1292	1298	1383	1503	1644	1751	1851	1939	1977	2029	2078	2107	2092	2079	2027	2023	1926	1780	1630
8/2/2010	1515	1443	1401	1405	1473	1608	1689	1823	1954	2135	2288	2417	2508	2582	2635	2644	2620	2572	2516	2441	2398	2250	2062	1891
8/3/2010	1767	1694	1644	1621	1690	1830	1918	2011	2094	2138	2203	2329	2480	2594	2682	2768	2808	2791	2736	2688	2669	2535	2356	2212
8/4/2010	2096	2017	1965	1940	2004	2131	2211	2350	2484	2674	2809	2837	2880	2934	2992	3013	2998	2968	2890	2774	2589	2379	2179	2020
8/5/2010	1902	1816	1752	1729	1783	1910	1991	2090	2208	2333	2451	2541	2624	2669	2706	2720	2692	2626	2545	2458	2418	2247	2030	1852
8/6/2010	1713	1614	1542	1508	1549	1650	1709	1808	1940	2076	2181	2267	2343	2392	2420	2408	2367	2303	2191	2089	2050	1915	1745	1597
8/7/2010	1487	1401	1358	1330	1339	1360	1370	1485	1622	1760	1868	1960	2035	2096	2148	2189	2219	2203	2138	2052	2035	1918	1766	1619
8/8/2010	1509	1414	1362	1326	1313	1311	1313	1415	1563	1735	1895	2030	2106	2184	2231	2280	2308	2279	2261	2206	2177	2059	1888	1732
8/9/2010	1614	1535	1486	1479	1557	1698	1775	1872	2027	2214	2388	2545	2685	2778	2840	2851	2839	2802	2743	2668	2621	2468	2278	2115
8/10/2010	1995	1908	1847	1829	1897	2036	2108	2195	2341	2499	2666	2804	2882	2947	2978	2982	2930	2897	2860	2793	2757	2574	2375	2208
8/11/2010	2077	1997	1939	1926	1991	2140	2205	2306	2442	2624	2707	2720	2802	2869	2890	2918	2892	2813	2696	2605	2549	2374	2169	2003
8/12/2010	1878	1799	1742	1714	1787	1930	2013	2124	2295	2451	2584	2721	2819	2882	2918	2931	2910	2858	2772	2685	2636	2459	2244	2068
8/13/2010	1937	1835	1769	1746	1803	1942	2003	2121	2267	2447	2581	2706	2809	2864	2885	2892	2841	2777	2655	2507	2448	2316	2142	1991
8/14/2010	1880	1789	1712	1666	1678	1721	1741	1833	1952	2085	2213	2331	2363	2405	2474	2531	2539	2515	2484	2413	2375	2244	2092	1953
8/15/2010	1828	1741	1688	1638	1636	1642	1629	1752	1907	2097	2285	2409	2507	2575	2637	2665	2670	2648	2595	2498	2450	2256	2044	1862
8/16/2010	1725	1636	1562	1531	1579	1709	1774	1869	1973	2101	2193	2271	2357	2417	2468	2491	2479	2445	2362	2257	2192	2001	1778	1615
8/17/2010	1506	1436	1400	1388	1466	1617	1688	1768	1878	2008	2119	2228	2320	2383	2384	2396	2397	2336	2249	2208	2179	2022	1839	1696
8/18/2010	1597	1519	1478	1482	1573	1742	1819	1889	1978	2105	2226	2335	2419	2478	2516	2556	2550	2503	2424	2345	2293	2105	1904	1736
8/19/2010	1612	1524	1477	1464	1533	1698	1750	1859	2002	2166	2287	2408	2507	2590	2646	2684	2674	2633	2560	2499	2432	2231	2020	1851
8/20/2010	1738	1655	1600	1574	1657	1814	1873	1957	2090	2247	2374	2504	2609	2682	2721	2742	2689	2586	2490	2428	2364	2212	2045	1891
8/21/2010	1765	1678	1621	1591	1598	1623	1642	1702	1796	1855	1893	1944	1984	2025	2076	2097	2089	2087	2062	2051	2041	1940	1793	1677
8/22/2010	1557	1482	1431	1390	1398	1407	1409	1508	1650	1734	1811	1938	2036	2125	2211	2289	2335	2318	2273	2211	2160	2011	1821	1663
8/23/2010	1552	1477	1436	1433	1516	1694	1767	1816	1871	1920	1999	2119	2235	2301	2355	2383	2367	2336	2266	2209	2160	1959	1779	1639
8/24/2010	1532	1449	1415	1410	1497	1654	1725	1792	1909	2016	2115	2202	2253	2283	2291	2278	2234	2187	2132	2140	2101	1950	1759	1607
8/25/2010	1502	1444	1404	1404	1497	1675	1758	1808	1856	1970	2067	2082	2140	2211	2271	2311	2301	2258	2165	2091	2015	1824	1626	1467
8/26/2010	1379	1309	1290	1290	1368	1525	1578	1638	1713	1799	1846	1900	1947	1981	2019	2044	2051	2015	1963	1898	1858	1702	1519	1382
8/27/2010	1297	1245	1212	1220	1292	1447	1518	1582	1666	1773	1828	1893	1952	2008	2054	2091	2096	2072	2000	1922	1866	1726	1566	1418
8/28/2010	1319	1263	1206	1201	1209	1244	1257	1347	1470	1598	1710	1799	1885	1983	2072	2166	2218	2213	2158	2095	2045	1910	1770	1630
8/29/2010	1540	1459	1407	1380	1365	1384	1388	1483	1663	1855	2039	2196	2317	2394	2456	2489	2494	2461	2417	2365	2296	2124	1942	1781
8/30/2010	1662	1579	1532	1518	1610	1782	1867	1936	2073	2234	2309	2345	2412	2471	2512	2531	2531	2499	2442	2413	2338	2145	1949	1793
8/31/2010	1672	1588	1539	1530	1611	1762	1857	1916	2035	2166	2275	2379	2480	2546	2626	2660	2644	2608	2529	2500	2415	2202	1999	1830

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
9/1/2010	1712	1620	1567	1550	1625	1787	1860	1939	2068	2233	2355	2471	2507	2545	2598	2619	2585	2482	2375	2356	2298	2099	1910	1769
9/2/2010	1649	1579	1536	1529	1610	1773	1844	1921	2049	2181	2275	2345	2363	2375	2364	2361	2331	2320	2266	2276	2206	2052	1880	1753
9/3/2010	1675	1607	1548	1510	1602	1745	1822	1830	1855	1945	1996	2010	2029	2030	2019	1988	1919	1827	1731	1698	1668	1567	1441	1332
9/4/2010	1252	1196	1159	1137	1150	1175	1180	1240	1317	1370	1401	1429	1442	1463	1468	1496	1507	1487	1441	1453	1440	1360	1269	1190
9/5/2010	1129	1085	1059	1048	1055	1073	1071	1119	1200	1269	1320	1359	1394	1424	1467	1513	1546	1545	1513	1525	1509	1431	1333	1250
9/6/2010	1178	1145	1117	1113	1127	1148	1144	1177	1287	1402	1505	1578	1662	1720	1810	1892	1953	1960	1923	1932	1889	1751	1585	1470
9/7/2010	1378	1311	1280	1286	1376	1552	1654	1721	1843	1997	2117	2239	2293	2251	2191	2148	2112	2069	1982	1984	1911	1755	1567	1421
9/8/2010	1332	1269	1236	1242	1321	1471	1541	1585	1660	1737	1788	1832	1883	1932	1969	2000	1992	1965	1903	1879	1803	1628	1464	1337
9/9/2010	1259	1208	1180	1192	1263	1420	1497	1534	1591	1661	1708	1737	1783	1821	1836	1835	1834	1804	1751	1779	1719	1580	1424	1313
9/10/2010	1238	1205	1174	1188	1267	1430	1510	1543	1609	1686	1739	1793	1845	1878	1907	1913	1886	1820	1762	1793	1744	1647	1517	1416
9/11/2010	1341	1289	1251	1242	1253	1302	1339	1383	1424	1484	1510	1514	1510	1518	1562	1617	1663	1675	1631	1653	1618	1521	1414	1323
9/12/2010	1249	1192	1159	1133	1125	1149	1142	1209	1309	1403	1489	1571	1627	1670	1730	1785	1821	1817	1784	1800	1738	1599	1457	1337
9/13/2010	1265	1221	1196	1209	1302	1491	1583	1620	1718	1820	1917	2009	2099	2170	2228	2263	2223	2195	2145	2155	2057	1863	1672	1510
9/14/2010	1420	1348	1302	1296	1368	1540	1645	1660	1705	1768	1820	1900	1925	1931	1935	1943	1977	1978	1923	1938	1838	1671	1500	1374
9/15/2010	1290	1237	1222	1227	1301	1481	1569	1611	1673	1769	1842	1932	2018	2106	2168	2208	2204	2159	2113	2137	2042	1894	1707	1588
9/16/2010	1504	1456	1425	1421	1501	1699	1811	1835	1887	1938	2026	2112	2180	2190	2175	2121	2049	1993	1893	1886	1798	1621	1468	1344
9/17/2010	1263	1227	1198	1204	1286	1441	1528	1552	1617	1694	1734	1750	1799	1841	1865	1876	1869	1821	1750	1752	1671	1551	1422	1305
9/18/2010	1227	1179	1150	1139	1157	1196	1237	1288	1388	1483	1562	1634	1686	1741	1802	1859	1879	1844	1812	1839	1764	1635	1514	1406
9/19/2010	1334	1286	1249	1229	1232	1254	1271	1317	1404	1499	1578	1677	1792	1878	1853	1835	1868	1881	1848	1887	1795	1695	1560	1445
9/20/2010	1366	1308	1294	1306	1401	1595	1703	1728	1818	1929	2005	2125	2229	2308	2352	2390	2393	2349	2292	2298	2157	1981	1783	1635
9/21/2010	1518	1446	1405	1410	1482	1678	1782	1796	1887	2018	2167	2306	2424	2523	2580	2609	2586	2517	2442	2429	2289	2093	1907	1739
9/22/2010	1608	1565	1516	1497	1567	1735	1846	1870	1933	2058	2117	2134	2108	2060	2028	2002	1988	1962	1949	1971	1888	1725	1571	1443
9/23/2010	1376	1330	1310	1326	1424	1615	1731	1765	1870	2004	2139	2278	2383	2461	2498	2517	2503	2425	2367	2369	2251	2069	1886	1732
9/24/2010	1633	1566	1521	1507	1591	1774	1875	1909	1997	2124	2205	2169	2162	2231	2286	2284	2203	2073	1972	1955	1849	1691	1536	1390
9/25/2010	1294	1233	1186	1172	1183	1225	1259	1306	1378	1436	1483	1515	1541	1560	1581	1598	1605	1564	1521	1529	1454	1357	1259	1183
9/26/2010	1127	1094	1069	1065	1072	1097	1131	1157	1216	1272	1295	1312	1324	1336	1338	1351	1362	1364	1396	1481	1418	1325	1225	1155
9/27/2010	1107	1081	1075	1101	1183	1366	1484	1488	1514	1564	1597	1624	1657	1661	1662	1656	1628	1598	1611	1652	1572	1447	1316	1222
9/28/2010	1167	1138	1125	1138	1227	1401	1517	1515	1550	1606	1628	1642	1659	1659	1650	1654	1644	1611	1605	1652	1564	1441	1308	1210
9/29/2010	1159	1128	1114	1135	1218	1390	1505	1506	1551	1620	1671	1701	1732	1747	1756	1766	1754	1729	1703	1721	1615	1479	1342	1241
9/30/2010	1174	1122	1110	1132	1218	1390	1507	1518	1570	1649	1701	1745	1782	1783	1780	1762	1742	1676	1665	1695	1598	1470	1339	1236

IPL System Loads For Calendar Year 2010, MW

Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
10/1/2010	1171	1144	1122	1139	1212	1373	1481	1490	1527	1582	1608	1635	1638	1652	1641	1632	1600	1555	1538	1558	1491	1399	1282	1197
10/2/2010	1144	1105	1086	1082	1104	1149	1213	1264	1345	1389	1410	1417	1405	1377	1344	1331	1327	1324	1386	1420	1375	1317	1245	1171
10/3/2010	1128	1095	1083	1078	1093	1130	1177	1217	1277	1307	1324	1337	1331	1327	1324	1327	1340	1347	1429	1486	1425	1345	1248	1181
10/4/2010	1140	1132	1131	1174	1271	1469	1598	1597	1605	1621	1624	1628	1619	1596	1578	1555	1535	1523	1576	1612	1536	1425	1316	1227
10/5/2010	1195	1167	1175	1202	1305	1507	1620	1613	1605	1618	1624	1623	1624	1614	1597	1578	1556	1534	1573	1615	1535	1424	1300	1224
10/6/2010	1186	1169	1158	1193	1301	1485	1604	1594	1586	1617	1632	1643	1656	1657	1647	1634	1603	1580	1616	1646	1572	1445	1328	1236
10/7/2010	1180	1154	1140	1158	1241	1426	1546	1539	1576	1622	1656	1696	1715	1729	1729	1723	1706	1656	1678	1697	1592	1460	1327	1220
10/8/2010	1171	1130	1122	1138	1232	1405	1527	1536	1556	1607	1642	1682	1702	1705	1713	1711	1684	1638	1617	1614	1529	1424	1307	1209
10/9/2010	1147	1108	1090	1082	1104	1161	1231	1300	1331	1395	1446	1482	1509	1538	1573	1611	1624	1604	1614	1609	1531	1442	1337	1245
10/10/2010	1173	1122	1092	1077	1086	1115	1153	1191	1278	1363	1447	1533	1599	1669	1707	1746	1762	1741	1767	1754	1652	1524	1391	1289
10/11/2010	1219	1182	1163	1174	1253	1427	1552	1552	1602	1636	1809	1846	1915	1967	1980	1968	1926	1873	1885	1856	1737	1575	1438	1316
10/12/2010	1238	1199	1173	1179	1269	1442	1557	1564	1601	1686	1749	1823	1866	1888	1877	1857	1839	1799	1834	1809	1704	1570	1418	1314
10/13/2010	1240	1192	1173	1182	1267	1431	1563	1559	1596	1651	1702	1753	1802	1775	1702	1672	1630	1619	1675	1654	1557	1428	1306	1221
10/14/2010	1158	1137	1129	1141	1234	1411	1543	1540	1559	1591	1616	1627	1638	1622	1603	1579	1551	1524	1587	1605	1529	1417	1305	1226
10/15/2010	1173	1147	1140	1158	1246	1421	1543	1530	1560	1592	1598	1602	1611	1594	1581	1549	1497	1468	1513	1512	1464	1361	1273	1200
10/16/2010	1145	1119	1108	1114	1151	1211	1297	1337	1377	1394	1387	1377	1361	1355	1345	1344	1349	1339	1400	1408	1368	1301	1217	1151
10/17/2010	1103	1076	1061	1056	1072	1109	1157	1187	1246	1279	1310	1319	1334	1348	1365	1383	1403	1408	1484	1478	1409	1318	1230	1147
10/18/2010	1103	1078	1076	1106	1199	1382	1520	1522	1543	1569	1587	1592	1600	1595	1576	1553	1544	1545	1617	1602	1525	1412	1304	1222
10/19/2010	1180	1153	1157	1187	1291	1478	1614	1606	1601	1609	1602	1604	1604	1581	1568	1557	1530	1520	1600	1596	1527	1428	1315	1235
10/20/2010	1190	1175	1166	1202	1297	1492	1635	1616	1607	1623	1622	1621	1623	1609	1590	1574	1549	1535	1609	1598	1533	1425	1311	1225
10/21/2010	1175	1154	1146	1157	1238	1398	1529	1552	1563	1581	1587	1595	1592	1573	1553	1524	1500	1492	1574	1578	1520	1433	1335	1263
10/22/2010	1228	1211	1217	1243	1347	1496	1630	1647	1655	1640	1624	1611	1583	1575	1535	1520	1476	1457	1533	1510	1448	1378	1284	1211
10/23/2010	1163	1130	1126	1126	1148	1205	1280	1325	1370	1415	1425	1413	1396	1373	1348	1338	1342	1345	1429	1418	1372	1301	1226	1161
10/24/2010	1113	1089	1060	1063	1069	1102	1154	1190	1234	1283	1321	1347	1356	1370	1366	1376	1392	1426	1519	1515	1455	1370	1279	1187
10/25/2010	1141	1117	1114	1134	1236	1429	1584	1602	1617	1653	1672	1683	1685	1676	1645	1629	1606	1617	1693	1664	1589	1482	1350	1268
10/26/2010	1219	1188	1171	1192	1283	1488	1635	1680	1686	1644	1662	1651	1633	1619	1605	1587	1560	1538	1621	1599	1522	1418	1290	1214
10/27/2010	1159	1137	1123	1145	1234	1422	1563	1565	1571	1609	1635	1643	1643	1626	1599	1574	1549	1550	1620	1597	1528	1429	1310	1221
10/28/2010	1175	1148	1144	1164	1268	1456	1610	1625	1636	1664	1678	1669	1664	1645	1630	1632	1647	1688	1741	1717	1657	1545	1440	1362
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10/30/2010	1288	1280	1278	1288	1320	1389	1477	1511	1541	1537	1501	1461	1414	1375	1354	1347	1349	1378	1456	1440	1400	1337	1274	1225
10/31/2010	1189	1171	1162	1165	1188	1232	1295	1328	1355	1372	1367	1363	1351	1343	1331	1320	1318	1325	1423	1471	1459	1411	1330	1265

IPL System Loads For Calendar Year 2010, MW																								
Date	HE1	HE2	HE3	HE4	HE5	HE6	HE7	HE8	HE9	HE10	HE11	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24
11/1/2010	1238	1221	1235	1280	1397	1603	1757	1759	1726	1711	1676	1661	1638	1610	1567	1554	1548	1589	1687	1670	1606	1526	1434	1359
11/2/2010	1316	1299	1294	1327	1440	1624	1775	1766	1737	1735	1702	1681	1654	1620	1599	1581	1591	1649	1736	1708	1653	1547	1440	1373
11/3/2010	1328	1324	1343	1389	1520	1721	1872	1849	1796	1748	1691	1664	1635	1602	1582	1574	1587	1608	1672	1660	1610	1516	1408	1345
11/4/2010	1306	1286	1279	1313	1422	1619	1758	1748	1731	1726	1704	1679	1670	1654	1651	1616	1610	1676	1745	1727	1659	1554	1448	1366
11/5/2010	1330	1309	1305	1341	1450	1647	1793	1797	1756	1755	1722	1703	1698	1679	1657	1640	1633	1689	1758	1730	1679	1607	1525	1459
11/6/2010	1418	1402	1392	1415	1445	1526	1631	1678	1680	1648	1610	1573	1525	1465	1433	1421	1428	1495	1605	1619	1603	1563	1497	1441
11/7/2010	1399	1387	1379	1385	1403	1451	1510	1548	1572	1553	1514	1471	1436	1407	1390	1372	1381	1449	1564	1550	1545	1481	1401	1328
11/8/2010	1282	1262	1257	1277	1328	1458	1657	1741	1711	1681	1667	1649	1639	1632	1610	1585	1568	1588	1673	1644	1605	1520	1428	1331
11/9/2010	1270	1250	1239	1251	1292	1413	1620	1699	1670	1647	1654	1637	1641	1638	1631	1606	1570	1592	1671	1635	1592	1512	1416	1306
11/10/2010	1235	1213	1202	1215	1253	1374	1575	1666	1645	1638	1644	1629	1638	1630	1618	1586	1565	1584	1672	1647	1599	1528	1419	1303
11/11/2010	1245	1217	1207	1212	1244	1358	1551	1642	1626	1620	1628	1631	1626	1636	1624	1608	1568	1604	1679	1639	1597	1508	1409	1309
11/12/2010	1219	1183	1173	1173	1206	1314	1508	1606	1603	1609	1622	1633	1631	1622	1608	1581	1552	1559	1607	1566	1526	1463	1375	1298
11/13/2010	1231	1196	1169	1159	1172	1206	1268	1319	1380	1416	1432	1435	1425	1415	1399	1400	1428	1495	1515	1484	1458	1399	1342	1284
11/14/2010	1225	1200	1180	1174	1184	1222	1270	1316	1374	1434	1425	1413	1408	1383	1371	1350	1369	1479	1605	1611	1592	1538	1469	1405
11/15/2010	1340	1313	1312	1329	1386	1507	1709	1807	1778	1753	1753	1704	1681	1651	1632	1618	1632	1706	1792	1783	1759	1697	1596	1518
11/16/2010	1466	1441	1430	1439	1478	1596	1778	1865	1850	1849	1859	1848	1839	1836	1829	1817	1839	1901	1921	1875	1808	1722	1608	1495
11/17/2010	1418	1382	1367	1376	1416	1542	1734	1833	1793	1753	1743	1722	1686	1659	1643	1631	1625	1701	1793	1780	1762	1702	1614	1516
11/18/2010	1465	1420	1398	1386	1416	1521	1696	1809	1796	1792	1801	1777	1766	1747	1718	1686	1693	1775	1859	1850	1839	1783	1696	1607
11/19/2010	1556	1526	1530	1539	1579	1704	1889	1977	1959	1943	1926	1897	1879	1844	1804	1755	1729	1782	1833	1794	1750	1693	1609	1518
11/20/2010	1438	1391	1365	1372	1395	1447	1521	1589	1611	1645	1664	1649	1614	1590	1567	1553	1538	1609	1679	1665	1644	1605	1546	1481
11/21/2010	1414	1363	1335	1316	1321	1330	1360	1383	1405	1441	1458	1461	1461	1454	1430	1414	1416	1512	1573	1563	1528	1470	1372	1282
11/22/2010	1213	1162	1142	1141	1171	1278	1467	1597	1606	1626	1651	1656	1656	1652	1630	1607	1604	1664	1713	1693	1651	1568	1461	1342
11/23/2010	1254	1202	1162	1158	1190	1312	1524	1683	1702	1697	1712	1715	1696	1680	1655	1630	1633	1743	1851	1859	1854	1808	1726	1630
11/24/2010	1568	1533	1523	1531	1565	1675	1858	1966	1964	1986	1999	2009	2017	2042	2021	1987	1963	2010	2005	1961	1902	1826	1718	1602
11/25/2010	1500	1432	1373	1340	1335	1346	1359	1383	1424	1496	1544	1551	1512	1457	1411	1373	1371	1421	1447	1471	1507	1524	1519	1491
11/26/2010	1481	1478	1483	1500	1542	1617	1692	1737	1729	1733	1729	1710	1684	1650	1615	1601	1633	1751	1839	1824	1799	1752	1689	1591
11/27/2010	1527	1467	1437	1430	1437	1469	1548	1603	1634	1646	1643	1628	1598	1555	1512	1482	1502	1636	1745	1751	1748	1736	1699	1647
11/28/2010	1598	1566	1555	1560	1573	1607	1651	1683	1693	1657	1619	1577	1543	1506	1468	1449	1482	1620	1743	1759	1756	1695	1629	1543
11/29/2010	1477	1441	1440	1447	1488	1598	1784	1893	1855	1841	1799	1752	1713	1685	1657	1645	1677	1784	1818	1791	1754	1673	1566	1444
11/30/2010	1352	1293	1262	1261	1281	1370	1544	1667	1659	1678	1703	1733	1763	1792	1818	1837	1877	1984	2037	2026	2000	1930	1825	1715

IPL System Loads For Calendar Year 2010, MW																								
Date	**HE1**	**HE2**	**HE3**	**HE4**	**HE5**	**HE6**	**HE7**	**HE8**	**HE9**	**HE10**	**HE11**	**HE12**	**HE13**	**HE14**	**HE15**	**HE16**	**HE17**	**HE18**	**HE19**	**HE20**	**HE21**	**HE22**	**HE23**	**HE24**
12/1/2010	1640	1609	1593	1595	1642	1761	1963	2073	2073	2072	2097	2097	2104	2099	2088	2095	2125	2203	2232	2199	2166	2080	1957	1829
12/2/2010	1736	1689	1669	1680	1720	1842	2033	2124	2092	2066	2046	1981	1936	1921	1917	1906	1937	2027	2072	2050	2019	1956	1844	1732
12/3/2010	1656	1610	1590	1590	1626	1729	1925	2023	1990	1941	1925	1880	1864	1834	1812	1786	1798	1916	1958	1940	1912	1863	1788	1688
12/4/2010	1618	1581	1567	1565	1582	1624	1687	1767	1801	1853	1884	1896	1871	1843	1821	1821	1842	1950	2009	1984	1959	1911	1835	1760
12/5/2010	1687	1626	1593	1579	1584	1615	1663	1745	1799	1848	1895	1889	1884	1869	1889	1927	1992	2112	2161	2151	2141	2090	1992	1905
12/6/2010	1841	1817	1841	1889	1969	2122	2337	2478	2451	2446	2371	2281	2237	2206	2183	2191	2239	2385	2500	2505	2482	2392	2269	2137
12/7/2010	2053	2013	2006	2009	2045	2162	2337	2425	2373	2314	2262	2196	2142	2100	2062	2050	2099	2273	2381	2394	2391	2338	2226	2126
12/8/2010	2065	2030	2031	2055	2097	2218	2409	2514	2461	2396	2322	2221	2165	2107	2065	2047	2071	2220	2339	2344	2339	2288	2185	2089
12/9/2010	2039	2019	2019	2036	2078	2193	2389	2482	2420	2351	2247	2186	2158	2150	2125	2114	2138	2229	2259	2234	2191	2107	2005	1877
12/10/2010	1785	1745	1719	1702	1714	1803	1975	2083	2051	2011	1985	1933	1884	1839	1808	1780	1767	1883	1964	1944	1921	1876	1798	1706
12/11/2010	1645	1599	1579	1568	1582	1625	1689	1767	1804	1830	1849	1842	1803	1777	1748	1759	1784	1874	1886	1848	1805	1754	1676	1605
12/12/2010	1560	1542	1550	1567	1596	1648	1713	1782	1828	1917	1962	1990	2017	2032	2024	2037	2072	2187	2212	2200	2166	2101	2031	1957
12/13/2010	1907	1899	1910	1940	2007	2141	2301	2428	2449	2439	2414	2371	2347	2334	2312	2305	2355	2461	2540	2536	2511	2436	2340	2213
12/14/2010	2142	2116	2113	2129	2177	2287	2464	2555	2515	2433	2335	2253	2201	2146	2106	2090	2124	2283	2397	2411	2410	2367	2270	2182
12/15/2010	2133	2125	2133	2155	2218	2341	2549	2645	2600	2500	2376	2284	2203	2158	2145	2165	2211	2325	2369	2348	2297	2217	2107	1996
12/16/2010	1914	1872	1848	1859	1885	1994	2138	2230	2233	2219	2218	2194	2151	2104	2074	2078	2100	2197	2253	2224	2187	2121	1999	1891
12/17/2010	1814	1777	1772	1769	1810	1919	2082	2195	2195	2190	2196	2172	2146	2139	2100	2049	2048	2166	2246	2237	2220	2188	2125	2043
12/18/2010	1972	1941	1912	1917	1913	1955	2026	2111	2148	2128	2059	1989	1916	1858	1826	1822	1850	2001	2102	2097	2053	2005	1949	1877
12/19/2010	1804	1764	1766	1778	1805	1855	1927	2002	2030	2033	1998	1929	1908	1892	1886	1879	1905	2003	2064	2039	2009	1964	1883	1801
12/20/2010	1724	1679	1666	1672	1703	1815	1956	2080	2082	2092	2080	2067	2039	2014	1979	1978	1995	2106	2168	2149	2120	2061	1961	1853
12/21/2010	1765	1708	1682	1684	1709	1802	1920	2038	2048	2058	2077	2075	2067	2052	2024	2010	2017	2092	2130	2094	2047	1981	1891	1777
12/22/2010	1693	1639	1610	1613	1641	1738	1890	2050	2114	2179	2200	2184	2164	2152	2115	2094	2101	2163	2192	2153	2117	2073	2005	1917
12/23/2010	1852	1798	1755	1741	1754	1819	1940	2053	2060	2040	2040	2021	1975	1943	1916	1897	1912	1993	2039	2016	1981	1926	1854	1749
12/24/2010	1673	1618	1587	1577	1596	1640	1707	1775	1790	1806	1803	1774	1745	1733	1733	1728	1741	1832	1868	1836	1813	1784	1746	1701
12/25/2010	1650	1602	1584	1569	1587	1615	1656	1716	1721	1754	1754	1730	1708	1671	1674	1675	1684	1758	1840	1843	1852	1856	1822	1783
12/26/2010	1727	1707	1694	1695	1702	1750	1801	1844	1855	1886	1874	1869	1840	1811	1814	1805	1835	1947	2016	2021	2011	1970	1919	1846
12/27/2010	1807	1795	1798	1823	1872	1947	2031	2114	2108	2131	2143	2131	2100	2060	2027	1999	1986	2095	2196	2192	2167	2096	2008	1909
12/28/2010	1836	1795	1780	1782	1815	1901	2025	2122	2140	2160	2143	2094	2005	1937	1920	1946	1964	2044	2086	2052	2035	1969	1888	1799
12/29/2010	1732	1697	1694	1707	1749	1842	1965	2061	2070	2033	1970	1909	1854	1811	1811	1829	1866	1971	2010	1986	1951	1886	1797	1678
12/30/2010	1599	1552	1523	1518	1529	1603	1699	1779	1800	1822	1836	1810	1767	1760	1703	1642	1618	1711	1778	1758	1726	1669	1583	1477
12/31/2010	1402	1348	1324	1302	1316	1358	1412	1470	1494	1513	1552	1550	1542	1533	1516	1493	1524	1603	1612	1553	1489	1437	1371	1318

LOAD RESEARCH

[170 IAC 4-7-4(2)(A)-(E)]

Load shape data including annual load shapes, seasonal load shapes, monthly load shapes, selected weekly load shapes, and daily load shapes are maintained by IPL at the rate class/customer class level.

IPL currently maintains a load research sample of 515 load profile meters. The distribution of these meters by rate and class are shown in the following table.

Load Research Meters by Rate and Class			
Rate RS	97	Rate SS	123
Rate RC	107	Rate SH	31
Rate RH	147		
Residential	351	Sm C & I	154

In addition to the Residential and Small Commercial/Industrial meters outlined above, all Large Commercial/Industrial have 15 minute profile metering. The 15 minute information provides load research and billing increment data for our demand sensitive customers.

Table 1 shows the load research sample design. In some cases, the strata were designed to permit the analysis of certain sub-groups within rates. The stratification criteria are shown for the following rates:

RS – Residential Basic Service

RC – Residential Basic Service with electric water heating

RH – Residential Basic Service with electric heat

SS – Small Commercial & Industrial Secondary Service (Small)

SH – Small Commercial & Industrial Secondary Service (Electric Space Conditioning

Table 1

STRATIFICATION CRITERIA BY RATE

Rate	# of Strata	Criteria
RS	4	high/low winter and high/low summer
RC	4	high/low winter and high/low summer
RH	5	small/large heat pump houses, small/large resistance houses and apartments
SS	6	survey small/large by manufacturing; non-manufacturing; billing manufacturing/non-manufacturing
SH	4	annual kWh

Hourly data is retained in EXCEL spreadsheets. Typical weekdays, weekend days, system peak days and rate peak days are available for the following groups:

classes
rates
heat pump houses
resistance houses
electrically heated apartments
electrically heated houses
rate SS manufacturing
rate SS non-manufacturing

Historical Billing Data

Historical billing data by account is maintained on an on-going basis. The monthly billed kWh is weather adjusted for each account.

The actual and normal cooling degree days (CDD's) and heating degree days (HDD's) are calculated for each of IPL's twenty billing districts. The number of days in each billing district is also calculated. Using this data coefficients are calculated for each billing district and used to weather adjust each accounts kWh usage.

IPL Historical Load Shapes Data Files Are Provided Electronically

Table A

Future Avoided Capacity and Production Costs Used to Evaluate DSM Programs

Year	Energy ($/kWh)	Capacity ($/kW-year)
1	0.0240	130.45
2	0.0242	130.45
3	0.0245	130.45
4	0.0530	130.45
5	0.0552	130.45
6	0.0560	130.45
7	0.0578	130.45
8	0.0626	130.45
9	0.0626	130.45
10	0.0678	130.45
11	0.0695	130.45
12	0.0712	130.45
13	0.0730	130.45
14	0.0748	130.45
15	0.0766	130.45
16	0.0785	130.45
17	0.0804	130.45
18	0.0824	130.45
19	0.0845	130.45
20	0.0866	130.45

Table C. Standard DSM Benefit/Cost Tests

DSM test objectives and valuation equation and components

	Standard Benefit / Cost Tests			
	RIM	TRC	UC	Participant
Goal/Impact of test				
Minimizes Utility costs			X	
Minimizes Customer rate impacts	X			
Achieves Customer fairness	X			
Minimizes Overall/Societal costs		X		
Maximizes Participant benefit				X
Test Benefit and Cost Components				
Benefits				
Production Cost Savings (energy)	X	X	X	
Capacity Cost Savings	X	X	X	
Participant Bill Savings				X
Costs				
Lost Revenue to Utility (Customer base)	X			
Incentives paid by Utility	X		X	
Program Administrative Costs	X	X	X	
Participant Costs (investment)		X		X

B/C test ratio (equation)

Benefit/Cost test equation is ratio of marked ("X" above). Benefits and Costs expressed as present values.

Annual Per Participant Data **[170 IAC 4-7-6(b)(5-8)]**

Table D

Program	kWh Savings	kW Savings	Bill Savings*	Net** Participant Cost	Market Penetration (% per MPS)
Residential A/C Load Management	11	1.00	$20.73	$0.00	8.4%
Residential Energy Assessment	464	0.06	$30.76	$0.00	1.8%
Residential Home Energy Audit	1,036	0.45	$68.69	$0.00	4.8%
Residential Lighting	57	0.01	$3.78	$1.66	45.7%
Residential Renewables	2,350	1.54	$155.81	$10,000.00	0.00%
Residential New Construction	1,810	0.22	$120.00	$785.71	0.02%
Residentilal 2nd Refrigerator Pickup	907	0.20	$60.13	$0.00	1.1%
Residential Low Income Weatherization	1,304	0.55	$86.46	$0.00	0.3%
Residential High Eff HVAC Incentives	696	0.40	$46.14	$0.00	0.2%
Residential Peer Comparison Reports	283	0.03	$18.76	$0.00	6.0%
Residential Multi-Family Direct Install	715	0.09	$47.40	$0.00	1.8%
Residential Room AC Pickup	113	0.60	$7.49	$0.00	0.1%
Residential Energy Efficient Schools-Kits	417		$27.65	$0.00	2.4%
C&I Custom-Business Solutions	29,879	4.50	$2,563.62	$2,289.86	0.4%
C&I Prescriptive	20,820	2.10	$1,786.36	$7,580.50	4.9%
C&I Renewables	2,350	1.50	$201.63	$10,000.00	0.0%
C&I A/C Load Management	40	3.50	$53.43	$0.00	1.1%
C&I School Audits	-	-	$0.00	$0.00	0.1%

* Based on 2010 projected rates
** One-time investment net of IPL incentives

Indianapolis Power & Light Company

3-Year Demand Side Management Plan

October 15, 2010

Table of Contents

Page

EXECUTIVE SUMMARY

Introduction

The Indiana Utility Regulatory Commission ("IURC" or "Commission") conducted a generic statewide investigation into energy efficiency and demand side management ("DSM") that culminated in a December 9, 2009 Order ("Generic DSM Order").[1] The Generic DSM Order established mandatory energy savings goals and other requirements regarding the implementation of five Core Programs constituting a mandatory minimum offering to be made by all utilities on a uniform basis through the State.[2] The Core Programs must be offered through a statewide Third Party Administrator ("TPA") and evaluated by a statewide Evaluation, Measurement and Verification ("EM&V") administrator. The Generic DSM Order acknowledges that the required energy savings and timeline mandated by the Commission's Order cannot be met solely through Core Programs. Consequently, the Generic DSM Order also recognizes the need for Core Plus Programs.

The Generic DSM Order established energy savings targets for jurisdictional electric utilities that will be required to meet an overall goal of 2% annual incremental cost-effective DSM savings within ten years. The annual savings goals are based on the average weather-normalized electric sales over each rolling prior three-year period. The result is that over a ten-year period the total energy savings required for IPL to comply with the statewide target is estimated to be more than 10% of current sales of electricity. In this 3-Year DSM Plan, IPL is proposing a portfolio of DSM programs that provide sufficient energy efficiency savings to meet the Commission's targets for 2011 through 2013 as well as additional savings to meet 2010 goals that will not be achieved in 2010.

The Commission's Phase I Order in *Re Petition of Indianapolis Power & Light Co.*, Cause No. 43623 (IURC 2/10/10) ("Phase I Order") authorized IPL to implement a portfolio of DSM programs and approved ratemaking to provide cost recovery for its Core and Core Plus Programs through Standard Contract Rider No. 22 (Core and Core Plus Demand-Side Management Adjustment). IPL has implemented the portfolio of DSM programs in order to begin achieving some of the energy savings required by the Generic DSM Order.

This current portfolio includes four of the five mandatory Core Programs. The Core Programs required by the Generic DSM Order include an energy efficient schools program described in the Generic DSM Order to include "[i]nformation and energy efficiency kits for K-12 schools, school building energy audits and access to prescriptive incentives available for commercial customers." Generic DSM Order at 36. IPL has requested authority to implement the school energy audits component of this Core Program in Cause No. 43911, which is currently pending before the Commission. While IPL is currently delivering the Core Programs that were approved in the "Phase I Order", IPL expects to transition the delivery of these programs to the TPA once the TPA contract is completed and approved by the IURC.

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1 The IURC issued its Phase II Order in Cause No. 42693 on December 9, 2009.

2 As used herein the term "Core Programs" refers to those programs required by the Generic DSM Order. The term "Core Plus Programs" refers to DSM programs or portions thereof that exceed or go beyond the type of programs contemplated to be Core Programs.

Over the past several months, the newly established DSM Coordination Committee ("DSMCC"), consisting of eleven (11) parties that represent utilities, consumer groups and the Office of Utility Consumer Counselor ("OUCC") has issued a Request for Proposal ("RFP") and conducted due diligence to select a TPA for the delivery of the five (5) Core Programs established by the Generic DSM Order. The DSMCC also must select an independent consultant to perform EM&V of the Core Programs on a statewide basis.

The 3-Year DSM Plan contained in this report is the result of IPL's research, planning and evaluation undertaken since IPL's submission of its request for approval of its current DSM programs which were approved by the Commission in February 2010 in Cause No. 43623. Developed primarily to comply with the Generic DSM Order, the Plan begins with prior program approvals but also reflects experience gained since its request in Cause No. 43623.

The following plan incorporates both Core and Core Plus Programs that have been selected by IPL to achieve the energy savings mandated by the Generic DSM Order over the next three years (2011-2013) (the "3-Year DSM Plan"). The 3-Year DSM Plan includes both expanding IPL's current Core and Core Plus Programs and implementing new programs, including the addition of programs targeting commercial and industrial customers.

As required by the Generic DSM Order, IPL will also file annual reports with the Commission on or before July 1st of each year. The annual report, prepared in consultation with the IPL Oversight Board and in cooperation with the EM&V administrator, will summarize the (1) accomplishments of the previous year, (2) proposed changes in the 3-Year DSM Plan and the rationale for the proposed changes, and (3) revised program budgets and goals for the following year. It is currently anticipated that IPL will file a subsequent DSM plan on or before July 1, 2013, to achieve the energy savings mandated by the Generic DSM Order over the three year period 2014-2016.

DSM Plan Savings Targets and Objectives

The 3-Year DSM Plan is designed to create cumulative energy efficiency savings of 320,852 megawatt hours ("MWh") and cumulative demand savings of 94,555 kilowatts ("kW") by the end of Program Year 3. The Tables below reflect the program goals (including energy/demand impacts and program budget) for the (1) 3-Year DSM Plan, (2) Core Programs included in the 3-Year DSM Plan, and (3) Core Plus Programs included in the 3-Year DSM Plan.

3-Year DSM Plan[3]

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	293,305	81,513	81,513	26,458	26,458	$18,361,000
Year 2	356,466	110,369	191,882	32,669	59,127	$21,278,000
Year 3	415,903	128,970	320,852	35,428	94,555	$24,214,000
Total	1,065,674	320,852		94,555		$63,853,000

3 Energy/Demand Impacts shown in Table 1 do not include savings attributable to Rate REP. The Program Budget includes costs associated with the Customer Outreach and Education Program.

IPL Core Programs

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	246,446	59,735	59,735	16,086	16,086	$11,192,000
Year 2	268,664	70,634	130,369	19,262	35,347	$12,913,000
Year 3	329,406	87,533	217,900	23,849	59,197	$15,475,000
Total	844,516	217,902		59,197		$39,580,000

IPL Core Plus Program

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh-Cumulative	Demand Savings kW-Annual Incremental	Demand Savings kW-Cumulative	Program Budget
Year 1	46,859	21,779	21,779	10,372	10,372	$5,662,000
Year 2	87,802	39,734	61,513	13,407	23,779	$7,003,000
Year 3	86,497	41,439	102,952	11,579	35,358	$7,312,000
Total	221,158	102,952		35,358		$19,977,000

DSM Portfolio Analysis and Modeling

The DSM planning effort that resulted in the 3-Year DSM Plan utilized a combination of sources to develop the program costs and impacts. First, IPL leveraged many of the inputs and results from the 2008 electric DSM market potential study – IPL DSM Action Plan: Final Report dated July 31, 2008 prepared by Forefront Economics and H. Gil Peach & Associates LLC (the "MPS"). Second, during the procurement and planning process that led to current program delivery, IPL obtained information on pricing and impacts that has been incorporated.

Third, IPL's recent experience with current programs has resulted in adjustments to previously approved program plans.

The program costs were modeled by Vista Energy Group, Inc. ("Vista") to determine the program economics under the direction of IPL staff. Vista was also utilized for research and analytical support.

Below are the summary results for the economic evaluation of the 3-Year DSM Plan.

Table 4

Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
Residential Prescriptive Lighting	$17,440	7.87	$7,448	3.46	($6,540)	0.62	$7,403	2.72
Residential Home Energy Audit	$33,059	23.47	$15,689	2.08	($11,918)	0.72	$18,052	2.22
Residential Low Income Weatherization	$2,751	7.85	$608	1.31	($1,963)	0.57	$788	1.40
Energy Efficient Schools-Kits	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68
Energy Efficient Schools-Audits	($273)	0.00	($605)	0.00	($605)	0.00	($1,078)	0.00
Commercial and Industrial Rebate Program	$166,317	6.75	$90,541	7.54	($48,314)	0.68	$83,289	3.51
TOTAL-Core Programs	**$226,922**	**7.75**	**$114,609**	**4.13**	**($74,613)**	**0.67**	**$111,008**	**2.97**
Core Plus-Indrect Costs	$0	0.00	($4,008)	0.00	($4,008)	0.00	($4,008)	0.00
Second Refrigerator Pickup and Recycling	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80
Residential Room AC Pickup and Recycling	$38	0.00	$144	4.15	$129	3.13	$163	6.87
Residential Air Conditioning Load Management (ACLM)	$2,103	0.00	$11,832	2.51	$11,657	2.46	$13,760	3.33
C/I Air Conditioning Load Management (ACLM)	$410	0.00	$2,534	3.03	$2,496	2.94	$2,906	4.30
Residential Renewables Incentives Program	($85)	0.81	$37	1.18	($178)	0.58	($263)	0.50
Commercial and Industrial Renewables Incentives Program	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49
Residential Peer Comparison Energy Reports	$3,938	0.00	$437	1.16	($3,243)	0.47	$695	1.29
Residential Energy Assessment Program	$2,876	18.15	$824	2.26	($1,327)	0.53	$1,012	2.55
Residential New Construction Energy Star Plus Program	$1,031	7.35	$294	1.83	($783)	0.45	$248	1.52
Residential High Efficiency HVAC Incentives Program	$3,755	2.42	$3,337	3.52	($685)	0.84	$1,815	1.56
Multi-Family Direct Install Program	$14,636	0.00	$7,511	6.64	($5,382)	0.62	$9,254	19.84
Commercial and Industrial Business Energy Incentives Program	$21,878	4.77	$11,811	4.44	($12,708)	0.55	$9,170	2.18
Customer Energy Management System (CEMS)	$1,447	0.00	$2,393	2.53	$1,358	1.52	$2,605	3.30
TOTAL-Core Plus Programs	**$56,808**	**7.06**	**$39,218**	**2.49**	**($15,062)**	**0.81**	**$40,150**	**2.37**
All Programs	**$283,730**	**7.60**	**$153,827**	**3.45**	**($89,675)**	**0.71**	**$151,156**	**2.77**

TECHNOLOGY REVIEW

Description

IPL's measure screening process began with the comprehensive list of DSM programs and measures identified in the MPS. The list was reviewed and updated to determine whether any of the measures not currently in IPL's DSM program portfolio should be re-examined. These measures primarily include technologies which were marginally close to passing the benefit-cost screening in the MPS but due to economics at that time were not included in any programs. However, since IPL's system data, including avoided costs, have changed since the MPS, re-evaluating some of the measures was appropriate.

A Technology Analysis was conducted for each of these measures. This analysis characterizes the benefits and costs of each measure assuming adoption by a single participant. It considers the relevant costs and benefits of each measure without any marketing dynamics. It does not include delivery costs, incentives or program infrastructure requirements. It simply looks at the avoided cost benefits versus the incremental technology costs.[4] If a program cannot pass the Technology Analysis screening, adding program costs will only make the option more uneconomic. The Technology Analysis is a common metric and provides a quantitative method of identifying candidate technologies.

The analysis is based on the following components:

(1) Benefits- the annual avoided cost benefit for each measure over the life of the measure.

(2) Costs- the incremental technology cost for a given measure.

The Net Present Value ("NPV") of the avoided cost benefits of each measure is calculated and a Benefit Cost Ratio ("BCR") is determined. The technology data used in the analysis was taken from the IPL MPS. In a few cases, information from a recently completed Commonwealth Electric Company study was incorporated.[5] The results of the technology analysis for IPL are shown below.

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4 The Technology Analysis is designed to present the Total Resource Cost perspective net of any program costs based on a single adopter.

5 Commonwealth Edison Company, *Energy Efficiency and Demand Response Plan*, November 2007.

ID	Program Name	TRC Test	
		NPV $	BCR
1	High Efficiency Refrigerator- MPS	($52)	0.74
2	High Efficiency Room AC- MPS	($53)	0.81
3	High Efficiency Clothes Washer-MPS	$333	1.83
4	High Efficiency Clothes Washer-ComEd	($16)	0.97
5	High Efficiency Electric Water Heater-ComEd	($12)	0.83
6	High Efficiency Dishwasher-MPS	$31	1.61
7	High Efficiency Dishwasher-ComEd	$9	1.07
8	Energy Efficient CAC- 13-15 SEER-MPS	$50	1.06
9	Energy Efficient HP- 13-15 SEER-MPS	$348	1.35
10	Electric AC Tune Up	($63)	0.31

CUSTOMER OUTREACH AND EDUCATION

Program 1: Online Energy Feedback

Program Description

This program will be available for all IPL customers. For energy-only metered customers, daily energy consumption along with a historical view will be displayed on a one-day delay basis through a web-portal. Currently, IPL's demand metered customers are able to access energy, demand and reactive power consumption through a tool known as PowerView. This is updated each billing cycle. IPL envisions the new tool will provide similar information on a one-day delay basis. Customers with future AMI meters will be able to see 15-minute interval data on a one-day delay basis. Approximately 10,400 AMI meters will be installed by third quarter of 2011 for all demand metered customers and some energy-only metered customers.

Energy/Demand Savings and Program Budget

IPL expects some energy savings to occur from the Online Energy Feedback program.[6] Those anticipated savings vary by rate class. IPL assumed 2% participation by residential and small commercial and industrial participants and estimated 2% energy savings per participant. This estimate is based upon a review of a limited number of studies including those from ACEEE.[7] For estimates of savings for small commercial customers, IPL used average small commercial consumption based on aggregate 2009 rate class data. For large C&I customers, IPL assumed a 5% participation rate and estimated 3% energy savings per participant. This was based upon review of savings by IPL large C&I customers currently utilizing advanced metering technology as well as informal interviews with large C&I customers.

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6 IPL did not use projected energy savings from this program for purposes of demonstrating its compliance with the Generic DSM Order's energy savings goals because there were insufficient studies to support reliable projections.

7 "Residential Energy Use Behavior Change Pilot" by Carroll, Ed; Hatton, Eric; and Brown, Mark.

Program Participation, Energy/Demand Impacts and Program Budget						
Program Year	Participants	Energy Savings MWh -Annual Incremental	Energy Savings MWh Cumulative	Demand Savings MW Annual Incremental	Demand Savings MW Cumulative	Program Budget[8]
Year 1	3,019	10,065	10,065	4.7	4.7	$612,000
Year 2	9,504	1,800	11,865	0.0	4.7	$178,000
Year 3	9,504	0	11,865	0.0	4.7	$145,000
Total	22,027	11,865		4.7		$935,000

Marketing Plan

IPL will reach out to all customers who may use the online energy feedback tools through bill inserts, radio, the IPL website, print and electronic media, community events, meetings and specialized marketing materials. IPL Account Representatives will interface with commercial and industrial customers through regular channels including the IPL "Powerpoints" newsletter. Where practical, ties to this program may be embedded in DSM educational/outreach programs.

Delivery Method

IPL will likely roll out specific software functions incrementally. For example, providing one day delayed energy consumption for all energy only metered customers (using nightly AMR data) may be followed by providing 15-minute interval data for customers metered with new AMI meters for energy only and demand metered customers. Specific timelines will be developed with program vendors. The tools will be accessible through www.IPLpower.com. IPL may also conduct training workshops.

8 Program Budget reflects the total cost of the program after DOE funding is applied. DOE funds will cover approximately 40% of the implementation cost in Years 1 and 2.

Program 2: Energy Consumer Behavior Study

Program Description

Leading energy professionals and public policy leaders have highlighted the need to engage in analyses of energy consumer behavior to better understand what motivates customers to change their energy behavior.[9] IPL also recognizes the complex challenge of blending new energy technologies with understanding customer behavior. Therefore, IPL proposes to work with the DSM OSB and energy professionals versed in consumer science to develop and implement a study of Indiana energy consumer behavior. This could include interviews, surveys, focus groups, and analysis of metered energy data. IPL intends to utilize the study results of Indiana-specific customer behavior to shape future programs.

Program Budget

The budget for this study is based primarily upon surveying customers, consultant services and modeling requirements following high level discussions with consumer science and energy professionals at Purdue University and Christensen and Associates. This will be further defined based on the scope of work.

Program Year	Program Budget
Year 1	$0
Year 2	$125,000
Year 3	$125,000
Total	$250,000

Marketing Plans

Not applicable.

Delivery Mechanism

Not applicable.

[9] See ACEEE report "Advanced Metering Initiatives and Residential Feedback Programs: A Meta-Review for Household Electricity-Saving Opportunities." June 2010, p. iv.

Program 3: Smart Appliance Pilot

Program Description

Appliance manufacturers are engaged with designing and commercializing products to automatically respond to price signals through advanced meters or information from Home Energy Management Systems ("HEMS"). Given the potential promise of this early stage technology, IPL proposes to collaboratively develop with its OSB a smart appliance rebate program for implementation in Program Year 3. This pilot rebate program for appliance purchases will reimburse consumers the premium required for the initial investment, in exchange for enabling limited scope of demand response and sharing information. Cost benefit tests will be completed and provided to the Commission prior to implementation through annual reports.

Program Budget

A $250,000 budget for this pilot is based upon providing an estimated 25 % rebate of the purchase premium to participating customers. See the table below for representative participation and rebate amounts based on preliminary research in this area.[10]

	Standard Appliance Price	Smart Appliance Price	Distribution of Dollars	# Appliances Rebated	Total IPL Cost
Electric Dryer	$450	$540	25.0%	421	$56,835
Dishwasher	$350	$420	25.0%	542	$56,910
Oven/Range	$600	$720	25.0%	316	$56,884
Water Heater	$450	$1,500	25.0%	151	$56,643
Sub-Total				**1,430**	**$227,272**
Program Administration					**$22,727**
Total				**1,430**	**$250,000**

Program Year	**Program Budget**
Year 1	$0
Year 2	$125,000
Year 3	$125,000
Total	$250,000

10 Standard Price based on Sears' website. Specific prices may vary.

Marketing Plans

To be developed collaboratively. IPL anticipates inviting customers with HEMS installations to participate in this program, but is willing to consider all residential customers based on analysis.

Delivery Mechanism

IPL proposes to focus on those customers who agree to HEMS and Time of Use ("TOU") rates to optimize savings, however, those without TOU rates may also provide meaningful information about consumer behavior and preferences. IPL intends to work with a local appliance retailer to implement this program.

Program 4: Program Outreach Messaging and Other Indirect Costs

Program Description and Delivery

Program Outreach Messaging includes those activities that will be required to successfully communicate to IPL's customers the growing importance of understanding their energy consumption and how to use energy more efficiently. Moreover, IPL must be able to make its customers aware of the information and programs available to assist them in these efforts.

In their daily lives, IPL's customers do not necessarily focus on energy efficiency. In order to implement successful programs, IPL must understand what messages will cause customers to consider their energy consumption and then motivate them to change their behavior. Outreach efforts will incorporate these key messages into a general awareness campaign that will be delivered through a variety of channels that may include bill inserts, the IPL website, radio, print and other mass media. This awareness campaign will help drive the behavior and decisions that IPL desires.

In addition to awareness and education, indirect expenses include appropriate training and development for program staff, memberships in relevant organizations, including those that can cost-effectively provide research into DSM-related subjects, and the addition of staff for overall portfolio analysis and reporting.

Program Budget

Program Year	Program Budget
Year 1	$895,610[11]
Year 2	$934,537
Year 3	$1,032,456
Total	$2,862,603

[11] Year 1 Program Budget includes $80,000 related to the integration of the Statewide Core Programs.

CORE PROGRAMS

Program 1: Residential Lighting Program

Program Description

The Residential Lighting Program is an existing IPL program that has been available to IPL customers since 2003. This program delivery is expected to be transitioned to the TPA on or about January 1, 2011. The goal of the Residential Lighting Program is to increase the penetration of high efficiency Energy Star ("ES") qualified lighting in the homes of IPL residential customers. This program will provide IPL residential customers with the opportunity to purchase energy efficient light bulbs (primarily Compact Fluorescent Lights ("CFLs") at reduced prices at participating area retail stores.

Energy/Demand Savings, Program Budget and Cost Effectiveness

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013). The expected demand and energy savings are representative of responses to the TPA RFP, which indicated that these savings will be achievable by the prospective TPA. The proposed program budget represents IPL's current understanding of the costs for the program to be delivered by a TPA.

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS:RESIDENTIAL LIGHTING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Prescriptive Lighting	226,233	13,009	1,598	-	-	$404	$681	$1,085
2012	Residential Prescriptive Lighting	245,750	27,017	3,318	-	-	$436	$563	$988
2013	Residential Prescriptive Lighting	300,958	44,172	5,425	-	-	$533	$667	$1,189
TOTAL		774,941			-	-	1,372	1,990	3,262

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Prescriptive Lighting	$17,440	7.87	$7,448	3.48	($5,640)	0.62	$7,403	2.72
	TOTAL	$17,440	7.87	$7,448	3.48	($5,640)	0.62	$7,403	2.72

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Prescriptive Lighting	2011	$ 149,000	$ 42,000.0	$ -	$ 1.94	$ 47,000.0	$ 1.77		228,233	0.80
Residential Prescriptive Lighting	2012		$ 43,000.0	$ -	$ 1.90	$ 43,000.0	$ 1.77		245,750	0.80
Residential Prescriptive Lighting	2013		$ 45,000.0	$ -	$ 1.86	$ 52,000.0	$ 1.77		300,958	0.80

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL - EE savings are slightly less than EE savings represented in Schedule E - due to rounding in modeling.
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs assumes 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623

Eligible Customers

This program will be available to all IPL Residential Customers.

Marketing Plan

The TPA will be responsible for all program marketing strategy. Marketing efforts may include effective signage in participating retail stores, information on the IPL web site and use of bill inserts and/or messages, and educational outreach at events such as Earth Day Indiana and other similar community events.

Delivery Method

This program will be delivered by Wisconsin Energy Conservation Corporation ("WECC") until the program is transitioned to the Statewide TPA for delivery.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 2: Residential Home Energy Audit

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-RESIDENTIAL HOME ENERGY AUDIT PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Home Energy Audit	10,588	10,969	4,765	-	-	$380	$3,761	$4,142
2012	Residential Home Energy Audit	15,083	26,595	11,652	-	-	$541	$5,013	$5,554
2013	Residential Home Energy Audit	18,935	46,212	20,073	-	-	$680	$5,631	$6,311
TOTAL		44,606			-	-	$1,601	$14,405	$16,007

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Home Energy Audit	$33,059	23.47	$15,889	2.06	($11,918)	0.72	$18,052	2.22
	TOTAL	$33,059	23.47	$15,889	2.06	($11,918)	0.72	$18,052	2.22

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Home Energy Audit	2011	$ 57,000	$ 28,000	$ -	$ 329.00	$ 193,000	$ 35.90		10,588	0.90
Residential Home Energy Audit	2012		$ 29,000	$ -	$ 313.00	$ 263,000	$ 35.90		15,083	0.90
Residential Home Energy Audit	2013		$ 30,000	$ -	$ 280.00	$ 299,000	$ 35.90		18,935	0.90

10.4.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses provided to the RFP for a Statewide TPA - derived from number of participants and per participant incentive amount
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admin
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

Program 3: Residential Low Income Weatherization

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-RESIDENTIAL LOW INCOME WEATHERIZATION PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Low Income Weatherization	437	670	240	-	-	$105	$459	$564
2012	Residential Low Income Weatherization	615	1,372	579	-	-	$148	$575	$723
2013	Residential Low Income Weatherization	767	2,372	1,000	-	-	$184	$679	$863
TOTAL		1,819			-	-	$437	$1,713	$2,150

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Low Income Weatherization	$2,751	7.85	$808	1.31	($1,963)	0.57	$788	1.40
	TOTAL	$2,751	7.85	$808	1.31	($1,963)	0.57	$788	1.40

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Low Income Weatherization	2011	$ 5,000	$ 42,000.00	$ -	$ 886.00	$ 25,000.00	$ 240.00		437	1.00
Residential Low Income Weatherization	2012		$ 43,000.00	$ -	$ 813.00	$ 32,000.00	$ 240.00		615	1.00
Residential Low Income Weatherization	2013		$ 45,000.00	$ -	$ 776.00	$ 39,000.00	$ 240.00		767	1.00

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

Program 4: Energy Efficient Schools - Kits

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-ENERGY EFFICIENT SCHOOLS-KITS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Energy Efficient Schools-Kits	6,847	2,855	-	-	-	$404	$396	$800
2012	Energy Efficient Schools-Kits	6,868	5,719	-	-	-	$405	$306	$711
2013	Energy Efficient Schools-Kits	8,333	9,194	-	-	-	$492	$314	$806
TOTAL		22,048		-	-	-	$1,301	$1,017	$2,317

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Energy Efficient Schools-Kits	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68
	TOTAL	$7,627	0.00	$928	1.43	($5,073)	0.38	$2,554	3.68

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Energy Efficient Schools-Kits	2011	$ 40,000	$ 28,000	$ -	$ 43.00	$ 34,000	$ 59.00		6,847	1.00
Energy Efficient Schools-Kits	2012		$ 29,000	$ -	$ 36.00	$ 30,000	$ 59.00		6,868	1.00
Energy Efficient Schools-Kits	2013		$ 30,000	$ -	$ 30.00	$ 34,000	$ 59.00		8,333	1.00

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Incentives are representative of responses provided to the RFP for a Statewide TPA - derived from number of participants and per participant incentive amount.
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admin
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from IPL

Eligible Customers

The program will be available to K-12 students/schools in the IPL service territory. Initially the program may focus on a limited number of school and students in a particular grade.

Marketing Plan

The TPA will be responsible for all program marketing strategy. The program will be marketed directly to K-12 schools in IPL's service territory as well as other channels identified by the TPA. A list of the eligible schools may be provided by IPL to the TPA for direct marketing to the schools via email, phone and mail (if necessary) to obtain desired participation levels in the program.

Delivery Method

This program will continue to be delivered on IPL's behalf by the National Energy Foundation (NEF) until the program is transitioned to the Statewide TPA for delivery.

Approval Status

Although not a named program in IPL's request and approval, the Energy Efficiency Schools – Kits Program was included in the budget for Indirect Costs as requested and approved by the Commission in Cause No. 43623. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 5: Energy Efficient Schools- Audits

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-ENERGY EFFICIENT SCHOOLS-AUDITS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Energy Efficient Schools-Audits	14	-	-	-	-	$0	$301	$301
2012	Energy Efficient Schools-Audits	12	-	-	-	-	$0	$262	$262
2013	Energy Efficient Schools-Audits	13	-	-	-	-	$0	$301	$301
TOTAL		39	-	-	-	-	$0	$864	$864

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Energy Efficient Schools-Audits	($273)	0.00	($805)	0.00	($805)	0.00	($1,075)	0.00
	TOTAL	($273)	0.00	($805)	0.00	($805)	0.00	($1,075)	0.00

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Energy Efficient Schools-Audits	2011		$ 28,000	$ -	$ 19,500.00		$ -		14	1.00
Energy Efficient Schools-Audits	2012		$ 29,000	$ -	$ 19,416.67		$ -		12	1.00
Energy Efficient Schools-Audits	2013		$ 30,000	$ -	$ 20,846.15		$ -		13	1.00

10.4.2010

Number of participants is representative of responses provided to the RFP for a Statewide TPA.
Energy savings will be attributable to the C&I Prescriptive program, none associated with the actual audit
The proposed program budget represents IPL's current understanding of the costs for a TPA to deliver the program as well as well as IPL costs for program admir
Net to Gross Ratios are from IPL

Eligible Customers

K-12 Schools in IPL's service territory will be eligible for this program.

Marketing Plan

The TPA will be responsible for all program marketing strategy. The Energy Efficient Schools Program targets K-12 schools that are greater than ten (10) years old.

Delivery Method

This program will be delivered by the Statewide TPA.

Approval Status

Approval of this program is currently pending in Cause No. 43911. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 6: Commercial & Industrial Rebate Program

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PROGRAMS-COMMERCIAL AND INDUSTRIAL (C&I) REBATE PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Rebate Program	327	32,331	9,483	-	-	$2,664	$1,646	$4,300
2012	C/I Rebate Program	336	69,665	19,899	-	-	$3,255	$1,419	$4,674
2013	C/I Rebate Program	400	115,951	32,699	-	-	$4,471	$1,534	$6,005
TOTAL		1,063			-	-	$10,380	$4,599	$14,979

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Rebate Program Yr 1	$40,095	5.99	$23,827	6.54	($10,173)	0.73	$21,422	3.21
	C/I Rebate Program Yr 2	$52,768	6.74	$28,926	7.65	($15,165)	0.69	$26,613	3.53
	C/I Rebate Program Yr 3	$73,434	7.27	$37,788	8.28	($22,926)	0.66	$35,254	3.70
	TOTAL	$166,317	6.75	$90,541	7.54	($48,314)	0.68	$83,289	3.51

Program Name	Year	Start-Up Cost	IPL Fixed Costs	Materials / Training (Marketing Costs)	Unit Variable (M&V)	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Rebate Program-Yr1	2011	$ 126,000	$ 98,000	$ -	$ 3,756	$ 194,000	$ 8,116		327	0.80
C/I Rebate Program-Yr1	2012									
C/I Rebate Program-Yr1	2013									
C/I Rebate Program-Yr2	2011									
C/I Rebate Program-Yr2	2012		$ 101,000	$ -	$ 3,290	$ 213,000	$ 9,688		336	0.80
C/I Rebate Program-Yr2	2013									
C/I Rebate Program-Yr3	2011									
C/I Rebate Program-Yr3	2012									
C/I Rebate Program-Yr3	2013		$ 104,000	$ -	$ 2,884	$ 276,000	$ 11,178		400	0.80

10.09.2010

Number of participants is derived from representative responses provided to the RFP for a Statewide TPA.
Energy Savings are from Schedule E of RFP for a Statewide TPA - target savings requirements by Core Program were provided by IPL
Demand savings are derived from representative responses to the RFP for a Statewide TPA.
Incentives are representative of responses to the TPA RFP based on number of participants and per participant incentive amount.
Start Up Costs are based on IPL proportional share of the total program start up costs as estimated by TPA RFP responses
The proposed program budget represents IPL's current understanding of the costs for the TPA to deliver the program
Evaluation Costs are assumed to be 5% of program costs
Start Up Costs are based on IPL's assumed proportional share of the total Statewide TPA program start up costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

CORE PLUS PROGRAMS

Program 1: Residential Energy Assessment Program

Program Description

The Residential Energy Assessment Program is an existing IPL program, launched in July 2010, which educates consumers on their home energy use and identifies potential areas where they can take action to reduce their energy consumption. This program will continue to be promoted with a combination of marketing materials directing customers to IPL's website to complete an online audit of their home. The web based energy audit tool (branded as *Home Energy Inspector*) provides customers with information on: (1) no or low cost ways to reduce energy consumption, (2) identifies possible investment opportunities in energy efficiency improvements and (3) describes how a customer's energy bill is calculated. Armed with this information, customers are better equipped to make informed decisions in managing their consumption and energy costs. Customers that complete the brief energy assessment will be provided an energy efficiency kit at no charge that includes low-cost, easy-to-install energy saving water fixtures and CFLs for self installation.

IPL plans to deliver this program collaboratively with Citizens Gas to the extent that Citizens has sufficient funds available in their DSM budget to co-fund this program.

Energy/Demand Savings, Program Budget and Cost Effectiveness

Per participant savings (kWh)	464
Per participant savings (kW)	0.055
Measure Life	7 years
Net to Gross Ratio	0.80

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL ENERGY ASSESSMENT PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Energy Assessmnent	3,000	1,392	166	-	-	$60	$173	$233
2012	Residential Energy Assessmnent	3,000	2,784	330	-	-	$60	$173	$233
2013	Residential Energy Assessmnent	3,000	4,176	495	-	-	$60	$173	$233
TOTAL		9,000			-	-	$180	$519	$699

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Energy Assessment	$2,876	18.15	$824	2.26	($1,327)	0.53	$1,012	2.55
	TOTAL	$2,876	18.15	$824	2.26	($1,327)	0.53	$1,012	2.55

Program Name	Year	Marketing Costs	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Web Tool Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Energy Assessment	2011	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80
Residential Energy Assessment	2012	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80
Residential Energy Assessment	2013	$ 15,000	$ 47,000	$ 100,000	-	$ 11,000	$ 20.00		3,000	0.80

10.09.2010

Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010

Annual Fixed costs include WECC direct costs and allocated Admin costs based on estimated program budget

Annual Materials costs include $65,000 for online energy audit tool

Net To Gross ratio from Forefront Economics MPS Report - July 2008

Per unit incentive is estimated IPL cost share of Energy Efficiency kit. Citizens Gas will share in program costs

Program 2. Residential Second Refrigerator Pick Up and Recycling Program

Program Description

The Second Refrigerator Pick Up and Recycling Program is an existing program that provides for the removal and disposal of operable but inefficient secondary refrigerator and freezer units. Many households retain these older refrigerator or freezer units in a garage or basement and often do not realize how inefficient they are. This program provides education on the cost of keeping an older, often underutilized unit along with the opportunity to have the unit removed at no cost and recycled in an environmentally-sound manner.

This program was introduced to IPL residential customers in May, 2010. IPL is proposing an expansion of the existing program to provide for the collection of 4,000 refrigerators and freezers per year. Refrigerators and freezers must be in working condition to be eligible for this program. There is currently a limit of two units that can be picked up per household per year.

Residential customers with eligible units can schedule a date to have the unit(s) picked up at no charge and will also receive an incentive payment for each unit. The current incentive the customer receives for allowing the removal of the appliance is $30 per unit. IPL's contractor removes the units and hauls the appliance to a facility where the components, including cooling systems and insulation which are potentially harmful to the environment, can be completely recycled. The process used captures hazardous materials and recycles over 95% of the metal, glass and plastic components.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	907
Per participant savings (kW)	0.20
Measure Life	5 years
Net to Gross Ratio	1.0

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-SECOND REFRIGERATOR PICKUP AND RECYCLING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Second Ref Pickup and Recycling	4,000	3,628	800	-	-	$120	$534	$654
2012	Second Ref Pickup and Recycling	4,000	7,256	1,600	-	-	$120	$534	$654
2013	Second Ref Pickup and Recycling	4,000	10,684	2,400	-	-	$120	$534	$654
TOTAL		12,000			-	-	$360	$1,602	$1,962

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
2	Second Ref Pickup and Recycling	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80
	TOTAL	$4,807	0.00	$2,060	2.13	($2,119)	0.65	$2,688	2.80

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Second Ref Pickup and Recycling	2011		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00
Second Ref Pickup and Recycling	2012		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00
Second Ref Pickup and Recycling	2013		$ 14,000	$ 25,000	$ 116.00	$ 31,000	$ 30.00		4,000	1.00

10.09.2010

Participants and program costs based on proposal from JACO Environmental.
Energy & Demand savings from Forefront Economics MPS Report dated July 2008.
Evaluation Costs assumes 5% of program costs
Net to Gross Ratios are from Cause No. 43623 - Forefront Economics MPS Report - July 2008

Eligible Customers

All IPL residential customers.

Marketing Plan

IPL will share marketing responsibilities for this program with the program administrator. IPL has marketed the existing Second Refrigerator Pick Up and Recycling Program under the tag line of "Ditch Your Fridge. Chill Your Bill." IPL will continue to use that program name and will use radio, IPL bill inserts and newsletters, print ads and community outreach events to publicize the availability of the program.

Delivery Method

This program is being delivered for IPL by JACO Environmental Inc. To better meet the demand for an expanded program, JACO is committed to opening a new recycling facility in Indianapolis. This facility would also serve as the base for collection crews and trucks.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 3: Residential Room Air Conditioner Pick Up and Recycling Program

Program Description

The Room Air Conditioner Pick Up and Recycling Program provides for the removal and disposal of operable but inefficient window/room air conditioner units. This program is intended as an add-on to the Second Refrigerator Pick Up and Recycling Program, in that a customer who schedules a pick up of a refrigerator or freezer unit may also relinquish an older, inefficient room air conditioner unit and receive an incentive for both appliances. The proposed incentive for a room air conditioner unit is $20. AC unit pick ups will only be scheduled for customers who are also having a refrigerator and / or freezer picked up on the same visit.

The units will be taken to the recycling facility and decommissioned and dismantled in an environmentally-responsible way. This program will ensure that these older, inefficient units are permanently taken off the electric grid.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	113
Per participant savings (kW)	0.60
Measure Life	3 years
Net to Gross Ratio	0.80

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL ROOM AC PICKUP AND RECYCLING PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Room AC Pickup and Recycling	320	36	192	-	-	$6	$10	$16
2012	Room AC Pickup and Recycling	320	72	384	-	-	$6	$10	$16
2013	Room AC Pickup and Recycling	320	108	576	-	-	$6	$10	$16
TOTAL		960			-	-	$19	$30	$49

Results by Program

ID	Program Name	Participant Test NPV, 000$	Participant Test BCR	Utility Test NPV, 000$	Utility Test BCR	RIM Test NPV, 000$	RIM Test BCR	TRC Test NPV, 000$	TRC Test BCR
3	Room AC Pickup and Recycling	$38	0.00	$144	4.15	$129	3.13	$163	6.67
	TOTAL	$38	0.00	$144	4.15	$129	3.13	$163	6.67

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recuring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Room AC Pickup and Recycling	2011		$ -	$ -	$ 31.00		$ 20.00		320	0.80
Room AC Pickup and Recycling	2012		$ -	$ -	$ 31.00		$ 20.00		320	0.80
Room AC Pickup and Recycling	2013		$ -	$ -	$ 31.00		$ 20.00		320	0.80

10.09.2010

Participants, Incentives and program costs based on proposal from JACO Environmental, Inc.
Energy & Demand savings based on proposal from JACO Environmental, Inc.
Net to Gross Ratios are from IPL

Eligible Customers

All IPL residential customers.

Marketing Plan

IPL will share marketing responsibilities for this program with the program administrator. IPL will revise its marketing materials for the Second Refrigerator Pick Up and Recycling Program ("Ditch Your Fridge. Chill Your Bill.") to include a reference to incentives available for older, working room air conditioners. The same marketing channels will be used.

Delivery Method

This program will be delivered for IPL by JACO Environmental Inc.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 4: Residential Air Conditioning Load Management ("ACLM") Program

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	11
Per participant savings (kW)	1.00
Measure Life	10 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL AIR CONDTIONING LOAD MANAGEMENT (ACLM) PROGRAM

Savings By Year

Year	Program Name	New Participants in Year	Energy MWh Savings in Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residental Air Conditonong Load Management (ACLM)	5,000	55	5,000	-	-	$100	$1,621	$1,721
2012	Residental Air Conditonong Load Management (ACLM)	5,000	110	10,000	-	-	$200	$1,621	$1,821
2013	Residental Air Conditonong Load Management (ACLM)	5,000	165	15,000	-	-	$300	$1,621	$1,921
TOTAL		15,000			-	-	$600	$4,863	$5,463

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Air Conditonong Load Management (ACLM)	$2,103	0.00	$11,832	2.51	$11,657	2.46	$13,760	3.33
	TOTAL	$2,103	0.00	$11,832	2.51	$11,657	2.46	$13,760	3.33

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt)	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Air Conditionong Load Management (ACLM)	2011		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00
Residential Air Conditionong Load Management (ACLM)	2012		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00
Residential Air Conditionong Load Management (ACLM)	2013		$ 344,000	$ 247,000	$ 200.00	$ 30,000	$ -	$ 20.00	5,000	1.00

Unit variable of $200 based on switch cost and contractor installation costs
Program budget based on current switch and Contractor costs - in addition to switch installation contractor costs includes phone center and customer service calls as well as as well as historical knowledge of necessary marketing costs.
Marketing costs are based on IPL historical experience. Ongoing Program Costs are primarily related to ongoing Switch Metered Maintenance Costs.
Energy and Demand savings from Forefront Economics MPS report-July 2008 - Based on IPL Load Research Analysis
Incentives reflect annual credit to program participatants of $20
Evaluations costs from Forefront Economics MPS Report - July 2008

Eligible Customers

This program is available to residential customers with central air conditioners or heat pumps. If customers do not own their home but live in a separately metered residence with central air conditioning or heat pump they must have written consent of the property landlord to participate.

Marketing Plan

Presently, IPL and GoodCents are jointly responsible for the marketing of this program to single family residential customers. This program is marketed directly to customers through bill inserts, direct mailed materials, and through various print media resources. Information is also available on IPL's website, various articles in customer communications and promotion at special events such as Earth Day. IPL employees, primarily Customer Service Representatives, also make customers aware of this program as well. Participants in other IPL DSM programs are among the best candidates to participate and are often specifically targeted for participation.

IPL has installed switches on a few multi-family properties and will continue to evaluate this as a way to increase customer participation. IPL is responsible for the marketing and customer acquisition of Multi-family units.

Delivery Method

This program is delivered for IPL by GoodCents. Tasks performed by GoodCents include switch installation, switch maintenance and replacement, and maintaining a customer call center.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting to reduce the budget and scale of the program. Additional programs are being proposed which will complement the ACLM program.

Program 5: Residential Renewables Incentives Program

Program Description

This program was launched in June, 2010 and provides residential customers with an incentive to install a small scale renewable energy project. IPL is providing the Renewable Energy Incentive Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy generated as a credit on their next month's IPL bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program, a reservation system has been established. An Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewable Energy Incentive Program provides incentive payments of up to $4,000 per system as follows:

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	2,350
Per participant savings (kW)	1.54
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL RENEWABLES INCENTIVES PROGRAM

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Renewables Incentives Program	10	24	15	-	-	$40	$32	$72
2012	Residential Renewables Incentives Program	12	52	34	-	-	$48	$27	$75
2013	Residential Renewables Incentives Program	12	60	52	-	-	$48	$27	$75
TOTAL		34			-	-	$136	$86	$222

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Renewables Incentives Program	($65)	0.81	$37	1.18	($175)	0.58	($263)	0.50
	TOTAL	($65)	0.81	$37	1.18	($175)	0.58	($263)	0.50

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt (FTE))	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residental Renewables Incentves Program	2011	$ 6,500	$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		10	1.00
Residental Renewables Incentves Program	2012		$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		12	1.00
Residental Renewables Incentves Program	2013		$ 7,500	$ -	1,000.00	$ 7,500	$ 4,000.00		12	1.00

10.09.2010

All data presented as presented and approved in Cause #43623 in Petitoiners Exhibit MFR-2 - this program modified an existing Renewable Energy Education Program into an incentive based offering.

Eligible Customers

All IPL residential customers – although practically speaking customers living in non-owner occupied properties are not likely to participate because of the significant investment in the property that is required.

Marketing Plan

IPL has marketing responsibility for this program. IPL has promoted this program by doing a webinar with the Indiana Renewable Energy Association members – this includes the trade allies – who will principally drive participation in this program by promoting the program to customers. IPL also participated as an exhibitor at WINDIANA 2010, the statewide wind industry conference. Finally, IPL prominently displays information about this program on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. IPL is not requesting any changes to this program.

Program 6: Residential New Construction Energy Star Plus Program

Program Description

The New Construction Energy Star Plus Program is a continuation of a program that IPL has offered since September 2010. The program is designed to increase the percent of homes built to minimum ENERGY STAR specifications. It is available to builders of new single family homes and multifamily dwellings of up to twelve (12) attached units. This program is jointly delivered with Citizens Gas. Citizens Gas and IPL share program implementation costs as well as the costs of incentive payments required for the home to achieve an ENERGY STAR (HERS rating) qualification. Combined delivery by both utilities presents the opportunity for homes to become more efficient than a standalone program. ENERGY STAR homes have design and construction features that typically make them 20% to 30% more energy efficient than a standard new home.

Builders who choose to participate in the program will gain access to cash-back incentives designed to cover approximately 20% of the cost to upgrade and certify each home. In addition, IPL will provide rebates for the installation of higher efficiency electrical-mechanical equipment, including the installation of Electronic Commutated Fan (ECM) motors on gas furnaces and upgrades to higher efficiency Heat Pumps, Central Air Conditioners and Heat Pump water heaters.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	1,810
Per participant savings (kW)	0.22
Measure Life	25 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL NEW CONSTRUCTION ENERGY STAR PLUS PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential New Construction Energy Star Plus	42	76	9	-	-	$11	$112	$123
2012	Residential New Construction Energy Star Plus	60	185	22	-	-	$16	$112	$125
2013	Residential New Construction Energy Star Plus	60	293	36	-	-	$16	$112	$126
TOTAL		162			-	-	$44	$336	$380

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential New Construction Energy Star Plus	$1,031	7.35	$294	1.83	($783)	0.45	$248	1.52
	TOTAL	$1,031	7.35	$294	1.83	($783)	0.45	$248	1.52

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential New Construction Energy Star Plus	2011		$ 21,000	$ 21,000	$ 1,190.48	$ 20,000	$ 271.00	$ -	42	1.00
Residential New Construction Energy Star Plus	2012		$ 21,000	$ 21,000	$ 833.33	$ 20,000	$ 271.00	$ -	60	1.00
Residential New Construction Energy Star Plus	2013		$ 21,000	$ 21,000	$ 833.33	$ 20,000	$ 271.00	$ -	60	1.00

10.09.2010

Cost and Impact Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010
Annual Fixed costs include WECC direct costs and allocated Admin costs based on estimated program budget
Net to Gross ratio from Forefront Economics MPS Report-July 2008

Eligible Customers

The program is available to builders of new single family homes and of new multi-family developments of 12 total units or less. The program will target builders who do not currently meet the ENERGY STAR standards, with emphasis on the higher production builder.

Marketing Plan

The program will be marketed to builders through targeted mailings to members of the Indiana Builders Association as well as direct business to business contacts. The program administrator will promote the program through meetings with builders and trade associations and associated newsletters and publications.

Participating builders will be supported with materials to aid them in communicating the benefits of ENERGY STAR homes to their customers.

Delivery Method

This program is delivered for IPL and Citizens Gas by WECC

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 7: Residential Multi-Family Direct Install Program

Program Description

This proposed program is designed to affect the energy efficiency of rental apartment units through the installation of energy-efficient, high-performance water fixtures (i.e., showerheads and faucet aerators) and CFLs. The program will educate tenants about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption.

The program is designed to target multi-family complexes with units that are either all-electric or have natural gas-fueled storage water heaters. In the latter situation, IPL plans to partner with Citizens Gas to jointly deliver and share costs for this program.

This program will be available at no charge which is an important consideration since property owners would not typically have an incentive to make investments that provide energy efficiency benefits to the tenants who pay the utility bills.

The program will first target property-management companies as well as property owners in an effort to secure agreements to treat multiple properties through a single point of contact before targeting owners and managers of single properties.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	715
Per participant savings (kW)	0.09
Measure Life	7 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL MULTI-FAMILY DIRECT INSTALL PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Multi-Family Direct Install Program	7,500	6,363	664	-	-	$246	$179	$427
2012	Residential Multi-Family Direct Install Program	10,000	12,513	1,549	-	-	$330	$174	$504
2013	Residential Multi-Family Direct Install Program	10,000	19,663	2,434	-	-	$330	$174	$504
TOTAL		27,500			-	-	$906	$527	$1,435

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Multi-Family Direct Install Program	$14,636	0.00	$7,511	6.64	($6,382)	0.62	$9,264	19.64
	TOTAL	$14,636	0.00	$7,511	6.64	($6,382)	0.62	$9,264	19.64

Program Name	Year	Admin Costs	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Multi-Family Direct Install Program	2011	$ 23,000	$ 101,000	$ 35,000	-	$ 20,000	$ 33.00		7,500	1.00
Residential Multi-Family Direct Install Program	2012	$ 23,000	$ 92,000	$ 35,000	-	$ 24,000	$ 33.00		10,000	1.00
Residential Multi-Family Direct Install Program	2013	$ 23,000	$ 92,000	$ 35,000	-	$ 24,000	$ 33.00		10,000	1.00

10.09.2010

Cost and Impact Data based on IPL and Citizens Joint Program Delivery Plan developed by WECC - August 2010
Net to Gross ratio from Joint Operating Plan

Eligible Customers

This program is available to any multi-family complex in the IPL serving territory. IPL will fund 100% of the installed measures in complexes that are total-electric service. In complexes with gas water heat, IPL will provide funding for the installation of CFLs.

Marketing Plan

The program will be marketed through presentations to apartment associations and in face-to-face meetings with property-management firms and owners.

Delivery Method

This program will be delivered for IPL and Citizens Gas by WECC.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 8: Residential Peer Comparison Energy Reports Program

Program Description

The Peer Comparison Energy Reports Program will utilize behavioral science-based marketing to provide customized energy consumption information to IPL residential households, engage those households in their energy consumption as compared to their peers, and thus drive changes in behavior that result in measurable energy savings.

Selected households will receive a printed and mailed quarterly energy report that combines their energy usage data with demographic and housing data to provide a picture of their energy consumption trends and how those trends compare with similar households. The report will contain customized suggestions for reducing energy consumption, including information about key IPL energy efficiency programs.

By comparing a household's energy use to others, including their "most efficient" neighbors, and showing specific actions that those other households took to save energy, the reports provide both goals and a sense of competition that have shown to produce sustained energy-conservation behaviors.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	245
Per participant savings (kW)	0.03
Measure Life	3 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL PEER COMPARISON ENERGY REPORTS

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential Peer Comparison Energy Reports	25,000	6,120	750	-	-	$0	$381	$381
2012	Residential Peer Comparison Energy Reports	62,500	23,820	2,625	-	-	$0	$865	$865
2013	Residential Peer Comparison Energy Reports	62,500	43,918	4,500	-	-	$0	$1,390	$1,390
TOTAL		150,000			-	-	$0	$2,636	$2,636

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential Peer Comparison Energy Reports Yr1	$549	0.00	$357	1.94	($156)	0.83	$393	2.03
	Residential Peer Comparison Energy Reports Yr2	$1,557	0.00	$546	1.88	($935)	0.59	$649	1.81
	Residential Peer Comparison Energy Reports Yr3	$1,802	0.00	($466)	0.61	($2,150)	0.26	($345)	0.71
	TOTAL	$3,938	0.00	$437	1.18	($3,243)	0.47	$695	1.29

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential Peer Comparison Energy Reports Yr1	2011	$ 63,750	$ 90,000	$ 212,000		$ 15,000			25,000	1.00
Residential Peer Comparison Energy Reports Yr1	2012									1.00
Residential Peer Comparison Energy Reports Yr1	2013									1.00
Residential Peer Comparison Energy Reports Yr2	2011									1.00
Residential Peer Comparison Energy Reports Yr2	2012	$ 19,375	$ 65,000	$ 742,000		$ 39,000			62,500	1.00
Residential Peer Comparison Energy Reports Yr2	2013									1.00
Residential Peer Comparison Energy Reports Yr3	2011									1.00
Residential Peer Comparison Energy Reports Yr3	2012									1.00
Residential Peer Comparison Energy Reports Yr3	2013	$ 39,375	$ 65,000	$ 1,221,450		$ 64,000			62,500	1.00

Includes demand impact of .03kW per participant
10.09.2010

Participants, Energy and Demand savings from representative vendor proposal - dated October 2010
Annual Fixed Costs include cost for integration of IPL data with vendor software

Eligible Customers

IPL residential households.

Marketing Plan

The program will target high-usage single-family households who can most benefit from the energy consumption information and energy saving tips provided.

Delivery Method

IPL will engage the services of a program delivery vendor.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 9: Residential High Efficiency HVAC Incentives Program

Program Description

The Residential High Efficiency HVAC Incentives Program provides a financial reward in the form of a prescriptive rebate for the purchase and installation of high efficiency air conditioner and heat pump systems for IPL customers and HVAC dealers. System efficiency will be as verified through the Air Conditioning, Heating and Refrigeration Institute (AHRI). Incentives will be paid to HVAC dealers and customers for the purchase and installation of high efficiency air conditioners or heat pumps. The program is available to any existing single-family, owner-occupied home served by IPL. The program will be conducted through incentive applications, documented proof of purchase, and AHRI verification of installed equipment completed and submitted by HVAC dealers.

Energy/Demand Savings and Program Budget

Residential HVAC-Central Air Conditioner

Per participant savings (kWh)	389
Per participant savings (kW)	0.40
Measure Life	20 years
Net to Gross Ratio	0.80

Residential HVAC-Heat Pump

Per participant savings (kWh)	800
Per participant savings (kW)	0.40
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-RESIDENTIAL HIGH EFFICIENCY HVAC INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Residential High Efficiency HVAC Incentives	1,000	636	400	-	-	$260	$218	$478
2012	Residential High Efficiency HVAC Incentives	1,025	1,291	810	-	-	$268	$200	$468
2013	Residential High Efficiency HVAC Incentives	1,050	1,967	1,230	-	-	$275	$203	$478
TOTAL		3,075			-	-	$803	$621	$1,423

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	Residential High Efficiency HVAC-Costs	$0	0.00	($293)	0.00	($293)	0.00	($293)	0.00
	Residential High Efficiency HVAC-Central AC	$667	1.75	$1,163	4.47	$163	1.12	$580	1.56
	Residential High Efficiency HVAC-Heat Pump	$3,086	2.77	$2,467	4.54	($754)	0.61	$1,628	1.60
	TOTAL	$3,755	2.42	$3,357	3.62	($885)	0.64	$1,815	1.58

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
Residential HVAC-Costs	2011	$ 20,000	$ 40,000	$ 40,000		$ 18,000	$ -		-	1.00
Residential HVAC-Costs	2012		$ 40,000	$ 40,000		$ 17,500	$ -		-	1.00
Residential HVAC-Costs	2013		$ 40,000	$ 40,000		$ 17,800	$ -		-	1.00
Residential HVAC CAC	2011	$ -	$ -	$ -	$ 100	$ -	$ 200		400	0.60
Residential HVAC CAC	2012		$ -	$ -	$ 100	$ -	$ 200	$ -	400	0.60
Residential HVAC CAC	2013		$ -	$ -	$ 100	$ -	$ 200	$ -	400	0.60
Residential HVAC- HP	2011	$ -	$ -	$ -	$ 100	$ -	$ 300		600	0.60
Residential HVAC- HP	2012	$ -	$ -	$ -	$ 100	$ -	$ 300		625	0.60
Residential HVAC- HP	2013		$ -	$ -	$ 100	$ -	$ 300		650	0.60

10.09.2010

Demand and Energy Impacts are from engineering calculations based on Indianapolis area weather
Net To Gross ratio from Forefront Economics MPS Report - July 2008

Eligible Customers

The program is available to any existing single-family, owner-occupied home served by IPL.

Marketing Plan

The marketing plan includes program specific marketing materials that will target contractors and trade allies in the HVAC industry using direct mail, direct contact by the program vendor personnel, trade shows and trade association outreach. IPL will also consider bill inserts, IPL website, and mass market advertising.

A similar HVAC Incentive program (branded as PerfectCents) was available to IPL customers from 2004 to 2009. Due to marketplace recognition of the program name it is likely IPL will use this name again in this program re-launch.

Delivery Method

IPL will maintain responsibility for the program and may use an outside vendor to help with fulfillment and distribution of incentives, recruiting participants, educational workshops/seminars, and random verification of equipment installations.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Program 10: Customer Energy Management System Program

INDIANAPOLIS POWER AND LIGHT DSM PLAN
PORTFOLIO RESULTS: CORE PLUS PROGRAMS-CUSTOMER ENERGY MANAGEMENT (CEMS)

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	Customer Energy Management	570	306	788	-	-	$31	$261	$312
2012	Customer Energy Management	1,330	1,020	2,626	-	-	$86	$468	$554
2013	Customer Energy Management	-	1,020	2,626	-	-	$43	$152	$195
TOTAL		1,900			-	-	$161	$901	$1,062

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
1	Marketing Costs--Customer Energy Management	$0	0.00	($95)	0.00	($95)	0.00	($96)	0.00
4	HEMS-with TOU	$536	0.00	$845	3.61	$399	1.52	$934	4.53
5	HEMS-with TOU-GiftCard	$21	0.00	($21)	0.00	($21)	0.00	$0	0.00
6	HEMS-without TOU	$712	0.00	$1,226	2.26	$723	1.49	$1,436	2.61
7	HEMS-without TOU-Gift Card	$32	0.00	($32)	0.00	($32)	0.00	$0	0.00
8	BEMS without TOU	$141	0.00	$480	5.27	$393	2.96	$533	9.14
9	BEMS without TOU -Gift Card	$5	0.00	($5)	0.00	($5)	0.00	$0	0.00
	TOTAL	$1,447	0.00	$2,393	2.53	$1,356	1.52	$2,805	3.30

Program Name	Year	Start-Up Cost	IPL Fixed Cost	Software License	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
CEMS-OUTREACH	2011	$ 75,000					$ -		-	1.00
CEMS-OUTREACH	2012	$ 25,000					$ -		-	1.00
CEMS-OUTREACH	2013						$ -		-	1.00
HEMS-with TOU	2011		$ 48,254.00					$ 20.00	135	1.00
HEMS-with TOU	2012		$ 98,576.00	$ 5,400.00				$ 20.00	315	1.00
HEMS-with TOU	2013		$ 17,885.00	$ 18,000.00				$ 20.00		1.00
HEMS-with TOU-GiftCard	2011						$ 50.00		135	1.00
HEMS-with TOU-GiftCard	2012						$ 50.00		315	1.00
HEMS-with TOU-GiftCard	2013									1.00
HEMS-without TOU	2011	$ -	$ 144,762.00					$ 20.00	405	1.00
HEMS-without TOU	2012	$ -	$ 295,729.00	$ 16,200.00				$ 20.00	945	1.00
HEMS-without TOU	2013		$ 53,654.00	$ 54,000.00				$ 20.00		1.00
HEMS-without TOU-Gift Card	2011		$ -				$ 25.00		405	1.00
HEMS-without TOU-Gift Card	2012		$ -				$ 25.00		945	1.00
HEMS-without TOU-Gift Card	2013		$ -							1.00
BEMS without TOU	2011		$ 12,833.00					$ 72.00	30	1.00
BEMS without TOU	2012		$ 26,216.00	$ 1,200.00				$ 72.00	70	1.00
BEMS without TOU	2013		$ 4,756.00	$ 4,000.00				$ 72.00	-	1.00
BEMS without TOU -Gift Card	2011						$ 50.00		30	1.00
BEMS without TOU -Gift Card	2012						$ 50.00		70	1.00
BEMS without TOU -Gift Card	2013									1.00

10.09.2010

Home Energy Management with TOU Rates - Residential

Program Description

This program will offer home energy management tools with TOU rates. This will be mirrored after the Tendril HAN/HEMS study with modifications expected after analysis is complete and with input from the OSB. A one-time participation incentive of $50 will be offered along with $5 per summer month per year.

Energy/Demand Savings and Program Budget

IPL has conservatively estimated 0.1% participation ramping up over two years. Expected energy savings of 8% are based on national studies. Demand savings of 1.1 kW are based on ACLM program plus an additional 0.5 kW per home.[13]

Per participant savings (kWh)	977
Per participant savings (kW)	1.6
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Residential Rate RS customers are eligible for this program. IPL is in the process of assessing the ability to use AMR and AMI meters to accomplish TOU billing. Also, the AMI communications system network design is in development.

Marketing Plan

IPL will develop a multi-avenue marketing strategy to include traditional and electronic communications to reach possible participants. For example, customers who have registered their email accounts for e-bill or on-line transactions may be contacted easily to invite them to participate. The IPL web-site will include links to informational pages. Possible other avenues include sharing testimonials from participants in the 2010 HEMS pilot in written or video formats. Community events and meetings may also include presentations about the HEMS program offering.

[13] "The Impact of Informational Feedback on Energy Consumption – A Survey of the Experimental Evidence" by Farqui, Sergici, Sharif, The Brattle Group.

Delivery Method

IPL will contract with a third party to deliver the HEMS program using an RFQ type process.

Approval Status

This program is a new program for which approval is being requested in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

Home Energy Management without TOU Rates - Residential

Program Description

This program will include home energy management tools but will not require participation in TOU rates. A one-time participation incentive of $25 will be offered along with $5 per summer month per year. Energy and demand savings are expected to be lower than the program option with TOU rates.

Energy/Demand Savings and Program Budget

IPL anticipates 0.3% participation ramping up over two years. Expected energy savings of 3% are estimated based on industry studies. Demand savings of 1.1 kW are based on IPL's ACLM program.[14]

Per participant savings (kWh)	366
Per participant savings (kW)	1.1
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Residential Rate RS customers are eligible for this program. IPL is assessing the ability to use AMR or AMI meters for this program to enable communications with in-home devices.

[14] "Residential Energy Use Behavior Change Pilot" by Carroll, Ed; Hatton, Eric; and Brown, Mark.

Marketing Plan

Marketing efforts will mirror those for the HEMS with TOU rates.

Delivery Method

IPL will contract with a third party to deliver the HEMS program using an RFQ type process.

Business Energy Management without TOU Rates – Small C&I

Program Description

The Business Energy Management component will provide near real time data through an interface to an AMI meter. A one-time participation incentive of $50 will be offered along with $5 per air conditioning net ton per summer month per year.

Energy/Demand Savings and Program Budget

IPL assumed 0.2% participation and 3% savings from aggregate rate class 2009 data. Demand savings of 3.5 kW was based on an ACLM program report prepared by Cooper-Cannon, and was increased by 0.7 kW to account for additional demand effects as a result of awareness of consumption patterns in other areas.

Per participant savings (kWh)	864
Per participant savings (kW)	4.2
Measure Life	10 years
Net to Gross Ratio	1.00

Eligible Customers

All Rate SS customers will be eligible for this program.

Marketing Plan

IPL will leverage marketing plans for the HEMS programs for the BEMS program and anticipates identifying likely participants following discussions with vendors and other utilities that are implementing similar programs based on business type.

Delivery Method

IPL will contract with a third party to delivery the BEMS program using an RFQ type process.

Program 11: Commercial and Industrial Air Conditioning Load Management ("ACLM") Program

Program Description

The Commercial and Industrial Air Conditioning Load Management ("ACLM") Program is a companion program to the Residential ACLM Program. This program (also branded as CoolCents®) was launched in June, 2010 to Rate SS and Rate SL customers. This program is expected to provide significant demand savings along with some energy savings to participating customers. Customers who enroll in the program will have an ACLM switch installed on their facility cooling equipment. This will allow IPL the opportunity to cycle the equipment during times of system peak usage. The switches are expected to be controlled at the same time as the Residential ACLM customer switches. In return for participating, a customer must agree to allow IPL to control 50% of its cooling load and will receive an incentive on the basis of net tons of controlled air conditioning load. Customers will receive a $5 credit on their utility bill during the billing months of June, July, August and September for each net ton enrolled.

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	40
Per participant savings (kW)	3.5
Measure Life	10 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL AIR CONDITIONING LOAD MANAGEMENT ACLM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Air Conditioning Load Management ACLM	275	11	963	-	-	$19	$246	$266
2012	C/I Air Conditioning Load Management ACLM	275	22	1,925	-	-	$39	$246	$285
2013	C/I Air Conditioning Load Management ACLM	275	33	2,888	-	-	$58	$246	$304
TOTAL		825			-	-	$116	$739	$856

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
5	C/I Air Conditioning Load Management (ACLM)	$410	0.00	$2,534	3.03	$2,498	2.94	$2,906	4.30
	TOTAL	$410	0.00	$2,534	3.03	$2,498	2.94	$2,906	4.30

Program Name	Year	Start-Up Cost	Annual Fixed (Admin & Pgm Mgmt (FTE))	Materials / Training (Marketing Costs)	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Air Conditioning Load Management (ACLM)	2011		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00
C/I Air Conditioning Load Management (ACLM)	2012		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00
C/I Air Conditioning Load Management (ACLM)	2013		$ 77,000	$ 20,000	$ 525.00	$ 5,000		$ 70.00	275	1.00

Average Demand savings of 3.5 kW per participant from Cooper Power Systems experience and reflected in study provided to IPL.
Energy savings is estimated at 40 kWh per participant per year.
Incentives assumes $5 per net ton with an average of 3.5 net tons per customer for 4 summer months = $70 per year
Unit variable of $525 based on switch cost and contractor installation costs
Evaluation costs from IPL

Eligible Customers

Presently this program is available to any Commercial and Industrial customer served under Rate SS or Rate SL. It is proposed to make this offering available to all IPL C&I customers.

Marketing Plan

IPL has marketing responsibility for this program. IPL has been promoting this primarily through face to face customer contacts made by the Account Management Staff. Initial discussions have focused on customers with multiple facility locations. In 2011 IPL may do a direct mail piece to likely program participants as well. Information about the program is also predominantly displayed on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. In this proceeding, IPL is requesting to reduce the budget and scale of the program. Early experience with customers in marketing this program suggests customer adoption rates for this program will be lower than expected.

Program 12: Commercial and Industrial Renewables Incentives Program

Program Description

This program was launched in June, 2010 to Rate SS and Rate SL customers. It provides commercial customers with an incentive to install a small scale renewable energy project. This program is the counterpart to the similar program offered for IPL residential customers. IPL is providing the Renewables Incentives Program to support and promote the generation of clean, renewable energy by reducing the net cost to the end user of such systems. Owners of small scale renewable energy systems are also eligible to lower their bills by signing up for IPL's Net Metering rate which will allow the system owner to bank excess energy generated as a credit on their next month's bill. Customers who wish to participate in this program must complete an application for incentives. Since there are limited funds for this program a reservation system has been established. An Application for Interconnection and an Interconnection Agreement must also be completed and approved.

The Renewables Incentives Program provides incentive payments of up to $4,000 per system as follows:

Technology	Incentive $ per watt	Maximum Incentive	Minimum Project Size (kW)	Maximum Project Size (kW)
Solar PV	$2.00	$4,000.00	1.0	19.9
Wind	$1.00	$4,000.00	1.0	49.9

Energy/Demand Savings and Program Budget

Per participant savings (kWh)	2,350
Per participant savings (kW)	1.5
Measure Life	20 years
Net to Gross Ratio	1.00

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL RENEWABLES INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings in Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Renewables Incentives Program	4	9	6	-	-	$16	$12	$28
2012	C/I Renewables Incentives Program	4	19	12	-	-	$16	$9	$25
2013	C/I Renewables Incentives Program	4	28	18	-	-	$16	$9	$25
TOTAL		12					$48	$30	$78

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Renewables Incentives Program	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49
	TOTAL	($24)	0.85	$12	1.17	($70)	0.55	($94)	0.49

Program Name	Year	Start-Up Cost	Annual Fixed Admin & Pgm Mgmt	Materials / Training/ Marketing Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Renewables Incentives Program	2011	$ 2,500	$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00
C/I Renewables Incentives Program	2012		$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00
C/I Renewables Incentives Program	2013		$ 2,500		1,000	$ 2,500	$ 4,000.00		4	1.00

10.05.2010

All data presented as presented and approved in Cause #43623 in Petitoiners Exhibit MFR-2 - this program modified an existing Renewable Energy Education Program into an incentive based offering

Marketing Plan

IPL has marketing responsibility for this program. IPL has promoted this program by doing a webinar with the Indiana Renewable Energy Association members, which includes the trade allies who will principally drive participation in this program to promote the program. IPL also participated as an exhibitor at WINDIANA 2010, the statewide wind industry conference. Finally, IPL prominently displays information about this program on our web site.

Delivery Method

Delivery of this program is managed by IPL.

Approval Status

This program was approved in the Phase I Order. IPL is not requesting any changes to this program.

Program 13: Commercial and Industrial Business Energy Incentives Program

C&I New Construction Component Description

The New Construction component addresses a "lost opportunity" segment, promoting energy efficient practices at the time initial decisions are made, ensuring efficient results for the life of the measures. The focus of the program is on getting developers and designers predisposed to consider fully integrated design to incorporate relevant efficiency measures through building design and equipment specification. To overcome first cost barriers, IPL will provide incentives and assistance to design teams (architects, engineers, property managers) that develop projects that are more efficient than standard construction practices and current Indiana building code.

C&I Retro-Commissioning Component Description

The Retro-Commissioning component is designed to motivate facilities owners to reduce energy use through improvements in how their facilities' mechanical systems are operated and maintained. Most buildings have never been commissioned, so the retro-commissioning of an existing building could possibly identify and correct operating deficiencies, saving time, reducing energy consumption and improving performance and comfort. The goal of this program is to help identify high cost (kWh per square foot) buildings then identify and implement low cost tune-ups and adjustments that would improve the efficiency of existing building's operating systems. Efficiency improvements include returning systems to their intended operation or design, and adapting system settings to the buildings present use (often technology and business model changes will affect the comfort and efficiency of buildings). The goal of this program is to ensure that a building operates as efficiently and effectively as its original design.

Energy/Demand Savings and Program Budget

An analysis of this Program is provided on the next page. The analysis summarizes (1) the projected energy savings, (2) total program costs, (3) program budgets and (4) the results of typical cost effectiveness tests for the program over a 3-year term (2011-2013).

INDIANAPOLIS POWER AND LIGHT DSM PLAN
RESULTS: CORE PLUS PROGRAMS-COMMERCIAL AND INDUSTRIAL BUSINESS ENERGY INCENTIVES PROGRAM

Savings By Year

Year	Program Name	New Participants In Year	Energy MWh Savings In Year	Summer kW Savings	Winter kW Savings	Therm Savings	Incentives, 000$	Program Costs, 000$	Budget, 000$
2011	C/I Business Energy Incentives Program	136	4,123	821	-	-	$316	$635	$951
2012	C/I Business Energy Incentives Program	276	12,370	1,863	-	-	$633	$742	$1,376
2013	C/I Business Energy Incentives Program	276	20,817	3,105	-	-	$633	$756	$1,369
TOTAL		690			-	-	$1,582	$2,133	$3,715

Results by Program

ID	Program Name	Participant Test		Utility Test		RIM Test		TRC Test	
		NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR	NPV, 000$	BCR
	C/I Business Energy Incentives Program	$21,878	4.77	$11,811	4.44	($12,703)	0.55	$9,170	2.16
	TOTAL	$21,878	4.77	$11,811	4.44	($12,703)	0.55	$9,170	2.16

Program Name	Year	Start-Up Cost	Contractor Fixed Costs	IPL Fixed Costs	Unit Variable	Evaluation Costs (M&V)	One Time Per Unit Incentive (Rebate)	Annual Recurring Per Unit Incentive	Annual New Participants	Net to Gross Ratio
C/I Business Energy Incentives Program	2011	$ 50,000	$ 209,000	$ 126,000	$ 1,319	$ 68,000	$ 2,293		138	1.00
C/I Business Energy Incentives Program	2012	$ 50,000	$ 229,000	$ 179,000	$ 688	$ 94,000	$ 2,293		276	1.00
C/I Business Energy Incentives Program	2013	$ 50,000	$ 242,000	$ 179,000	$ 688	$ 95,000	$ 2,293		276	1.00

10.09.2010

Program costs and incentives are a combination of the previously approved C&I Custom, C&I Retro Commissioning and C&I New Construction programs
Cost and Impact Data based on IPL Program Delivery Plan developed by WECC - August 2010
Customers are assumed to have a 50 / 50 cost share of technology costs
Net To Gross ratio from Forefront Economics MPS Report-July 2008

Eligible Customers

Presently this program is available to any Commercial and Industrial customer served under Rate SS or Rate SL. It is proposed to make this offering available to all IPL C&I customers.

Marketing Plan

IPL has shared marketing responsibility for this program with Citizens Gas and WECC. The initial marketing push was made in early September by WECC through informational mailings to all known trade allies. This mailing was followed up by phone calls to several hundred trade allies. IPL Account Management Staff has been promoting this through face-to-face customer contacts. Information about the program is also provided on our web site.

Delivery Method

This program is delivered for IPL and Citizens Gas by WECC

Approval Status

Each of the program components of this program were approved in the Phase I Order. In this proceeding, IPL is requesting additional funds to increase the scale of the program in order to comply with the energy savings mandated by the Generic DSM Order over the next three years (2011-2013).

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE COMMISSION'S INVESTIGATION, PURSUANT TO IC § 8-1-2-58, INTO THE EFFECTIVENESS OF DEMAND SIDE MANAGEMENT ("DSM") PROGRAMS CURRENTLY UTILIZED IN THE STATE OF INDIANA, INCLUDING AN EXAMINATION OF ISSUES THAT COULD IMPROVE THE EFFECTIVENESS OF DEMAND SIDE MANAGEMENT PROGRAMS IN THE STATE INCLUDING CONSIDERATION OF THE ESTABLISHMENT OF AN INDEPENDENT DSM ADMINISTRATOR MODEL ON A STATE-WIDE BASIS	)	**CAUSE NO. 42693-S1**
RESPONDENTS: ALL JURISDICTIONAL ELECTRIC AND GAS UTILITIES IN THE STATE OF INDIANA	)	

INDIANAPOLIS POWER & LIGHT COMPANY'S JULY 1, 2011 DSM ANNUAL REPORT

Indianapolis Power & Light Company ("IPL") hereby submits the attached annual report to apprise the Indiana Utility Regulatory Commission ("Commission") of IPL's progress in developing and implementing demand side management ("DSM") programs that achieve a level of energy savings set forth in the Commission's December 9, 2009 Order in Cause No. 42693 (the "Phase II Order").[1] The attached report is being submitted to satisfy requirements in the Phase II Order, as clarified by the May 14, 2010 Docket Entry in this Cause.

IPL has taken significant steps to satisfy the energy savings targets set forth in the Phase II Order. IPL has implemented the Core and Core Plus DSM programs approved by the Commission's February 10, 2010 Order in Cause No. 43623 and November 4, 2010 Order in

[1] IPL submitted its first annual report on July 1, 2010.

Cause No. 43911. IPL has proposed to expand its existing DSM programs in Cause No. 43960 to add new programs and bolster existing programs as necessary to achieve the Phase II Order's energy savings targets. The evidentiary hearing in Cause No. 43960 was held on June 29, 2011. IPL has also worked through the Demand Side Management Coordination Committee ("DSMCC") to obtain approval of the selected statewide third party administer ("TPA") that will provide the Core Programs.

Despite these efforts, IPL's July 1, 2011 Scorecard demonstrates that IPL will not achieve the goals in the Phase II Order through 2013. The 3-Year Plan IPL developed was projected to achieve the energy savings goals of the Phase II Order, but these projections assumed that the TPA would be engaged by January 1, 2011 and also that IPL would be authorized to provide its expanded Core Plus Programs earlier than approval will be received in Cause No. 43960. This has delayed IPL's expanded DSM program by one year, resulting in a deficit through 2013. A review of IPL's July 1, 2011 Scorecard demonstrates that IPL would meet the targets if it had been able to implement its 3-Year DSM Plan earlier. IPL has also proposed to count energy purchased pursuant to its Rate REP (Renewable Energy Production) towards the energy savings targets. Projected energy savings for Rate REP have not been estimated for purposes of the July 1, 2011 Scorecard because that request is currently pending in Cause No. 44018. If IPL's proposal is approved, the energy savings it projects to achieve would be greater.

The report reflects a good faith effort to forecast program expenditures and energy savings for IPL's Core and Core Plus DSM programs. The sources of the forecast are noted in the attached report and assume approval of the TPA selected by the DSMCC and approval of the

Core and Core Plus Programs as proposed by the Stipulation and Settlement Agreement presented in Cause No. 43960.

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CERTIFICATE OF SERVICE

The undersigned certifies that on July 1, 2011, a copy of the foregoing was served by email transmission or by United States Mail, first class, postage prepaid (where noted) on the following counsel of record:

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Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

	End Notes (page 2)	Gross MWh Savings (a) (b)					Program Expenditures (000's) (c) excluding lost revenues and/or performance incentives					Gross MWh Savings By Program
CORE PROGRAMS		2010	2011 Actual Thru 5/31/11	2011 Forecast Year End	2012	2013	2010	Actual thru 5/31/11	2011 Forecast Year End	2012	2013	
Prescriptive Lighting (d)	1	1,735	6,266	10,509	13,009	14,008	$114	$195	$415	$1,085	$988	39,261
On-Site Audit with Direct Install (d)	2	678	1,949	4,298	10,969	15,626	$127	$541	$1,081	$4,142	$5,554	31,571
Low and Moderate Income Weatherization (d)	3	375	112	531	570	802	$289	$166	$916	$564	$723	2,278
Energy Efficiency Schools - Kits	4	1,686	0	3,713	2,855	2,864	$147	$1	$132	$800	$711	11,118
C&I Prescriptive (d)	5	675	8,576	21,592	32,331	37,334	$141	$418	$1,423	$4,300	$4,675	91,932
C&I Energy Efficiency Schools - Audits	6	0	0	0	0	0	$0	$4	$48	$301	$262	0
Total Core Programs By Year		5,149	16,904	40,642	59,734	70,634	$818	$1,326	$4,015	$11,192	$12,913	176,160

CORE PLUS PROGRAMS		2010	2011 Actual Thru 5/31/11	2011 Forecast Year End	2012	2013	2010	Actual thru 5/31/11	2011 Forecast Year End	2012	2013	
Residential-Second Refrigerator Pickup and Recycling	7	760	184	806	4,268	4,268	$122	$43	$231	$654	$654	10,102
Residential-Room AC Pickup and Recycling	8	0	0	0	36	36	$0	$0	$0	$16	$16	72
Residential-New Construction Energy Star Plus	9	67	48	157	76	109	$46	$14	$113	$123	$128	409
Residential-Energy Assessment	10	1,398	1,123	1,341	1,392	1,392	$120	$240	$267	$233	$233	5,523
Residential-Renewables Incentive	11	5	0	27	24	28	$32	$5	$72	$72	$75	84
Res-Air Conditioning Load Management	12	41	10	54	55	55	$1,338	$324	$1,569	$1,721	$1,821	206
Residential-High Eff HVAC Incentives	13	0	0	0	1,021	1,041	$0	$0	$0	$748	$738	2,062
Residential-Peer Comparison Energy Reports	14	0	0	0	6,120	17,700	$0	$0	$0	$381	$865	23,820
Residential-Multi-Family Direct Install	15	0	0	9,493	5,363	7,150	$0	$8	$534	$427	$504	22,006
C&I Custom	16	0	1,222	6,680	4,123	8,247	$49	$105	$685	$951	$1,375	19,050
C&I Air Conditioning Load Management	17	1	1	11	11	11	$21	$7	$210	$266	$285	34
C&I Renewables Incentives	18	10	0	14	9	9	$7	$5	$36	$28	$25	42
On-line Energy Feedback	19	0	0	0	0	0	$0	$0	$0	$612	$178	0
Indirect Costs attributable to all Core Plus programs	20	0	0	0	0	0	$212	$78	$450	$895	$934	0
Total Core Plus Programs By Year		2,282	2,589	18,583	22,498	40,046	$1,947	$828	$4,167	$7,127	$7,831	83,409

Portfolio Summary		**2010**	**2011 Actual Thru 5/31/11**	**2011 Forecast Year End**	**2012**	**2013**	**2011 - 2013 Summary View**
Total Gross MWh Core & Core Plus	21	7,431	19,492	59,226	82,232	110,680	259,569
Core & Core Plus MWh Generic Target		44,892	NA	83,830	111,042	140,185	335,057
Total Program Expenditures Core & Core Plus		$2,765	$2,154	$8,182	$18,319	$20,744	$47,244

Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

General Notes	
(a)	2011 Forecast Year End reflects the Gross MWh Savings reported in Cause No. 43623-DSM-2 and DSM-3 where appropriate. Savings from Wisconsin Energy Conservation Corporation ("WECC") administered programs reflect estimates from Oversight Board ("OSB") approved program plans.
(b)	2012-2013 Gross MWh Savings are as filed in Exhibit LHA-3 of Cause No. 43960, filed in October 2010 for Program Year 1 and Program Year 2, respectively. If approved in Cause No. 44018, IPL also intends to submit energy from any participation in its Rate REP (Renewable Energy Program) feed-in-tariff towards compliance with energy savings targets as approved in the Commission's Generic Order in Cause No. 42693.
(c)	2011 Forecast Year End reflects the projected Program Expenditures reported in Cause No. 43623-DSM-2 and DSM-3, excluding performance incentives where appropriate. Expenditures for WECC administered programs reflect cost estimates from OSB approved program plans. 2012-2013 Program Expenditures are as filed in Exhibit LHA-3 of Cause No. 43960 filed in October 2010 for Program Year 1 and Program Year 2, respectively.
(d)	These Core Programs have been administered by WECC since September 1, 2010 and will continue to be until such time as the programs are transferred to the Statewide Third Party Administrator ("TPA").

Note #	Core Programs	
	Program Name	**Comment**
1	**Prescriptive Lighting**	Provides incentives for residential customers to purchase Energy Star compact fluorescent light bulbs ("CFLs"). Status: There has been very strong participation in this program which is expected to continue through the remainder of the program. The original target number of CFLs to be incentivized prior to transition of this Core Program to the TPA was 48,000. Due to strong customer interest, IPL expects to have over 200,000 CFLs deployed prior to this Core Program's transition to the TPA.
2	**On-Site Audit with Direct Install**	Provides residential customers a walk-through examination of their home by trained energy auditors. Status: The response to recruitment mailings for this program has been between 3%-4%. The response rate has not diminished during the program and is expected to continue with possibly higher acceptance rates as "word of mouth" marketing prompts customers to participate. Using the current program design, it is anticipated that approximately 2,800 audits will be completed in 2011. Plans from the TPA indicate much higher participation levels, which are indicated in the 2012-2013 forecast.
3	**Low and Moderate Income Weatherization**	Provides comprehensive weatherization services for homes of low to moderate income homeowners. Purpose is to reduce energy consumption and lower electric bills for income-qualified customers. Status: This program is an ongoing extension of the program approved in Cause Nos. 42639, 43018 and 43252. Currently, this program is being delivered jointly with Citizens Gas.
4	**Energy Efficient Schools-Kits**	Presentations are given in schools to educate students on sources and forms of energy and how to use it wisely. Students are provided with an energy efficiency kit. The program is designed to empower students and their families to save energy at home and at school. Status: This program is an ongoing extension of the program approved in Cause Nos. 42639, 43018 and 43252. Currently, this program is being delivered jointly with Citizens Gas.
5	**C&I Prescriptive**	Provides monetary incentives to commercial and industrial customers for specific energy efficient equipment. Status: This program began to experience significant levels of participation during the first half of 2011. IPL anticipates maintaining similar activity levels until this Core Program is transitioned to the TPA.
6	**C&I Energy Efficiency Schools - Audits**	Provides schools (grades K-12) the opportunity to request and receive from IPL representatives, a detailed school building energy audit that will provide schools with a report that identifies and prioritizes energy savings opportunities. Status: IPL began implementation in the first half of 2011. As of May 31, 2011 eight (8) school audits have been completed.

Indianapolis Power & Light Company
DSM Status Report
July 1, 2011

Note #	Core Plus Programs	
7	**Residential-Second Refrigerator Pickup and Recycling**	Provides for the removal and disposal of operable, inefficient secondary refrigerators and freezers in an environmentally sound manner. Status: This program exceeded Program Year 1 targets established in Cause No. 43623. On track to meet Program Year 2 targets as well.
8	**Residential Room AC Pickup and Recycling**	This program is intended as a complement to the Second Refrigerator Pick Up and Recycling Program. A customer that schedules a pick up of a refrigerator or freezer unit may also have an older, inefficient room air conditioner picked up and recycled. Status: As proposed in Cause No. 43960 filed in October 2010.
9	**Residential-New Construction Energy Star Plus**	Provides incentives and training for builders to construct new homes that are more energy efficient than the standard practice. Status: As of May 31, 2011 incentives have been paid on 23 homes constructed under this program. Currently, this program is being delivered jointly with Citizens Gas.
10	**Residential-Energy Assessment**	Customers who complete an online energy audit of their home will receive a free energy efficiency kit. The kit includes several energy efficiency measures such as CFLs, low flow showerheads, faucet aerators and temperature gauges. Status: This program has successfully met targets. IPL intends to have this program available to customers, but will focus future efforts on the Multi-Family Direct Install Program. Currently, this program is being delivered jointly with Citizens Gas.
11	**Residential-Renewables Incentive**	IPL provides an incentive of up to $4,000 to customers who install small renewable energy systems. The program is available to all residential and most commercial and industrial customers. Status: Since February 10, 2010 there has been 1 incentive paid under the residential program. There has been a significant amount of customer interest.
12	**Res-Air Conditioning Load Management**	IPL has delivered the ACLM program to residential customers on a continuous basis since receiving Commission approval in 2003. The program allows IPL to temporarily reduce the run time of a customer's air conditioning unit during periods of peak summer demand. Enrolled customers receive monthly bill credits of $5 during the summer months of June through September. Status: In Program Year 1 of the current approval, just over 4,600 switches were installed. In total there are approximately 33,000 residential program participants.
13	**Residential-High Efficiency HVAC Incentives**	Provides a financial reward in the form of a prescriptive rebate for the purchase and installation of high efficiency air conditioner or heat pump systems. Status: As proposed in Cause No. 43960 filed in October 2010.
14	**Residential-Peer Comparison Energy Reports**	Will utilize behavioral science-based marketing to provide customized energy consumption information to IPL residential households, engage those households in their energy consumption as compared to their peers, and thus drive changes in behavior that result in measurable energy savings. Status: As proposed in Cause No. 43960 filed in October 2010.
15	**Residential-Multi-Family Direct Install**	Targeting multi-family units for the installation of energy efficiency measures, such as low flow water measures and CFLs. Tenants will be educated about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption. Status: As proposed in Cause No. 43960 filed in October 2010. With approval of the DSM Oversight Board, funds were shifted to begin implementation in March 2011. Currently, this program is being delivered jointly with Citizens Gas.
16	**C&I-Custom**	Provides financial incentives for custom energy efficiency measures that are not included in IPL's C&I Prescriptive Program. Customers must make application and receive approval prior to project start. Status: Implementation began in September 2010. Marketed as C&I Custom-Business Solutions, this program combines the programs previously identified separately as C&I Retro-Commissioning Pilot and C&I New Construction. Currently, this program is being delivered jointly with Citizens Gas.
17	**C&I-Air Conditioning Load Management**	This is a companion program to the Residential ACLM Program. The program provides significant demand savings by allowing IPL to temporarily reduce the run time of a customer's air conditioning unit during periods of peak summer demand. Enrolled customers receive monthly bill credits of $5 per net ton provided during the summer months of June through September. Status: Implementation began in June 2010.
18	**C&I-Renewables Incentives**	Provides incentives to Commercial and Industrial customers looking to install small scale renewable energy systems on their facilities. Status: Since February 10, 2010 two incentives have been paid to commercial customers under this program.
19	**Online Energy Feedback**	Daily energy consumption and a historical view of energy use will be available and displayed on a one-day delay basis through a web-portal for participating customers. Status: As proposed in Cause No. 43960 filed in October 2010.
20	**Indirect Costs allocable to all Core Plus Programs**	In addition to awareness and education, indirect expenses include appropriate training and development for program staff, memberships in relevant organizations, including those that can cost-effectively provide research into DSM-related subjects.
21	**Portfolio Summary**	MWh savings achieved in 2010 are included in the total savings reported in the 2011-2013 Summary View column.

INTEGRATED RESOURCE PLAN MODELING SUMMARY

REDACTED

Prepared for:
Indianapolis Power & Light Company

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August 31, 2011

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Attachment VIII – Forecasting Data Sets

IPL Forecasting Data Sets Are Provided Electronically

Folder A – Itron's Statistically Adjusted End-Use Models

Folder B – IPL Sales Forecast

Folder C – Independent Variables

Folder D – Sales Models

Folder E – Peak Forecast

Folder F – Model Performance

Folder G – Forecast Error Analysis