

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS)
POWER & LIGHT COMPANY)
REQUESTING THE INDIANA UTILITY)
REGULATORY COMMISSION TO)
APPROVE AN ALTERNATIVE)
REGULATORY PLAN PURSUANT TO IND.)
CODE § 8-1-2.5-1, ET SEQ., FOR THE)
OFFERING OF ENERGY EFFICIENCY)
CONSERVATION, DEMAND RESPONSE)
AND DEMAND-SIDE MANAGEMENT)
PROGRAMS AND ASSOCIATED RATE)
TREATMENT INCLUDING INCENTIVES IN)
ACCORDANCE WITH IND. CODE §§ 8-1-2.5-)
1 ET SEQ. AND 8-1-2-42(a); AUTHORITY TO)
DEFER PROGRAM COSTS ASSOCIATED)
WITH ITS ENERGY EFFICIENCY)
PORTFOLIO PROGRAMS; AUTHORITY TO)
IMPLEMENT NEW AND ENHANCED)
ENERGY PROGRAMS AND APPROVAL OF)
MODIFICATION OF THE FUEL)
ADJUSTMENT CLAUSE EARNINGS AND)
EXPENSE TESTS.)

CAUSE NO. 43623

PHASE I ORDER

APPROVED: FEB 10 2010


JPA
JLG


BY THE COMMISSION:

David E. Ziegner, Commissioner

Loraine L. Seyfried, Administrative Law Judge

On December 29, 2008, Indianapolis Power & Light Company (“Petitioner,” “IPL,” or “Company”) filed its Verified Petition with the Indiana Utility Regulatory Commission (“Commission”) for approval of an alternative regulatory plan (“ARP”) for the offering of energy efficiency conservation, demand response and demand-side management (“DSM”) programs and associated rate treatment; authority to defer program costs associated with its energy efficiency portfolio programs; authority to implement new and enhanced energy programs; and approval of modification of its fuel adjustment clause (“FAC”) earnings and expense tests.

On February 11, 2009, the Commission conducted a Prehearing Conference and Preliminary Hearing in this Cause. Petitioner and the Indiana Office of Utility Consumer Counselor (“OUCC”) appeared and participated at the Prehearing Conference. On February 18, 2009, the Commission issued its Prehearing Conference Order establishing the schedule and other procedural requirements for this Cause.

In accordance with the procedural schedule set forth in the Prehearing Conference Order, Petitioner filed its direct testimony and exhibits constituting its case-in-chief on February 2, 2009. On February 23, 2009, Petitioner submitted the proofs of publication required under Ind. Code § 8-1-2.5-6(d). Petitioner's Exhibit KF-3. Petitioner filed supplemental testimony on March 12 and May 1, 2009. On June 2, 2009, the OUCC filed its direct testimony and exhibits. On June 4, 2009, IPL Industrial Group ("Industrial Group") filed a Petition to Intervene, which was granted by Docket Entry dated June 12, 2009. On June 15, 2009, Petitioner filed its rebuttal testimony and exhibits.

Pursuant to public notice duly given and published, proof of which was incorporated into the record by reference and placed in the Commission's official file, a public hearing was held in this Cause on June 25, 2009 at 9:30 a.m. in Room 222 of the National City Center, 101 W. Washington Street, Indianapolis, Indiana. At the hearing IPL, the OUCC, and Industrial Group appeared by counsel. IPL and the OUCC offered their respective prefiled testimony and exhibits, which were admitted into evidence without objection. No other members of the general public appeared.

Based upon the applicable law and the evidence of record, the Commission now finds:

1. **Notice and Jurisdiction.** Proper notice of the hearing in this Cause was given as required by law. IPL is a "public utility" within the meaning of Ind. Code § 8-1-2-1 of the Public Service Commission Act, as amended, and is subject to the jurisdiction of the Commission. The Commission has jurisdiction over Petitioner and the subject matter of this Cause in the manner and to the extent provided by the laws of the State of Indiana.

2. **Petitioner's Organization and Business.** Petitioner is an operating public utility, incorporated under the laws of the State of Indiana, with its principal office and place of business in the City of Indianapolis, Indiana. Petitioner is subject to regulation by the Commission in the manner and to the extent provided by the laws of the State of Indiana. IPL renders retail electric utility service to approximately 470,000 retail customers located principally in and near the City of Indianapolis, Indiana, and in portions of the following Indiana counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Owen, Putnam and Shelby Counties. IPL owns, operates, manages and controls electric generating, transmission and distribution plant, property and equipment and related facilities, which are used and useful for the convenience of the public in the production, transmission, delivery and furnishing of electric energy, heat, light and power. As defined in Ind. Code § 8-1-2.5-2, IPL is an Energy Utility and its electric service constitutes Retail Energy Service as defined in Ind. Code § 8-1-2.5-3. By its Verified Petition, IPL elects to become subject to the provisions of Ind. Code §§ 8-1-2.5-5 and 8-1-2.5-6 for purposes of offering energy efficiency conservation, demand response and DSM programs.

3. **Background.** In Cause No. 42639, IPL was authorized to implement a DSM program with a budget of \$5,250,000 over three years. In Cause No. 43018, the Commission approved modifications to the DSM program approved in Cause No. 42639. In Cause No. 43252, the Commission approved an extension through June 30, 2009 of the DSM program approved in Cause No. 43018, including IPL's Income Qualified Weatherization Program at an

annualized budget of \$475,000; IPL's Renewable Energy Education Program at an annualized budget of \$50,000; IPL's Energy Efficiency Education Program at an annualized budget of \$125,000; IPL's High Efficiency Heating, Ventilating and Air Conditioning ("HVAC") Program at an annualized budget of \$286,667; IPL's Air Conditioning Load Management ("ACLM") Program, at an annualized budget of \$1,200,000 for the installation of ACLM devices; and IPL agreed to conduct a DSM market potential study at its own cost to identify viable DSM programs and quantify their potential application in IPL's service territory. The DSM program approved in Cause No. 42639, as modified in Cause No. 43018, and as further modified and extended in Cause No. 43252, is referred to as Petitioner's "Current DSM Program." The Current DSM Program was set to expire on June 30, 2009.

4. Petitioner's Request. In this proceeding, IPL requested approval of a portfolio of cost effective DSM and load control programs, with appropriate cost recovery and ratemaking treatment. IPL requested approval of performance incentives designed to support achieving program participation and savings, and requested that such incentives, if obtained, be excluded from the FAC earnings and expense tests in order to preserve the intention of creating and retaining an incentive opportunity. IPL also requested authorization to defer for future recovery any costs that it incurs to implement its proposed DSM plan prior to the time that the Commission issues an order providing recovery of such prudently incurred costs.

In light of the June 30, 2009 expiration of the Current DSM Program, IPL also requested expedited consideration of its Petition so that the Commission might enter an order no later than June 30, 2009. In the alternative, IPL requested that the Commission issue an order extending the Current DSM Program with monthly spending at the previously approved annual spending levels, prorated from the expiration of the Current DSM Program until the Commission has issued an order in this proceeding regarding IPL's proposed DSM plan. At the Prehearing Conference, the OUCG indicated that in the event a Commission order could not be issued prior to June 30, 2009, it had no objection to the Petitioner's proposed extension of the Current DSM Program. The Prehearing Conference Order instructed IPL to supplement its request with evidence demonstrating that such an extension is reasonable, just or otherwise in the public interest. IPL filed supplemental testimony supporting its expedited request on March 12, 2009. On June 3, 2009, the Commission issued its Interim Order authorizing IPL to continue its Current DSM Program on a month-to-month basis from July 1, 2009 until the Commission issues its final order in this Cause.

5. Petitioner's Proposed DSM Program. Petitioner's proposed DSM plan includes (a) core DSM programs, and (b) communication system upgrades and phased-in meter upgrades to enable advanced DSM (core and advanced DSM programs are collectively referred to herein as the "DSM Plan"). IPL proposed the DSM Plan be considered in two phases. Phase I includes the core DSM programs as described below. Additionally in Phase I, IPL is seeking to defer, for recovery following their completion through Standard Contract Rider No. 22, the costs of a proof of concept ("POC") to test Home Area Network ("HAN") systems and a Time-of-use ("TOU") pricing study. (The foregoing are herein referred to as the "Phase I DSM Program.")

IPL planned to file its Phase II testimony to coincide with its submission of a Smart Grid proposal for federal stimulus funding. The Phase II testimony was anticipated to include a

proposal to provide residential and small commercial and industrial (“C&I”) customers near real-time energy consumption information and to offer TOU tariffs. The HAN POC will test equipment that provides the customer with near real-time consumption information and will also test IPL’s ability to send direct load control signals to control certain devices in the home including a programmable communicating thermostat. The HAN POC will also test the upgrade of IPL’s Landis + Gyr¹ (“L+G”) legacy systems to include HAN functionality and the associated supporting software development and integration. (The foregoing are herein referred to as the “Phase II DSM Program.”)

During the evidentiary hearing, IPL witnesses confirmed that Phase II would be initiated by IPL’s planned filing and that a full procedural schedule would be established to afford all interested parties a chance to conduct full discovery, prefile testimony and participate in an evidentiary hearing on IPL’s Advanced Metering Infrastructure (“AMI”) deployment plans and related cost recovery and other issues. IPL expressly acknowledged that all interested persons reserve their rights to object to and oppose any relief IPL requests in Phase II of this proceeding. With the procedural commitments IPL’s witnesses made at the evidentiary hearing, the OUCC withdrew its earlier objection to addressing Phase II issues in a separate phase of this proceeding, rather than requiring a new docket to be opened.²

Petitioner’s proposed Phase I DSM Program consists of the following residential and commercial DSM programs (hereinafter referred to as “Core DSM Programs”):

Residential DSM Programs

- Residential Air Conditioning Load Management Program
- Residential Energy Assessment Program
- Residential On-Site Audit with Direct Install Program
- Residential Prescriptive Lighting Program
- Residential Renewables Incentive Program
- Residential New Construction Energy Star Plus Program
- Residential Second Refrigerator Pick-Up and Recycling Program
- Residential Low and Moderate Income Weatherization Program

Commercial and Industrial DSM Programs

- Commercial and Industrial Custom Program
- Commercial and Industrial Air Conditioning Load Management Program
- Commercial and Industrial Prescriptive Program
- Commercial and Industrial Renewables Incentive Program
- Commercial and Industrial Retro-Commissioning Pilot Program
- Commercial and Industrial New Construction Program

¹ In 2006, Landis + Gyr acquired Cellnet Technologies, the third-party vendor that installed IPL’s legacy Advanced Meter Reading (“AMR”) system.

² On August 5, 2009, a Prehearing Conference Order was issued for Phase II of this proceeding.

6. Petitioner's Case-In-Chief.

A. Ken Flora. Ken Flora, Director of Regulatory Affairs, stated that IPL began offering an interruptible rate to encourage customers to modify their load at IPL's direction starting in 1989 and that various additional curtailment options for C&I customers have since been added. He stated that IPL also has a Net Metering Tariff – IPL Standard Contract Rider No. 9, which has been available for Solar Photovoltaic installations (later modified to include hydro and wind resources) since early 2000.

Mr. Flora testified that the Current DSM Program has allowed IPL to work collaboratively with Citizens Gas and Coke Utility ("Citizens Gas"). He stated that due to the nature of their common customers, IPL and Citizens Gas jointly commissioned a DSM Market Potential Study ("MPS") and approximately half of IPL's Core DSM Programs will be delivered jointly with Citizens Gas. Mr. Flora provided a summary of some of the Company's most successful DSM programs, two of which were in collaboration with Citizens Gas.

Mr. Flora stated that the electric utility industry is changing as a result of volatile fuel prices, more stringent environmental rules, and evolving technology. While DSM has for some time been a viable element of resource planning and IPL has a long history of providing DSM programs, it is anticipated that DSM will have an increasing role in resource planning. He stated that DSM is becoming more cost effective as a result of increases in environmental compliance costs, volatility in fuel costs and the cost of construction of supply-side resources, which has escalated significantly in the past several years. The electric utility industry and the infrastructure to support that industry are evolving rapidly. Customers, including residential, commercial and industrial, are becoming more aware of and involved in their electricity consumption decisions and require better, timelier kW and kWh usage information. There is also growing public concern about environmental issues. Mr. Flora stated that it is in IPL's customers' interest for IPL to provide energy efficiency and demand response information and to offer rebate programs that assist customers with the implementation of energy efficiency and demand response measures in a cost effective manner. He stated that DSM is also a key component of a nationwide effort to reduce greenhouse gases. Mr. Flora stated that IPL is supportive of expansion of DSM programs provided that costs are equitably recovered. The Company also believes that appropriate steps should include electric grid upgrades, including AMI investment that enable advanced DSM programs and deployment of "smart" home and business technology.

Mr. Flora stated that to develop its Core DSM Programs, IPL contracted with Forefront Economics, Inc. and H. Gil Peach & Associates, LLC ("Forefront") to conduct its MPS to identify potential core DSM measures. IPL then retained Matthew Rose, a consultant with Vista Energy Group ("Vista"), to review the recommendations of the MPS and provide additional analysis. Having considered the recommendations in the MPS and the further analysis of Mr. Rose, IPL developed DSM programs that provide customers with various energy consumption management options.

Mr. Flora stated that in the Phase I DSM Program, IPL is requesting approval to recover costs of the Core DSM Programs through its new Standard Contract Rider No. 22. In addition, IPL is seeking authority to defer the costs of an AMI enabled HAN POC for its residential and small C&I customers and a TOU study for future recovery in its new Standard Contract Rider No. 22. In addition, IPL is proposing to recover its lost revenues and is requesting approval of an incentive mechanism to encourage deployment of these programs. Mr. Flora testified that the total estimated cost of the Phase I DSM Program, prior to recovery of lost revenues or any Company incentive payment, throughout the program term is approximately \$31 Million.

Mr. Flora stated the initial term will be for a period of approximately three years, although IPL plans to continue DSM programs into the foreseeable future in order to maximize the potential of DSM efforts. The timing of this initial term will allow additional demand-side alternatives to be analyzed in the Integrated Resource Planning (“IRP”) process and then considered for inclusion as IPL plans for continuation of the DSM.

Mr. Flora provided a brief explanation of IPL’s AMI proposal. He stated that IPL currently has an Automated Meter Reading (“AMR”) communication and meter system for its approximately 465,000 energy-only meters. However, due to the quality of data needed for demand rate customers, IPL must use traditional interval meters and manual meter reading for its approximately 6,400 demand rate customers. He stated, pending the results of the AMI POC and Commission approval, IPL will be able to provide greatly enhanced, timely access to usage information for its demand rate customers by upgrading the communication system and demand rate customer meters. Mr. Flora indicated that longer term, IPL expects to utilize two-way communication to improve its customer operations and system operating efficiency.

Mr. Flora stated that the Phase I DSM Program will provide AMI metering to C&I demand rate customers and that, subject to a successful AMI POC, IPL plans to provide more timely access to usage information via the IPL PowerViewSM internet portal. Mr. Flora stated that PowerViewSM provides IPL’s demand rate customers with secure and reliable access to their interval load data via the internet. Customers can access their data with PowerViewSM to gain a more precise understanding of their energy usage and will utilize this information to alter equipment operation and startup schedules to assist them in reducing or eliminating costly demand peaks.

Mr. Flora stated that the information provided on the PowerViewSM portal will be available to IPL’s C&I demand rate customers on a one-day delay, which is a major improvement over the current full billing cycle reading 30-day delay. During the Phase I POC, IPL is also testing the capability for demand rate customers to receive near real time usage on an as requested basis. The C&I customers that will receive upgrades during Phase I include IPL’s largest and most sophisticated customers. Currently about 20 of these customers participate in IPL’s existing C&I demand response programs and have made investments in on-site demand response technology and energy management systems. He stated that IPL anticipates that internet access to one-day delay information via PowerViewSM will support additional participation by IPL’s demand rate customers in IPL’s demand response and energy efficiency programs. Additionally, the information available through AMI will allow IPL to better track the performance of customers participating in its demand response programs.

Mr. Flora stated that the AMI communication system upgrade will allow IPL to accelerate its deployment of energy efficiency and demand response through the superior evaluation, measurement, and verification (“EM&V”) capabilities of AMI. He stated that it currently takes one full billing cycle for IPL to measure and verify demand rate customer participation in a demand response event creating uncertainty as to IPL’s supply needs during the most critical price and reliability hours on IPL’s system. Once AMI communication system meters are installed, IPL expects to be able to verify, in near real time, customer actions taken in response to an IPL demand response program request. Mr. Flora stated that this functionality will be tested in the AMI POC. Mr. Flora stated that the POC method is preferable to IPL, as opposed to a pilot, because IPL already has considerable experience with its AMR system, and L+G has experience with AMI. He noted that pilots take significantly more time to execute and evaluate, and IPL’s intent is to provide AMI benefits to its customers as soon as reasonably possible.

Mr. Flora stated that in a second Phase of this proceeding (assuming a successful AMI POC in its Phase I DSM Program), IPL will file a plan for its Phase II DSM Program, to include advanced DSM programs for up to 22,000 residential and small C&I customers that have energy-only meters over a period of three years. He stated that full implementation of the Phase II DSM Program will be subject to a successful HAN POC, which IPL seeks authority to conduct as part of its Phase I DSM Program, with deferred cost recovery. Mr. Flora stated that IPL anticipates that the HAN POC will allow IPL to provide access to near real time usage and TOU pricing information, which will be introduced to its customers after approval in Phase II of this proceeding. If approved for deployment in Phase II, customers would have a combination of in-home energy displays and internet portal access via residential and small C&I ZigBee Certified AMI meters. In addition, IPL envisions providing participating households/small businesses with Direct Load Control (“DLC”) technology, such as programmable thermostats that can be utilized for air conditioning direct load control and energy savings.

Mr. Flora stated that following completion of the AMI POC, IPL’s entire AMR communication system will be upgraded to accomplish the demand rate customer AMI conversion, which will position IPL to allow residential and small C&I customers to self select for AMI upgrades in a manner similar to how customers self select for IPL’s existing ACLM program. IPL currently has about 210,000 owner-occupied single family homes and 24,000 small commercial and industrial customers. About 25,200 customers have signed up for the ACLM program over the last six years. IPL proposes that 22,000 residential and small C&I customers added over a three year period represents a realistic target and also encompasses a significant portion of the homes and commercial locations that could achieve the largest benefits from energy efficiency and demand response, as well as the bill management benefits that an AMI meter upgrade combined with TOU rates and near real time access to customer usage will enable.

Mr. Flora stated that a major source of the economic benefits associated with the AMI upgrade to be proposed in Phase II of this proceeding is the enabling of time based rate designs. He noted that dynamic pricing can only work if price signals are accurately and effectively communicated to customers. He testified that recent studies, which combine Critical Peak

Pricing with near real time access to information and enabling technology, have demonstrated peak load reductions as high as 40-50 percent in high price regions of the United States. TOU pricing has also been shown to result in reduced overall energy usage.³ Achieving these results requires frequent meter reading by the utility, signal from the utility to the customer (two-way communication), meter information available to the customer, and customer access to technology to manage loads and consumption. He opined that AMI is the enabler of the first three of these requirements.

Mr. Flora stated that IPL estimates that making near real time information available and working with these C&I customers to help others understand the potential uses of this information will potentially result in a peak demand reduction of 4.7 MW and an energy reduction of more than 9,000 MWH. This estimate is based on its experience as well as discussions with several of the 57 customers that are already using the PowerViewSM web portal to understand and manage their load, although with a one month data lag.

Mr. Flora stated that there will be operational benefits including outage management, asset optimization, and potentially distribution automation. Additionally, the replacement of a significant number of standard energy-only meters with two-way meters that have the capability of providing 15 minute interval data will improve IPL's load management information. He indicated that currently, IPL relies on limited samples taken from load profile meters installed on residential and small C&I customer services.

Mr. Flora stated that, as part of its Phase I DSM Program, IPL is proposing to defer for future recovery through Standard Contract Rider No. 22 the cost of a TOU study to determine appropriate TOU rates and the HAN POC, including necessary software and system development for HAN implementation. The cost of the TOU study is estimated to be less than \$100,000⁴ and the cost for the HAN POC is currently estimated at \$300,000. The results of the TOU study (to be filed in the second Phase of this proceeding) will serve as the foundation for IPL's Phase II DSM Program.

Mr. Flora described how IPL proposes to calculate the kW and kWh savings under its EM&V methodology. He stated that similar to proposals that have been approved in other states, IPL proposes to annualize the savings related to a measure for the full program year. This means that no matter when a measure is installed during the year, its savings are calculated as if the measure had been in place for the full year.

Mr. Flora stated that IPL is also proposing changes to its Standard Contract Rider No. 9 (Net Metering for Customers with Solar Photovoltaic, Wind, or Hydroelectric Systems); changes to its Standard Contract Rider No. 13 (ACLM Adjustment), a new Standard Contract Rider No. 22 (Core and Advanced DSM Adjustment); and a new Rate REP (Renewable Energy Production). IPL is proposing the changes to Standard Contract Rider No. 9 and the introduction of Rate REP as part of its comprehensive effort to introduce more renewable energy resources into its portfolio of generating assets. Standard Contract Rider No. 9 is being revised to broaden

³ See "The Power to Choose," Brian Pollom, Puget Sound Energy, Transmission & Distribution World, February 2002, pages 38-41.

⁴ This amount was increased to \$200,000 in Mr. Flora's Supplemental Testimony filed May 1, 2009.

the number and type of customers eligible to participate. Proposed new Rate REP is being created so that customers may alternatively choose to participate in a renewable energy feed-in rate. Rate REP provides pricing unique to the type of renewable energy produced and allows for long-term contracting. IPL is proposing changes to Standard Contract Rider No. 13 to allow certain C&I customers to participate in IPL's ACLM Program. Standard Contract Rider No. 22 is being created to recover the expenditures for the Company's Phase I DSM Program, including the cost of the proposed at-risk performance-based incentive, and recovery of lost revenue due to decreased kWh consumption and kW demand from the program measures.

Mr. Flora stated that various entities are proponents of including performance based incentives as part of an aggressive, robust DSM program. He noted that Jenny Sumner of the OUCC, in Vectren's pending DSM proceeding, Cause No. 43427, testified that "[t]he OUCC is not opposed to performance incentives as authorized in Indiana Administrative Code Section 4-8-7." Mr. Flora stated that he is also familiar with the National Action Plan for Energy Efficiency ("NAPEE"). He stated that the NAPEE, developed by over 50 leading organizations representing key stakeholder perspectives, encourages regulators to reduce disincentives to the adoption of efficiency alternatives by encouraging recovery of lost revenues and incentives, in addition to direct program costs, in order to level the playing field between demand and supply side alternatives.

The NAPEE makes recommendations for utilities to: (1) recognize energy efficiency as a high-priority energy resource; (2) make a strong, long-term commitment to implement cost-effective energy efficiency as a resource; (3) broadly communicate the benefits of and opportunities for energy efficiency; (4) promote sufficient, timely, stable program funding to deliver energy efficiency where cost-effective; and (5) review and adopt policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments. Mr. Flora stated that IPL formally endorsed the NAPEE in the fall of 2007.

Mr. Flora testified that DSM programs have many positive consequences, including reduced need to build generation, reduced emissions, and less reliance on fossil fuels, among others. By their nature, however, DSM programs encourage customers to decrease their usage. Lowered usage leads to lower utility revenue and impacts a utility's ability to cover its fixed costs. Mr. Flora stated that allowing IPL to earn incentives which are tied to DSM program performance will help to reduce or eliminate the negative consequences, ease stakeholder concerns, meet the customers' expectations of specific results, and support the State's objective in encouraging energy efficiency while allowing a utility an opportunity to recover its reasonable costs and earn a reasonable return. The opportunity to earn incentives related to the DSM Plan aligns the financial interest of the Company with policy objectives including customer interests, demand resources, price mitigation, and environmental stewardship. Mr. Flora stated that a robust DSM program with lost revenue recovery and performance based incentives will advance the goals of safe, reliable, and cost effective delivery service, and will promote the objectives of economic efficiency.

Mr. Flora opined that Commission approval of IPL's proposed DSM Plan will serve the public interest. He stated that approval of IPL's proposed DSM Plan, including its request to

recover lost revenues and incentives, promotes the efficient use of energy by better aligning the Company's interests with those of its customers. It is also responsive to technological and operating conditions faced by IPL resulting from initiatives to decrease carbon emissions from generating units. He further stated that DSM provides an alternative to supply-side resources at a time of rising construction and generating costs and also addresses the growing demand of customers who want to install alternative technologies like wind and solar systems and still receive electric service from IPL for the demand their system cannot provide. Finally, DSM has the potential to decrease electric consumption by making use of AMI technology as an energy efficiency strategy.

Mr. Flora stated that he is familiar with the State's articulated policies on energy efficiency and alternative pricing mechanisms. He stated that in 2006, the State of Indiana through the Indiana Office of Energy & Defense Development established the Hoosier Home Grown Energy Strategic Plan that encourages energy efficiency measures ("Strategic Plan"). He stated that the Strategic Plan supports alternative pricing regulatory mechanisms that encourage utilities to promote efficiency and conservation by their customers.

Mr. Flora stated that he is also familiar with the Energy Independence and Security Act of 2007 ("EISA"). He stated that this Act amended the Public Utility Regulatory Policies Act of 1978 ("PURPA") (as amended by Section 1252 of the Energy Policy Act of 2005), adding two new PURPA standards addressing inclusion of energy efficiency options in utilities' IRP and rate design modifications to promote energy efficiency investments. Section 532 of the EISA requires utilities, as part of their IRP process, to adopt policies making cost-effective energy efficiency a priority resource. On rate design issues, the EISA states that rates should align utility incentives with the delivery of cost-effective energy efficiency and promote energy efficiency investments.

Mr. Flora stated that IPL took the EISA into account when it developed its DSM Plan. He stated that IPL is investing in energy efficiency resources and in Phases I and II of this proceeding, following completion of the AMI POC, IPL plans to upgrade its AMR communication system to AMI. Assuming successful proof of concepts, this AMI system will enable near real time communication for IPL's demand rate customers in Phase I and for approximately 22,000 residential and small C&I customers in Phase II.

Mr. Flora stated that IPL is monitoring activity that could result in the approval of grants or incentives for energy efficiency and smart grid projects at the federal level. He also stated that IPL is, and has been, an active participant in both phases of the Commission's DSM investigation currently pending in Cause No. 42693. He indicated that IPL designed its DSM Plan to be transparent, which was one of the issues addressed in the workshops in Cause No. 42693. He noted that IPL attempted to model its DSM Plan in a way that is relatively consistent with other Indiana electric utilities.

Mr. Flora stated that absent approval of recovery of lost revenues and Company incentives, there would be no level playing field between demand- and supply-side alternatives. He stated that the Company's ability to attract capital to invest in utility operations largely depends upon the Company's financial performance. IPL's proposed DSM Plan has been

designed to aggressively reduce customer usage, thereby creating a number of benefits, including (1) deferral of the need to build generating facilities, (2) reduction in air emissions, (3) reduction in fuel use and cost, and (4) providing customers with enhanced ability to reduce their bills. Mr. Flora stated that pursuit of these benefits means that due to reduced consumption of electricity, the Company will have less revenue and additionally, will invest less capital in plant, and therefore, will have less rate base growth as an earnings driver.

Mr. Flora stated that in recognition of the inherent impact DSM has on the Company's financial performance, which could be viewed negatively by the financial community, the DSM Plan being proposed is accompanied by rate design and incentive proposals that provide necessary financial support to IPL's commitment to DSM. He stated the recovery of lost revenues and the potential for a performance incentive positions IPL to better compete for capital. Additionally, Mr. Flora stated that major credit rating agencies are not generally supportive of DSM costs and infrastructure upgrades recorded as regulatory assets and not recovered on a current basis. Mr. Flora stated that IPL, just like many other companies, faces challenges in the current credit market. Banks have tightened their lending practices and available capital has been drastically reduced. Economic uncertainty associated with the current recession surrounds the volatile credit market. He stated that IPL's commitment to energy efficiency may have an impact on IPL's ability to access capital on reasonable terms. He stated that IPL's level of commitment to energy efficiency and DSM will depend on the Company's ability to implement current cost recovery of not only program costs, but also lost revenue and potentially, performance based incentives. Achieving this level of recovery and communicating the elimination of the negative aspect of DSM to financial analysts should ease their concerns and relieve any downward pressure on IPL's financial condition.

Mr. Flora stated that the proposed incentives are necessary to position DSM on a level playing field with construction of new generation but it still puts the utility at risk. Once a generation plant is constructed, earnings are somewhat predictable. A utility can forecast earnings on plant, and rely on the resulting revenue stream for many years. In establishing its proposed incentive mechanism, IPL tried to create a reasonable opportunity that would fall within the DSM economic tests and would provide a level of financial opportunity that would appear to be meaningful to management and to investors. He stated that IPL seeks to balance making cost-effective DSM programs available to customers while assuring that the Company also receives some reasonable level of financial reward for reducing generation requirements over time. The fact the incentive is only achieved if IPL delivers on the program savings should provide assurance that this balance is maintained.

Mr. Flora stated that IPL considers DSM to be a critical competency for the utility of the future. He stated that IPL has obtained an independent market assessment of programs in order to design a portfolio of programs responsive to the Commission and the Governor's Strategic Plan, federal legislation, and industry conditions such as rising construction costs, volatile fuel costs and anticipated carbon restrictions. IPL is conducting an AMI POC in order to bring the additional kWh and kW savings opportunities that AMI technology provides to its customers.

He stated that DSM investment should be used to reduce load and benefit customers by reducing generation needs. Mr. Flora noted that IPL has included DSM as an IRP resource for

many years, but, if current cost recovery, revenue protection and incentives are not provided, the Company will struggle in attempts to satisfy the financial community that future financial performance will not be impaired. Capital costs will potentially increase. This dilemma can be avoided by adopting a proposal that only provides an incentive when DSM succeeds, meaning the incentive is essentially paid for through a part of savings, and is a modest part of the overall plan costs. The incentive drives desired behavior and leads to the long-term use of DSM. Mr. Flora stated that the package of programs, rate design and incentive are linked together to provide benefits to customers and the Company, and to meet the Commission's DSM growth directive. He stated that for the program term, it represents an excellent opportunity to deploy cost-effective DSM and should be found to be in the public interest.

In conclusion, Mr. Flora stated that IPL's robust and comprehensive DSM proposal builds upon the DSM platform that IPL established several years ago. He explained the proposed DSM Plan is robust because it seeks to increase the level of annual spending to nearly four times the current level, and is comprehensive because it includes something for every customer class. Further, IPL plans to seek Commission approval for a Phase II DSM Program that will introduce new technology to upgrade IPL's current network to an AMI functional system, which has the potential to provide timely energy consumption information and automatically control devices in the home to improve demand response and energy efficiency capabilities. He stated that providing residential and C&I customers with more timely energy consumption information will allow them to make better energy decisions to manage their monthly electric bills. The AMI system will also create a foundation that IPL can build upon in the future to provide demand response, dynamic pricing and improved outage information to its customers. Mr. Flora stated that there are risks when a company moves toward the edge of technology, but these risks can be mitigated through careful testing to ensure the equipment performs as intended. Accordingly, IPL is proposing to move forward through the use of POCs to test the viability of the emerging AMI technology as part of its Phase I DSM Program.

Mr. Flora also stated that changes to IPL's Standard Contract Rider No. 9, Net Metering, the introduction of DSM customer incentives for renewable energy equipment, and the introduction of Rate REP provide a comprehensive and effective menu of incentives for supporting IPL's customers who are inclined to invest in renewable energy.

B. Lester H. Allen. Lester H. Allen, Team Leader, Marketing and Program Management of IPL testified that IPL has successfully offered DSM programs to its customers since 1993. He stated that these programs have been managed in a cost effective and efficient manner. The programs that IPL has offered over the last four years have provided for both peak demand and energy reductions.

Mr. Allen provided a summary of the programs currently being offered to residential customers and stated these programs have been successfully offered since the third quarter of 2004. He stated that in the proceeding approving the Current DSM Program (Cause No. 43252), IPL also agreed to conduct a DSM MPS at its cost to identify cost-effective DSM programs and quantify their potential application in IPL's service territory. As detailed in IPL's Annual DSM Reports filed with the Commission, these programs in total have generated significant demand and energy savings. At the end of 2008, IPL had deployed approximately 25,000 switches which

is equivalent to about 25 MW of summer peak reduction capability. When the demand savings from IPL's Interruptible Tariff Riders are considered, there was approximately 100 MW of peak demand reduction available to IPL in the summer of 2008.

Mr. Allen stated that IPL's High Efficiency HVAC Program has provided incentives for high efficiency Air Conditioners and Heat Pumps to about 5,800 residential customers since 2005. Citing to IPL's 2008 DSM Annual Report, he stated that these new high efficiency HVAC units are estimated to have provided nearly 3.0 MW of summer peak reduction and nearly 4,000 MWh of summer energy savings. Other examples of IPL efforts that reduce energy consumption include distributing energy efficiency kits and Compact Fluorescent Lights ("CFLs"). He noted that in 2007, IPL began distributing home energy efficiency kits as part of its Energy Efficiency Education Program through which 3,800 of these kits were provided to its residential customers.⁵ IPL had also distributed nearly 50,000 CFLs through the *Change a Light, Change the World* campaign through the end of 2007 providing about 3,000 MWh of annual energy savings.

Mr. Allen stated that IPL proposes to continue to offer the majority of the components of its Current DSM Program to its residential customers. He stated that IPL believes the proposed set of DSM programs will provide customers a means to manage their energy usage and mitigate the impact of increasing energy costs in an increasingly difficult economic time. Due to the relatively high cost of adding additional capacity, escalating environmental costs, and volatile fuel costs, DSM provides a cost-effective alternative to supply-side resources and gives customers a better opportunity to become more energy efficient and thereby manage their energy bills. IPL also believes that it is in its customers' interest to provide energy efficiency information, assistance and rebate programs that assist customers in both behavioral changes and with the implementation of energy efficiency measures in a cost effective manner. Increased energy efficiency also plays a key role in U.S. efforts to reduce greenhouse gases.

Mr. Allen opined that the full benefits of DSM programs cannot be achieved without offering programs to both residential and C&I customers. Therefore, the set of DSM programs IPL is proposing includes offerings for both of these groups of customers

Mr. Allen noted that the MPS was performed in collaboration with Citizens Gas. In late 2007, IPL and Citizens Gas conducted a request for proposal ("RFP") process ultimately selecting Forefront to complete the MPS. *The IPL DSM Action Plan: Final Report* dated July 31, 2008 contains the market assessment and proposed DSM action plan (the "*Forefront Report*"). Mr. Allen stated that the DSM programs recommended in the *Forefront Report* were based on a review of programs that have been successfully implemented by other utilities and programs that had likely applicability to IPL customers. The DSM program budget was based on a set of broad assumptions regarding estimated program costs and participation levels. He further noted that although the *Forefront Report* identifies a comprehensive list of DSM programs that have technical potential for IPL customers, the report only recommends

⁵ These energy efficiency kits distributed to Residential customers are in addition to the energy efficiency kits that IPL has been distributing through the National Energy Foundation classroom program.

implementation of those programs that appear to be cost effective. The cost effectiveness of the DSM programs was primarily determined using the Total Resource Cost (“TRC”) Test.

Mr. Allen noted that IPL and Citizens Gas were both to complete an MPS to identify and deliver a new set of DSM programs. Since IPL had successfully worked with Citizens Gas on the joint delivery of energy efficiency programs in the past, and since the two utilities generally serve the same customers within the boundaries of the City of Indianapolis, it was a very logical decision to perform the studies together. The objective was to build on these collaborative efforts to identify additional opportunities for both utilities to work together. As practical, an overarching objective was to identify opportunities to cooperatively deliver programs with Citizens Gas and attempt to align IPL’s programs with the programs being offered by other Indiana utilities.

Mr. Allen testified that it is IPL’s expectation that since many customers receive service from both utilities, the joint delivery of a common program, such as the Home Energy Audit, for example, will be more cost effective for the respective utilities and more convenient for both utilities’ customers.

Mr. Allen provided as an example of a successful IPL and Citizens Gas collaboration, the Targeted Weatherization Program administered by the Indiana Housing and Community Development Authority (“IHCDA”). This program provides an additional channel for the delivery of weatherization services to the income qualified community. Mr. Allen explained that funding from IPL and Citizens Gas is being leveraged with IHCDA-provided dollars. The program targets homes with high energy intensity for weatherization services, putting the weatherization investments to work where the savings can be realized. Mr. Allen noted that the OUCC and the Commission served as members of the Citizens Gas Oversight Board, participated in the review of and comment on the MPS process and the MPS draft and final reports.

Mr. Allen stated that many of the programs being proposed by IPL in this proceeding are also being proposed and/or delivered by other Indiana electric utilities. While Indiana utilities have to some degree worked together in the past to deliver programs that are similar in look and feel, he explained IPL’s intention to make an even greater effort to do this in the future. Mr. Allen asserted that the offering of similar program designs will minimize marketplace confusion and may leverage all participating utilities’ respective marketing efforts. To date, three Indiana utilities have selected Forefront to complete their MPS, which is also a factor in having consistent program offerings and similar expected results across the State.

Mr. Allen explained that IPL hired Vista to assist in reviewing the *Forefront Report* and to provide additional expertise to create a viable portfolio of DSM programs. Vista’s analysis effort was led by their principal, Matthew F. Rose, and focused on leveraging the *Forefront Report* with IPL’s previous planning, design and implementation as well as consideration of other successful efforts throughout the United States. He stated that Mr. Rose’s research, design and analysis complimented the work already performed by Forefront.

Mr. Allen testified that while IPL retained the majority of the findings from the *Forefront Report*, there are a few differences between that report and the later analysis performed by Mr. Rose. The most significant differences between the DSM Plan and the *Forefront Report* include:

1. Program Term - The term of the proposed set of DSM programs was condensed from a five (5) year plan to a three (3) year plan;
2. Residential Renewables Demonstration (*Forefront Report*, pp. 68-69) – This demonstration was modified to provide an incentive for the purchase of customer small renewable energy projects and to offer this program to both IPL’s residential and C&I customers;
3. Commercial and Industrial Prescriptive (*Forefront Report*, pp. 41-46) – The proposed program was modified to reduce its complexity, and IPL decided not to act on the suggestion of different program designs for different customer segments;
4. Commercial and Industrial Retro Commissioning Lite (*Forefront Report*, pp. 47-49) – IPL modified the program participants and spending levels to be a “pilot” program and to provide the opportunity to increase the offering if early experience is promising; and
5. Residential Prescriptive (*Forefront Report*, pp. 60-65) – IPL modified this program to remove direct incentives to consumers for their purchase of Energy Star® appliances and instead focus on the purchase of Energy Star® lighting.

Mr. Allen stated that IPL believes the programs can ramp up in participation over the initial three-year period more quickly than the estimate in the *Forefront Report*. However, IPL also believes that it is prudent to implement the programs for several years. He testified that IPL will gain program experience during the proposed three-year term, learning from the results of this effort. This experience, along with the outcome of the Commission’s DSM investigation currently pending in Cause No. 42693 (Phase II), will allow IPL to propose a new plan in three years that will allow IPL to build upon the anticipated success of this new set of programs.

The Phase I DSM Program includes the following core DSM programs:

Residential DSM Programs

Residential ACLM Program – This is a continuation of IPL’s existing ACLM Program. This voluntary program allows IPL to control the customer’s central air conditioning during the months of May to September;

Residential Energy Assessment Program – This program will be marketed and delivered in cooperation with Citizens Gas. Customers are provided a small kit with low cost home energy efficiency measures. The kit will be provided subsequent to either a short survey by the customer or the customers’ completion of a web-based home energy audit;

Residential On-Site Audit with Direct Install Program – This program will be marketed and delivered in cooperation with Citizens Gas. Customers in existing homes may request an on-site

home energy audit, and a set of low-cost energy efficiency measures will be provided with this program. The audit will recommend appropriate measures for the customers to install and the customers will be provided with a portion of the funds to assist in these incremental measures;

Residential Prescriptive Lighting Program – This program will provide incentives for energy efficient lighting;

Residential Renewables Incentive Program – Positioned as a Market Transformation program, this program will provide an incentive for residential customers to buy-down a portion of the cost of a renewable energy system;

Residential New Construction Energy Star[®] Plus Program – This program will be marketed and delivered in cooperation with Citizens Gas. Incentives will be provided to builders who construct homes that meet Energy Star[®] standards;

Residential Second Refrigerator Pick-Up and Recycling Program – Customers will be provided an incentive that will allow IPL to pick-up, disable and recycle inefficient second refrigerators and/or freezers; and

Residential Low and Moderate Income Weatherization Program – This program will be marketed and delivered in cooperation with Citizens Gas. This program is an extension of the current program that provides for the weatherization of income qualified homes.

Commercial and Industrial DSM Programs

Commercial and Industrial Custom Program – This program will be marketed and delivered in cooperation with Citizens Gas. This program provides for custom applications that have a large amount of energy savings but aren't covered by the C&I Prescriptive Program;

Commercial and Industrial ACLM Program – This program is an extension of the Residential ACLM Program (“CoolCents”) and will provide C&I customers the opportunity to participate in IPL’s voluntary air conditioning load control program;

Commercial and Industrial Prescriptive Program – Delivered in combination with Citizens Gas this program will facilitate the adoption of energy efficiency measure installation in commercial and industrial facilities. Prescriptive incentives will be provided for the installation of energy efficient lighting, motors, pumps and HVAC;

Commercial and Industrial Renewables Incentive Program – The Commercial counterpart of the Residential Program, this program is positioned as a Market Transformation program, providing an incentive for commercial customers to buy-down a portion of the cost of a renewable energy system;

Commercial and Industrial Retro-Commissioning Pilot Program – Delivered in combination with Citizens Gas, this program will “retro-commission” high opportunity buildings with the goal of getting building performance closer to a design level of performance; and

Commercial and Industrial New Construction Program – Delivered in combination with Citizens Gas, this program will provide incentives for developers to install equipment that is more efficient than standard efficiency equipment.

For purposes of program selection and modeling, Forefront proposed an initial weighted allocation of program direct and administrative costs for residential customers of 40 percent Electric and 60 percent Gas, when customers with natural gas appliances participate in the program. Mr. Allen stated that detailed program designs have not yet been developed, but this initial allocation will serve as a starting point for IPL and Citizens Gas as they work to develop joint program designs and budgets. Mr. Allen stated that actual costs and energy savings will depend on the participation rate by customers and the relative mix of all-electric household customers and homes that have some natural gas appliances.

Mr. Allen explained that for the jointly delivered C&I customer programs, it is anticipated that the allocation of program delivery costs will be more straightforward. For example, in the Commercial and Industrial Custom Program, each measure installed will generally use either natural gas or electricity as the energy source, so the program costs will generally be directly assignable on a customer-by-customer basis. In the C&I Prescriptive Program, it is likely that in many instances, both electric and natural gas measures will be installed, so the respective utility will pay the direct cost of measures installed and an allocated pro-rata share of indirect program costs.

Mr. Allen stated that IPL will develop a DSM tracking system. This tracking system will be used to record and report the relevant metrics necessary for program administration and cost recovery. Information recorded will include participant information, costs and energy impacts for each customer served. For programs jointly delivered with Citizens Gas the program direct costs will be assigned by fuel, as appropriate. Common costs will also be tracked and allocated based on an appropriate allocation method.

Citizens Gas is required by the Commission's Order in Cause No. 42767 to utilize a third-party to implement its DSM programs. Mr. Allen stated that this approach is compatible with the way IPL has historically delivered many of its DSM programs and the use of third parties (or contractors) will not negatively impact program delivery. Mr. Allen noted that IPL's ACLM, its largest current DSM program, has been delivered by a contractor since the program's inception. However, IPL has staff assigned to the ACLM program to administer the contract and remains responsible for the successful delivery of the program and overall customer satisfaction. This is the same relationship IPL will have with contractors jointly delivering the IPL and Citizens Gas programs. Even though program delivery is primarily through a contractor, the programs will remain branded as an IPL (or IPL and Citizens Gas) program.

As to which components of the Core DSM Programs will be delivered by contractors, Mr. Allen stated that while this has yet to be determined for all of the program offerings, IPL anticipates that the majority of the programs will be delivered by contractors that have expertise in DSM program management. He noted that Forefront anticipated this approach in developing the recommended limited staffing levels.

The Core DSM Programs will be devoted to efforts to reduce the electric demand and consumption of customers served under Rate Schedules RS, CW, SS, SH, OES, UW, CW (associated with Rate SS) and SL. Mr. Allen explained that IPL's largest customers served by Rate Schedules HL, PL and PH are not included in this proposal as they are typically sophisticated energy users and have technical resources available to allow them to identify energy savings opportunities and to make cost effective investments. Even though IPL does not propose to offer these customers a specific set of DSM programs, he stated IPL will continue to offer energy efficiency training and education opportunities for these customers, such as the series of workshops IPL has offered in partnership with the Purdue Technical Assistance Program. In addition, IPL proposes to provide these larger customers with the necessary tools to implement their own advanced DSM, made possible by an AMI communication system upgrade for all customers and a demand rate meter upgrade program for demand rate C&I customers, which will be considered in Phase II.

Mr. Allen stated that the program development process is consistent with the Commission's rules relating to DSM. He noted that the Guidelines for Integrated Resource Planning contained in 170 IAC 4-7 outlines many requirements for a utility to consider when analyzing future resources of energy supply. Specifically, according to 170 IAC 4-7-6(a) and (b), an electric utility must consider demand-side programs and demand-side resources as a source of new supply. This includes innovative rate design and a comprehensive array of demand-side measures that provide an opportunity for all ratepayers to participate in DSM. Furthermore, as part of the selection of new supply sources like DSM, 170 IAC 4-7-7 requires the utility to conduct cost-benefit analyses utilizing several tests to make sure the proposed sources are cost-effective. He stated that all of the analyses contained in the *Forefront Report*, as well as the additional work performed by Mr. Rose to develop IPL's proposed DSM programs, were performed in the context of these DSM rules.

Mr. Allen stated that an annual report will be prepared in cooperation with an independent third-party evaluator summarizing the (1) accomplishments of the previous year, (2) proposed changes in the DSM program and the rationale for the proposed changes, and (3) revised program budgets and goals for the following year.

Mr. Allen testified that several of the proposed DSM programs are new for IPL and it is not known at what pace customers will adopt these programs. He stated that this is made even more uncertain with the difficult economic conditions that currently exist. As recommended in the *Forefront Report*, IPL requested the flexibility to consider the approved spending levels as three-year targets, rather than as annual fixed amounts, and to allow the funds to be shifted between programs so long as the DSM programs still pass the TRC Test and the overall DSM budget is not exceeded.

Mr. Allen noted that IPL also proposed that the annual spending for the Income Qualified programs not be included in the annual program budget rebalancing, solidifying its commitment to its Income Qualified Weatherization program by safeguarding against dollars being shifted to other programs.

Mr. Allen explained that implementation of the Core DSM Programs requires significant investment in internal and external resources. The general requirements for DSM program implementation include the following: (1) development of detailed procedures for program administration; (2) development of a communication plan, promotional approaches, marketing and program support materials; (3) development of tracking procedures and procurement of an appropriate tracking system provider; (4) recruitment and training of additional program staff; and (5) for certain of the programs, development and issuance of RFPs for selection of contractors to deliver the program.

In addition to the direct program costs that are identified by Mr. Rose in his testimony covering each of the program plans, Mr. Allen stated there are indirect costs that will be incurred for successful DSM program delivery. These costs include a tracking system, program research and development, staff development, and membership in relevant organizations such as E-Source, Association of Energy Service Professionals and the Midwest Energy Efficiency Alliance. The necessity and appropriateness of these costs, which are estimated to total approximately \$575,000 for the three-year program term, are discussed in the *Forefront Report*.⁶

Mr. Allen testified that, based upon the proposed DSM programs to be implemented, the anticipated staffing requirements will total five positions in the first year of the program, with an additional individual added by the 2nd year of program delivery, for a total of six positions by Year 2. These staffing levels are consistent with the budgeted expenditures for program staffing that were included in the *Forefront Report*. Petitioner's Exhibit LHA-3 includes budget provisions for these staffing requirements in the program costs.

Mr. Allen stated that IPL will develop a tracking system to monitor and provide a uniform reporting of program results that may include: participants by program (applications, reservations requested and granted); number of units installed by measure; site data (as appropriate); program expenditures and remaining available budgets; and initial estimates of load impact by measure.

Mr. Allen also highlighted the more significant proposed additions and changes being made to the Current DSM Program. Mr. Allen offered the rationale and need for several of the proposed additions and changes.

Mr. Allen stated that although no longer identified as a separate program in the DSM Plan, a comprehensive and sustained energy efficiency education program is critical to raise awareness and drive customer participation to the programs. He noted that the *Forefront Report* recommended spending approximately \$1 Million during the three year program term. He testified that the education program has the following objectives: (1) build awareness of the need to use energy wisely; (2) educate consumers on how to conserve energy and reduce demand; (3) educate customers on how to manage their energy costs and reduce their bill; (4) provide more extensive energy efficiency training for IPL employees directly involved in customer contact; (5) communicate IPL's support of customer energy efficiency needs; and (6) drive participation in the DSM programs.

⁶ *Forefront Report*, p. 87.

Included in the Energy Education efforts is the proposed purchase and installation of a web-based energy audit tool to complement the Residential Energy Assessment Program and the On-Site Audit with Direct Install Program. IPL also proposes to continue and expand the Classroom Education program that has been offered the last several years in partnership with Citizens Gas.

IPL proposes to spend \$375,000 in Year 1, \$325,000 in Year 2, and \$325,000 in Year 3 for its Energy Efficiency Education efforts. The proposed three year funding level totals approximately \$1 Million dollars, which is about four percent of the overall DSM program budget. In order to achieve broader customer participation under the proposed DSM Plan, Mr. Allen asserted that it is critical to provide an adequate amount of energy efficiency education funding to create customer awareness and a call to action. He noted this approach is also consistent with recommendations in the *Forefront Report* concerning the appropriate amount of spending for energy efficiency education to complement the program marketing efforts.

Mr. Allen explained that a web-based energy audit software tool is an online solution for IPL's residential customers to improve their energy management and efficiency. An energy audit will provide IPL customers with the ability to compare previous months and years of customer specific consumption information for detailed energy analysis. The energy audit will also include information on isolated energy impacts of weather conditions. This web-portal will provide customers with 24-hour a day access to their energy information and serve as a gateway to encourage customers to consider other IPL energy efficiency offerings. Finally, the energy audit will provide IPL's customers with improved service, giving its Customer Service Representatives a tool that will allow them to better address customer concerns of how to reduce their energy bills.

Mr. Allen explained the rationale for IPL's expansion of its current ACLM Program to allow C&I customer participation. He stated that similar to IPL's residential customers, its C&I customer's peak electrical demand is driven in large part by use of air conditioning. IPL believes this is too large of a demand response opportunity to leave untapped. While not as homogenous a group as its residential customers, many of the C&I customers do have HVAC systems that are similar to residential HVAC systems that can also be controlled. The C&I customers will often have HVAC systems that are larger; therefore switch installations will likely be more complex. Since this group of customers will be more diverse in the size of the systems available for control, IPL proposes not to pay the flat seasonal incentive of \$20 per year that residential customers receive, but instead proposes that participating C&I customers receive an incentive on the basis of tons of controlled air conditioning load. The amount of the proposed payment is \$5 per ton of cooling capacity per month for the June through September period.⁷ In addition, since IPL already has a Residential ACLM Program, there will be limited program start-up costs.

Mr. Allen stated that there will be some differences for C&I customers from the way the program is currently designed and administered for IPL's residential customers. IPL will continue to credit customer bills for months of June, July, August and September. Also, participant enrollments will still most commonly start with either a web inquiry or a telephone call to the toll-free number. However, since the amount of air conditioning load that is available

⁷ One ton of controlled Commercial AC load is expected to yield about 1 kW of demand reduction making the Commercial incentive approximately equivalent to the incentive received by the Residential Customers.

for control will be site dependent, the amount of the credit will not be determined until after the customer site has been visited by an IPL representative. He stated that IPL anticipates that the customer will be required to enroll, at a minimum, one-half of its controllable air conditioning units at each site.

Mr. Allen also explained why maintenance for previously deployed ACLM switches is necessary and critical. Since IPL has been installing ACLM switches for over six years, its currently deployed switches need attention. Mr. Allen described the proposed maintenance program for the ACLM Program. He stated that IPL intends to utilize its existing AMR system to assist in conducting a “metered maintenance” program on the switches. Discussion and research with the AMR vendor and another utility leads IPL to believe that the AMR system provides IPL with a unique and effective tool to identify, and then repair or replace ACLM switches. Based on the experience at another utility with a similar AMR system and an ACLM program, IPL expects to be able to interrogate the majority of the switches to determine if they are in working condition. This “virtual” approach to system maintenance will be less expensive than field visits and testing of the ACLM switches as the switches age.

Each year IPL proposes to test a portion of the ACLM switches by simulating a control event. Metered information for customer usage prior to, during and after the control event will allow IPL to identify which switches functioned during the test event. Switches that don't appear to be functioning based on the metered information will be identified as possibly needing maintenance. A technician will then be dispatched to ensure that the switch is in working order or make necessary repairs. Mr. Allen stated this allows IPL to focus switch maintenance efforts on switches that are highly likely to not be in working condition, eliminating the need to systematically visit all the participating customers homes as most ACLM maintenance programs require. In addition, this metered maintenance approach will serve as a major component of IPL's EM&V efforts on the ACLM switches, complimenting other load research efforts and improving its confidence in the amount of load reduction that are being realized by operation of the ACLM switches.

Mr. Allen described IPL's proposal to recover costs included for EM&V for the residential and C&I ACLM program and the Metered Maintenance. He stated that IPL proposes to spend and recover approximately \$340,000 per year for ACLM metered maintenance and ACLM EM&V. These costs are allocated between the residential and C&I ACLM programs and included in benefit/cost tests.

IPL indicates it will be judicious in its utilization of the ACLM as a demand response resource, being mindful of its customers' comfort level and the need to maintain high customer retention as a program participant. IPL has registered ACLM as a Load Modifying Resource with Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”) as part of IPL's resource adequacy requirements.

Mr. Allen described the changes and additions proposed in the Renewable Energy Incentive Program. He stated that IPL is proposing to replace the current Renewable Energy Education programs with a program that provides an incentive to customers to install a small scale renewable energy project. This program would be available to both residential and C&I

customers. IPL is proposing to offer an incentive of \$2 per watt, up to \$4,000 per site, for customers to install a small scale renewable energy system. This program, in conjunction with the proposed modification to Rider No. 9 for Net Metering and the proposed Renewable Energy Production ("REP") rate will provide increased opportunities for the development of economic renewable generation resources. Mr. Allen stated IPL will work with local contractors to deliver this program.

Mr. Allen explained why it is necessary and appropriate for IPL to modify the Renewable Energy Program from an education program to a program that will provide individual customers with incentives for the purchase of small scale renewable projects. He stated that by changing the program design to provide for a smaller investment per installation, IPL dollars will leverage the investments of more customers and result in more projects being installed than the prior program design. He indicated that although IPL's Renewable Energy Education program has been an effective program, providing incentives for several demonstration projects that have given many IPL customers a first-hand view of the benefits of alternative energy sources, there has been very limited adoption of renewable generation projects by IPL customers. Mr. Allen stated that IPL's net metered program has been available to its customer's for about 10 years, but only five customers are currently enrolled as participants.

In recent years, Mr. Allen stated, there has been considerable customer interest in the purchase of small scale renewable systems, but the initial cost remains a major obstacle for customers. Also, there are a limited number of contractors with installation experience. Even with IPL provided incentives, renewable systems remain relatively expensive for customers. He stated the objective is for the IPL incentives to serve as a catalyst for additional customer system purchases and to begin a transformation of the market place. IPL anticipates that the end result of this incentive will be more customer installations and greater customer interest and acceptance of alternative energy sources. Mr. Allen also explained that eligible customers who install a system with IPL incentives will be able to participate as a Net Metered customer or under IPL's proposed REP Rate.

Mr. Allen described the EM&V process proposed for the DSM programs. He stated that a systematic evaluation and measurement process will be developed. The evaluations will be primarily used to make informed future decisions about cost-effectiveness and modifications necessary to enhance the success of the DSM programs. IPL will also utilize the evaluation process to determine the demand and energy impacts as well as actual program cost-effectiveness for the determination of performance incentives.

Mr. Allen explained that program quality control and verification will be conducted on an on-going basis by utilizing quality control/verification/survey samples for installations and services. Surveys and interviews will be conducted by an independent third-party evaluator to assess customer/market provider satisfaction as well as consumer satisfaction. IPL will also conduct field verifications on a sample of installations to ensure that program measures are installed.

Mr. Allen explained that the independent evaluator will perform two types of evaluations. A process evaluation will be performed to identify how well the programs are implemented. The

objective of the process evaluation is to examine the effectiveness and efficiency with which the programs are designed and delivered. Impact evaluations will also be used to examine the more technical effects of the programs such as energy and demand savings. The objective of the impact evaluation will be to determine the quantitative results produced by the DSM Plan.

Mr. Allen explained how IPL will use the results of EM&V to report DSM program effectiveness. He stated that IPL will track program participation on a monthly basis. The results of participation EM&V will be used to report actual participation rates for all programs and measures semi-annually. However, impact EM&V efforts will vary for those measures with savings which are deemable and those measures with savings which are considered non-deemable to optimize resources.

Mr. Allen stated that there is a trend in the industry to utilize historic savings values for commonly installed energy efficiency measures which have been proven or “deemed.” The New York State Energy Research and Development Authority defined “deemed savings” as “savings associated with commonly adopted measures and that do not require measurement and verification for individual projects.” Mr. Allen testified that IPL believes many of the measures in the proposed portfolio should be considered deemed for purposes of cost-benefit analysis and cost recovery.

He described how “deemable” and “non-deemable” measures will be treated. He stated that the deemed savings per measure will be used to determine impacts for the first year of the program. IPL will gather and report actual participation results to determine the participation component of lost revenue and incentive calculations. Following this first year of deployment, IPL will conduct impact evaluations to prospectively determine measured savings for subsequent years to be included in subsequent filings. Mr. Allen stated this process is expected to require between six and twelve months. Therefore, kW and kWh savings may remain unchanged for deemable measures in the second year.

For non-deemable measures, IPL will gather and report engineering estimates of kW and kWh savings based upon information received from participating customers. IPL will retain an independent evaluator to perform annual EM&V within the approved budget constraints. IPL will work with this evaluator to determine the appropriate EM&V on a measure-by-measure basis to identify the scope of each year’s analysis. IPL expects emphasis on specific measures may vary annually.

Mr. Allen also described the EM&V effort proposed for the ACLM Program. He stated that IPL’s AMR system puts IPL in a unique position of being able to verify the load efficacy and load reduction for the majority of the ACLM switch population. The same metered information that will indicate whether or not a switch is working will also yield information on the amount of the load reduction that was achieved. If unsatisfactory remote readings occur, a field visit will follow.

Mr. Allen testified that the estimated cost of the EM&V effort for the DSM Plan is 5.3 percent of the overall program budget. He stated that this percentage is an average of the percentage of total program costs for the residential and C&I programs and falls within

NAPEE's recommendation for evaluation budgets of three to six percent of program budget. He stated that IPL is committed to initiate its EM&V efforts upon receiving Commission approval of Phase I of the DSM Plan. Early coordination with a third-party evaluator is essential to establishing an effective tracking database and process.

C. John E. Haselden. John E. Haselden, Principal Engineer in the Regulatory Affairs Department of IPL, stated that he is familiar with the methodology used to evaluate DSM, the goals and objectives of DSM and IPL's IRP submitted to the Commission on November 1, 2007 ("2007 IRP"). He stated that IPL's overall objective is to investigate the potential for additional DSM programs to cost effectively meet the electricity service needs of its customers.

Mr. Haselden stated that the IRP process is conducted every two years. He explained that IPL uses the IRP process to assess its ability to provide reliable power supply to its customers, both near-term and long-term. Through modeling, the IRP creates a portfolio of supply-side resources that provide an adequate supply reserve margin to address most contingencies. In evaluating these scenarios and the available supply options, he stated IPL also considers conservation and DSM efforts as a means of meeting system requirements. An economic analysis or cost-benefit test of the various supply- and demand-side alternatives is conducted to provide for an overall integrated plan that will meet future energy requirements to reliably serve IPL's customers.

The 2007 IRP indicated that by 2012, IPL would need additional generating resources totaling approximately 160 MW of nominal capacity. He stated that IPL's proposed DSM programs are designed to help minimize this future generation need by reducing demand by 50 MW over the proposed three year term.

Mr. Haselden explained that IPL is proposing to expand its DSM initiatives at this time because IPL projects that it will need future generating capacity to meet its planning reserve margin, as established by the Midwest ISO. Mr. Haselden described the general benefits to IPL's customers of implementing additional DSM programs. He stated that IPL and Citizens Gas jointly commissioned the MPS to identify cost-effective DSM measures and programs that produce energy and demand savings at an overall cost to customers that is lower than comparable supply-side investments. He explained that participants in the various programs will realize bill savings by reducing their consumption of energy. In addition, all customers will realize savings, based upon avoided costs, including not only energy and capacity, but also required additional investment in transmission and distribution facilities and environmental compliance costs.

Mr. Haselden explained that the costs to IPL and its customers include program implementation, administration, evaluation, measurement and verification, marketing, and lost revenue/margin. Additionally, if programs are found to be successful in reducing demand and energy, the general costs would also include performance incentive costs. Mr. Haselden explained that if the utility is not allowed timely recovery of these costs, it does impose a barrier for regulated utilities to offer DSM programs. He stated that the Commission's Rule 8 (170 IAC 4-8-1, *et seq.*) allows DSM-related costs to be recovered by a utility and sets forth guidelines for DSM cost recovery. Specifically, he noted that 170 IAC 4-8-7 states that a utility is entitled to

recover the reasonable cost of planning and implementing a DSM program and lists several alternative cost recovery methodologies.⁸ In addition, 170 IAC 4-8-8 permits a utility to recover lost revenue from the implementation of a demand-side management program, and states that a utility is allowed an opportunity for earnings from prudent investments in both supply-side and demand-side resources.⁹

Mr. Haselden stated that the Commission has previously addressed the concept of “avoided costs.” For example, 170 IAC 4-7-1(b), which refers to the Commission’s Guidelines for IRPs, defines “avoided cost” as “the amount of fuel, operation, maintenance, purchased power, labor, capital, taxes, and other cost not incurred by a utility if an alternative supply or demand-side resource is included in the utility’s integrated resource plan.” He also noted that 170 IAC 4-7-4 sets forth the information required to be included in a utility’s IRP.

Mr. Haselden stated that in his opinion avoided costs should be utilized to consider the effectiveness of a DSM program as well as the performance incentive being proposed by IPL. He noted the Commission’s rules at 170 IAC 4-8-7(f) provide that “a performance incentive mechanism must reflect the value to the utility’s customers of the supply-side resource cost avoided or deferred by the utility’s DSM program minus incurred utility DSM program costs.” He stated that IPL has included a proposed performance incentive as a cost of its proposed DSM programs, as shown in the benefit-cost analyses prepared by IPL witness Rose and shown in Petitioner’s Exhibit JEH-3.

Mr. Haselden stated that Indiana’s definition of “avoided cost” is consistent with the term’s use in other states. He provided information on avoided cost calculations in California, Iowa, Massachusetts, and Missouri.

Mr. Haselden stated that he used updated cost information from the 2007 IRP in his analyses of the proposed DSM programs. Both avoided capacity and avoided operating costs have been updated. He stated that for purposes of evaluating potential DSM programs, IPL utilized the unit identified in its 2007 IRP for purposes of the avoided cost calculation. The avoided capacity cost calculation is based on a simple-cycle combustion turbine.

Mr. Haselden described IPL’s avoided cost calculation. He stated that IPL includes the marginal cost of capacity (inclusive of generation capacity, and transmission and distribution capacity) and the marginal cost of production (including fuel, emission costs and variable operating and maintenance costs). The marginal generation capacity cost is based on the deferral of a simple-cycle combustion turbine with an installed cost of \$600/kW. A Fixed Charge Rate of 13.61 percent was used to calculate a levelized avoided cost of \$81.66/kW/yr. Consistent with previous DSM work, the avoided transmission and distribution (“T&D”) capacity costs were assumed at 10 percent of the avoided generation value. The DSM programs were also credited with avoided T&D line losses of 5.4 percent to calculate a total avoided capacity value of \$89.56/kW/year. The avoided energy costs were derived by determining the marginal production costs through IPL’s production cost modeling. An 8 percent credit was applied to

⁸ The Commission notes that 170 IAC 4-8-5 addresses cost recovery.

⁹ The Commission notes that 170 IAC 4-8-6 addresses lost revenue.

these values for the line losses that are avoided by the DSM measure being implemented at the point of use.

Mr. Haselden stated that to address the potential reduction of greenhouse gases in its avoided cost calculation, in October, 2008, IPL updated the carbon dioxide (“CO₂”) costs included in the forecasted production costs to include \$6/ton of CO₂ beginning in 2012, and escalated thereafter. He stated that while this CO₂ estimate is lower than some of the estimates associated with possible legislative bills as discussed by IPL witness Burke, using a significantly higher number for CO₂ costs could overstate future avoided costs. However, a high CO₂ case that included a cost of \$19/ton beginning in 2012 was used to check the sensitivity of the benefit-cost tests of measures that might have been screened out earlier in the MPS process. The result was that there were no changes to the measures offered.

Mr. Haselden stated that IPL’s avoided cost calculation included a “market” component. The calculation of avoided cost for DSM modeling purposes reflects the cost to build new generation, which is “the market,” since DSM helps to defer those options. He stated that in this region, there exists a projected capacity shortfall and any new capacity will be built at the higher costs being experienced on all new projects. He also noted that the Midwest ISO has no capacity market. He further stated that a long-term reserve planning approach which encompasses both demand-side and supply-side options examines cost-effective and reliable methods of meeting planning requirements and that buying energy at market prices, as available, is not an acceptable planning method.

Mr. Haselden explained that to determine the proposed level of DSM program funding, IPL started with the MPS results. The programs were further developed and costs refined with the assistance of IPL witness Rose. The result was that the costs of offering the proposed DSM programs for a term of three years exceeded the projected costs of the first three years of the MPS. IPL checked the proposed spending level, as a percentage of revenue, against that which other utilities were spending on DSM. IPL was also concerned that there be no significant impact on rates and that the portfolio of programs be cost effective. IPL did not start with a minimum or maximum spending limitation.

Mr. Haselden explained that the Core DSM Programs have an initial term of three years with an annual implementation budget amount of \$5.9 Million in Year 1, \$8.1 Million in Year 2, and \$11.9 Million in Year 3. These annual amounts include evaluation costs. The level of funding uses a starting point of 0.6 percent of revenue and grows to 1.2 percent of revenue by Year 3. The core programs establish a goal of reducing residential and C&I customer usage by 72.1 million kWh of annual savings after Year 3, an approximate 0.5 percent reduction from 2008 total retail sales, adjusted for automatic protective lighting sales. The Core DSM Programs also establish a goal of reducing summer peak demand by 45.3 MW after Year 3, an approximate 1.4 percent reduction from IPL’s record peak demand. The following table contains the DSM program goals and shows participation, energy/demand impacts and program budget.

Core DSM Program Goals

Core DSM 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 \$,000
Year 1	28,384	16,970	16,970	7.64	7.64	5,916
Year 2	42,066	40,646	57,616	13.41	21.05	8,133
Year 3	63,681	72,090	129,706	24.26	45.31	11,928
Total	134,131	129,706	129,706	45.31	45.31	25,977

Mr. Haselden described the cost-effectiveness tests employed by IPL for DSM program planning and evaluation. He explained that IPL worked with Mr. Rose to model the cost-effectiveness of each component of the DSM program. The modeling approach included capturing the economics from various perspectives reflecting the California Standard Practice Methodology. These include the Participant Test, Utility Cost Test (“UCT”), Rate Impact Measure (“RIM”) Test and the TRC Test. For this analysis, the results of all the tests were reviewed. First, IPL looked for programs that passed the RIM Test because this is both a measure of efficiency and fairness. Mr. Haselden stated any program passing this test represents one that benefits non-participating customers as well as participating customers. It is also the most difficult test to pass.

Next, IPL looked for programs that passed the both the TRC and UCT tests. The TRC Test compares the total costs and benefits of a program, including costs and benefits to the utility and the participant with the avoided costs of energy supply. The programs that were found to be cost effective from a TRC perspective were included in the Phase I DSM Program. Mr. Haselden stated including programs that passed the TRC Test is consistent with the Commission’s DSM rules which require that at least one of the tests listed above be used to evaluate the cost-effectiveness of a DSM program. He also noted the TRC Test is commonly used to determine the cost-effectiveness of energy efficiency programs throughout many state jurisdictions. The UCT assesses the benefits and costs from the utility’s perspective by comparing the utility benefits versus the utility costs. The UCT captures all the same costs and benefits as the TRC Test while also including the performance incentive as a program cost. Customer incentives and rebates are treated as a transfer of payments in the TRC Test and not included in the stream of costs and benefits.

Mr. Haselden stated that IPL will act as the DSM Program administrator. IPL will select independent contractors when necessary to support the implementation and fulfillment of the Phase I DSM Program. He stated that IPL believes actual results should not vary drastically from the estimates. However, in the current economic climate, it may be difficult for customers to make investments in energy efficiency improvements and could consequentially have an impact on those programs that require some form of customer funding. He stated this is one of

the reasons that IPL is requesting flexibility to alter the implementation of programs to make the overall DSM program as successful as possible.

Mr. Haselden stated that IPL is proposing a performance incentive. He stated that IPL is committed to working with customers to identify and implement successful programs that can cost-effectively reduce energy consumption and help customers manage energy costs. Mr. Haselden opined that DSM program cost recovery, a performance incentive and recovery of lost margins take away disincentives associated with implementing DSM programs. Mr. Haselden explained that as a component of its overall Phase I DSM Program, IPL is proposing a performance based incentive mechanism which rewards implementation performance. The proposed incentive mechanism is based on deemed savings of the expected savings resulting from the implementation of the proposed measures. He stated that separate target incentives are proposed for the residential and C&I sectors.

Mr. Haselden stated that other utilities have been provided significant incentives for the successful implementation of DSM. He stated that the existence of a performance incentive has been shown to be influential in impacting utility behavior and an important tool for regulators in setting policy and guiding utility behavior. While incentives take on different forms, he stated, there has been a movement to provide utilities with incentives for the successful implementation of DSM programs. He noted that other Indiana utilities currently have pending requests for DSM programs that also include incentive mechanisms.

Mr. Haselden stated the proposed performance incentive mechanism is calculated based on two components. The first component measures the energy savings by comparing the projected kWh savings from installed measures (planned savings) and the actual kWh savings from installations (installed savings). The second component measures the demand savings by comparing the projected kW savings from installed measures (planned savings) and the actual kW savings from installations (installed savings).

Based on this, there will be two separately calculated incentives: the Residential Sector Incentive and the C&I Sector Incentive. The incentive amount for each of these sectors is dependent on the amount of combined savings from each of the sector's individual programs. IPL proposes to calculate the performance incentive for each sector as follows:

- Residential Sector Performance Level = [installed energy savings ÷ planned energy savings] * 50%, plus [installed demand savings ÷ planned demand savings] * 50%; and
- C&I Sector Performance Level = [installed energy savings ÷ planned energy savings] * 50%, plus [installed demand savings ÷ planned demand savings] * 50%

The performance level achieved in each sector will determine the percentage of the incentive to be awarded IPL for each sector. The incentive will be calculated on a pre-tax basis. Mr. Haselden explained that IPL will not earn a performance incentive unless the actual energy and demand savings percentage is greater than 60 percent of the planned energy and demand savings. This threshold will be applied separately to the Residential and C&I sectors.

Mr. Haselden stated that for purposes of calculating the performance incentive, the planned energy efficiency budget is defined as the actual program costs not to exceed the total program budget, but excluding the costs for the Energy Efficiency Education and Indirect Expenses for both sectors, the Residential Low and Moderate Income Weatherization Program, and both the C&I and Residential Renewables Incentive Programs. Mr. Haselden stated that the costs of the performance incentive will be included in the benefit-cost analysis and there will be a true-up process of the performance incentive based upon actual program results. The performance incentive percentage rate will be based on cumulative savings over the initial three year term and will be true-up as explained by IPL witness Cutshaw.

Mr. Haselden stated that the role of performance incentives is critical in providing the correct opportunity for financial reward to the utility. He said it is important to provide the utility with the incentive to succeed and to address the uncertainty and risks associated with introducing programs in a market where many of the components are either new or have been absent in the market for several years. He explained that the economic climate will likely decrease customer participation in programs that require customer investments, and the rationale for creating a bandwidth of program performance recognizes the difficulties in correctly forecasting the streams of program costs and benefits, prior to program implementation. The DSM program budgets are based upon many estimates, including costs of the DSM measures, market responses to incentives, estimates of savings, as well as required expenditures to successfully promote the programs.

Mr. Haselden stated that the term of the performance incentive mechanism will be three years, which is identical to the proposed initial term of the DSM Plan. However, the rider may continue after the initial three year period to adjust for any EM&V reconciliation.

Mr. Haselden stated that IPL is proposing changes to its Standard Contract Rider No. 9 and a new Rate REP as part of its comprehensive effort to introduce more renewable energy resources into its portfolio of generating assets. As part of that effort, IPL entered into a long-term power purchase agreement for wind energy, which was approved by the Commission in Cause No. 43485. He stated that this project is now under construction and will be completed later this year. Another step in that effort are the proposed Residential and C&I Renewables Incentives DSM programs that provide customer incentives for the installation of renewable generating resources on customer premises. He stated that the capital costs of small scale renewable resources has historically been high compared to the cost of conventionally produced power provided by electric utilities partly due to the lack of recognition of the environmental attributes of renewable energy production. He explained that earlier attempts to provide more compensation for such projects included the arrangement of net metering, wherein if a customer produces more renewable electric energy than is consumed at any point in time, then the excess is purchased by the serving electric utility and the customer receives a credit at the full retail rate on their bill. He stated that since retail rates are higher than a utility's avoided generating costs, this is in effect a subsidy revenue stream intended to offset the high capital costs of renewable resources. He explained that this has proven to be an insignificant amount of revenue for such projects and has not stimulated development of renewable energy projects in IPL's service territory.

Mr. Haselden explained that IPL is now proposing to expand the number and type of customers eligible to participate on Standard Contract Rider No. 9 by opening it up to C&I customers and by raising the qualifying capacity limit from 10 kW to 50 kW. He stated that IPL is also proposing a new Rate REP, created so that customers may alternatively choose to participate in a renewable energy feed-in rate for generation resources with capacity ratings ranging from 50 kW to 10 MW. Rate REP provides pricing unique to the type of renewable energy produced and allows for long-term contracting. He stated this allows a customer a basis for financing a project and helps to close the economic gap that has historically been a roadblock to renewable generation resource development, but does so in a transparent manner that is subject to the approval of the Commission. He explained that another key difference in this approach compared to net metering is that the output from a renewable generator is separately metered and the total output is compensated. As part of the agreement and in consideration of the compensation that is in excess of avoided costs of traditional generation alternatives, IPL will retain all environmental attributes of the power produced.

Mr. Haselden stated that the customer can also purchase green power through IPL's Standard Contract Rider No 21 (Green Power Initiative) if they wish. The environmental attributes will be sold to the market for such commodities with the proceeds applied as a credit for all customers against the costs of the purchase of renewable energy in the same manner and timing as that outlined in the Commission's order in Cause No. 43485 approving the long-term power purchase agreement for wind energy.

Finally, Mr. Haselden stated that Rate REP is similar to IPL's Rate CGS, with the notable exceptions of the basis for pricing and the voluntary nature with which IPL offers this rate. He stated the proposed rates for the various renewable technologies are not yet available and will be provided later through the 30-day filing process.

D. James L. Cutshaw. James L. Cutshaw, Revenue Requirements Manager of IPL, described the Company's proposal to utilize a new Standard Contract Rider No. 22 (Core and Advanced Demand-Side Management Adjustment) ("CA-DSM") to recover from customers the costs, including performance incentives and lost revenues/margins, of the DSM Program, and the proposed cost recovery mechanism.

Mr. Cutshaw stated that to fund the Core DSM Programs, IPL is proposing an annual budget starting in Year 1 of about \$5.9 million, or 0.55 percent of 2008 jurisdictional revenues and increasing to about \$11.9 million, or 1.11 percent of 2008 jurisdictional revenues, in Year 3. Petitioner's Exhibit JLC-2 contained the proposed new CA-DSM with proposed rates for the six-month period beginning July 2009. He stated that IPL is proposing recovery of the Core DSM Program costs, lost revenues/margins, and a performance incentive to support aggressive DSM and other efforts by the Company to reduce its customers' consumption of electricity and impact on peak demand. He stated that lost revenues/margins due to decreased kWh consumption and kW demand from the program measures will continue for a ten year period following installation based upon the weighted average life of the program measures. He noted that the cost recovery mechanism proposed would be applicable during the three year Phase I DSM Program period, and would remain in effect until all costs and incentives are properly recovered from customers.

Mr. Cutshaw stated that IPL proposes to prepare semi-annual filings to recover the forecasted costs of the Company's proposed DSM Plan over six-month periods which match the billing periods of the tracker. He noted that one benefit of IPL's proposal for semi-annual periods of July to December and January to June would be to mitigate the impact to its customers by instituting a change in the new DSM program tracker rate in a different month than IPL's quarterly FAC proceedings and semi-annual Environmental Compliance Cost Recovery Adjustment proceedings. In addition, Mr. Cutshaw opined that utilizing the proposed effective dates for the proposed CA-DSM cost recovery mechanism should smooth the workload of the OUCC and the Commission by reducing the number of months in which IPL makes multiple tracker filings.

Mr. Cutshaw explained that the DSM Plan expenditures will be forecasted semi-annually and reconciled to actual expenditures in a subsequent semi-annual filing. Lost revenues/margins will be forecasted for the same period based upon each program's estimated participation, and reconciled to actual participation in the same subsequent semi-annual filing as expenditures are reconciled. The performance incentive for the period will be calculated by multiplying the forecasted program expenditures for each program by the target incentive percentage for that program. When the forecasted expenditures are reconciled to actual expenditures in a subsequent filing, the performance incentive will be reconciled by multiplying the program expenditure variance by the target incentive percentage for that program. Finally, the DSM Plan amounts actually recovered from customers will be reconciled with DSM Plan amounts intended for recovery from customers for such period reflecting differences in estimated and actual kWh consumption. He stated that these reconciliation processes ensure a dollar-for-dollar recovery of the costs approved for recovery, no more and no less.

Mr. Cutshaw explained that expenditures for each component of the DSM Plan will be recorded in the Company's accounting system using individual project numbers, in conjunction with account numbers, to separate costs for accounting and reporting purposes. IPL's work management and timekeeping systems will facilitate this segregation for labor, materials and other expenses incurred to implement the individual programs. Mr. Cutshaw stated that because costs are recovered on a forecasted basis coincident with the billing to customers, IPL is not requesting carrying charges on the costs incurred for the proposed DSM Plan. However, if the programs are altered such that certain costs are recovered after being incurred, IPL would propose to recover carrying charges on the unrecovered balance of these costs.

Mr. Cutshaw described the cost allocation basis to the customer classes for each component of the DSM Plan. For all of the Residential and some of the C&I core DSM programs, the costs will be maintained in such a manner that they will be directly assigned to the appropriate rate class. Since several of the C&I core DSM programs are also applicable to Rate SL customers, a further breakdown of the large C&I factor was proposed to segregate the portion applicable to Rate SL. The allocation factors for these C&I core DSM programs was based upon the relationship of the small C&I and Rate SL allocation factors from the cost of service study as approved in Cause No. 39938, IPL's last rate case.

Mr. Cutshaw explained the process to determine the projected lost revenue/margin by rate class. He stated that estimates of the kWh consumption and kW demand reductions per participant and the number of participants for each program were determined from the analysis prepared by Mr. Rose. Estimated participants for each program were allocated between the individual rates based upon the ratio of the 2008 annual historical kWh consumption within their rate class. Allocated participants by rate were then multiplied by the kWh consumption and kW demand reductions by participant to determine the total kWh consumption and kW demand amounts by rate within each program. These amounts by program were totaled for each individual rate and then multiplied by the revenue margin rates per kWh and kW from IPL's last rate case. He noted that this methodology was previously utilized by IPL and approved by the Commission in prior quarterly DSM filings in Cause No. 40292.

Mr. Cutshaw stated that after IPL has actual information for the first six-month period, it will include schedules reconciling the projected expenditures, target performance incentive, lost revenue/margin and collections to actual in its next semi-annual filing. Mr. Cutshaw stated that the Company will calculate the actual performance incentive percentage and amount after the evaluation, measurement and valuation of the DSM Plan performance for the year has been determined. The incentive will be computed separately based on demand and energy results achieved. The separately determined demand and energy incentive amounts will be allocated to and recovered from rate classes in the same manner as described above for the program costs, in the following semi-annual CA-DSM filing. To ensure the incentives can be retained, IPL proposes that its authorized net operating income for purposes of the FAC earnings test be adjusted by the amount of the actual incentive earned.

Finally, Mr. Cutshaw stated that IPL does not intend to seek recovery of lost margins and its performance incentives for energy savings attributable to previously installed Air Conditioning Load Management devices.

E. Dwayne Burke. Dwayne Burke, Director of Environmental Affairs of IPL, explained that there are three primary carbon legislative scenarios that could potentially impact IPL and its customers. The first, and by far the most likely, is that carbon legislation could be enacted at the Federal level. The second potential scenario is that carbon initiatives have been discussed on a regional basis. The third and least likely scenario is that Indiana could, as with any environmental issue, adopt a state only carbon emission reduction plan.

Mr. Burke stated that in general, two carbon scenarios have been discussed in Congress. The first, a carbon tax, has been studied, but has not been formally proposed to date. The second, a carbon cap and trade program, has been introduced and debated in multiple proposals before various Congressional sub-committees and committees. Mr. Burke focused on a carbon cap and trade program due to the absence of a formal tax proposal to date. He stated that each carbon cap and trade proposal is a market-based cap and trade system that seeks to initially hold nation-wide carbon emissions at a set threshold level in the first phase, and further reduces the carbon nationwide emissions cap in subsequent phased reductions. Affected units or generating facilities will be required to hold allowances for each ton of CO₂ emitted. Allowances can be traded and banked for future use. He noted that most cap and trade proposals also allow a certain level of specified carbon off-sets in lieu of direct facility reductions.

Mr. Burke explained that as of January 26, 2009 there were five distinct climate change bills or policy drafts being discussed at the Federal level focusing on the cap and trade model to reduce carbon emissions. For each proposal, Mr. Burke compared and contrasted the following: (1) emission reduction targets; (2) covered sectors; (3) allowance process of either allocating based upon historical emissions or via auction; (4) cost containment (also known as safety valve); and (5) ability to utilize offsets or other flexible compliance provisions.

Mr. Burke stated that the most critical element in any cap and trade proposal is the stringency of the targets and the timetables for compliance. All major bills discussed thus far typically result in an 80 percent reduction from 1990 emission levels by 2050. Additionally, all reduction targets include interim provisions. The covered sectors required to meet the emission reduction targets range from the very broad (economy wide) down to the more specific (electric power and other industry intensive industry). However, he stated, regardless of what sectors are included in legislation, the electric utility industry will be required to shoulder a large share of the emission reduction burden. Mr. Burke stated all seriously considered emission reduction strategies at this time focus on cap and trade whereby allowances are the currency required for compliance. Allowance strategies range from free allocation to some degree based upon historical emissions to 100 percent of the allowances being auctioned. He believes it is quite likely that any carbon bill will include an auction of a significant portion of allowances over time which will result in higher compliance costs for utilities.

Mr. Burke stated that while there are very significant political and regional differences with respect to form and stringency of carbon legislation, there is growing momentum in Congress to pass some form of carbon legislation. This is especially important given the recent election of President Obama, who supports implementation of a market based cap and trade system to reduce carbon emissions to 80 percent below 1990 levels by 2050. Mr. Burke stated that it is highly unlikely that carbon legislation will be adopted at the regional or Indiana state level in the near future. He stated that there is no indication under the Daniels Administration that Indiana will even remotely consider a state only greenhouse gas emission reduction initiative, as it would unfairly penalize our State's industry as it competes in the global marketplace.

Mr. Burke stated that there have been attempts to estimate potential cost impacts of carbon legislation. He stated that as it became increasingly clear that the Lieberman-Warner bill was gaining momentum ahead of the other cap and trade proposals and the sponsors picked up the support of Chairwoman Boxer, Senate Committee of the Environmental and Public Works, the Federal Energy Information Administration ("EIA") and others modeled estimated cost impacts of the Lieberman-Warner legislation. EIA ran various scenarios under a Lieberman-Warner framework, with assumptions ranging from an assumption of effective cost mitigation strategies to an assumption of limited availability of renewables and new generation build. The range of estimated carbon allowance costs for the successful cost mitigation model scenario started at \$16.88/ton carbon in 2012 rising to \$61/ton in 2030, while the limited alternative scenario with no international offsets model scenario started at \$50.62/ton in 2012 rising to \$156/ton in 2030.

Mr. Burke stated that IPL did include carbon compliance cost numbers in its cost/benefit analysis for this proceeding.

Mr. Burke concluded by stating that not only does an effective and robust energy efficiency program have the benefit of enabling customers to reduce energy consumption which directly impacts the customer's bill, but an effective and robust energy efficiency program also has the added benefit of reducing carbon emissions from the IPL system, helping to mitigate future rate impacts for IPL's customers. Demand reductions result in less generation output attributed to IPL's native load customers, thus mitigating incremental costs associated with the purchase of carbon allowances. In the absence of economically viable capture and sequestration technology in the early years of a cap and trade program, IPL will have to rely on carbon allowances to cover its carbon emissions. He stated that costs for compliance with a cap and trade program may be significant. Energy efficiency and demand-side management programs are cost effective tools to reduce carbon emissions, reducing the number of allowances that IPL will have to purchase to comply with a mandatory reduction program, and mitigating what could potentially be an equally significant rate increase to IPL's customers.

F. Barry J. Bentley. Barry J. Bentley, Vice President, Power Delivery of IPL, described the technical aspects and benefits of converting IPL's metering from an AMR to AMI. Mr. Bentley stated that IPL currently has a L+G AMR network that supports approximately 465,000 energy-only electric meters. IPL began implementation in 1998 with the vast majority of these meters having been deployed by 2000. The AMR system provides automated one-way radio communication between IPL's customer meters and IPL's customer billing and operations systems. Mr. Bentley stated that the term AMI is broadly defined, generally referring to the networks, communications hardware and software, data management, billing and other systems and infrastructure collectively used to enable two-way communication between the utility and the customer. AMI can facilitate various rates to include alternative pricing options, demand response programs, customer energy consumption feedback, and improve outage management and distribution operations.

Mr. Bentley stated that IPL contracted with L+G to conduct a POC test of the AMI communication system upgrade and the two-way meter billing data upgrade during the first quarter of 2009 at the cost of \$25,000.¹⁰ Mr. Bentley explained that the objectives of this AMI POC are to: (1) ensure the system is able to collect and transfer information that is suitable for billing purposes, especially for demand-rate customers; (2) determine the timeliness of data availability, including the interface with the PowerViewSM system for demand rate customers on a one day delay basis and near real time on an as requested basis; and (3) determine whether any communication bandwidth or other data transfer issues occur; and (4) test software interfaces to the Customer Information System for billing purposes.

He stated that currently, IPL is rolling out PowerViewSM to all of its large C&I customers, which will provide energy consumption information on a one-month delay. As part of the AMI POC, IPL will test the interfaces of the metering system with PowerViewSM and its ability to deliver energy consumption information on a one-day delay. IPL is also testing the capability for demand rate customers to receive near real time usage on an as requested basis.

¹⁰ IPL's intent is to pay the cost of the POC to verify the capabilities of the AMI system.

Mr. Bentley stated that the testing that IPL plans to perform in Phase II of this proceeding will include in-home/on-premise energy displays and will include, at a minimum, verifying the display's presentation of: (1) near real time usage information, (2) TOU rate information and (3) bill estimation functionality. This test is referred to as HAN POC. Mr. Bentley stated that IPL expects to begin the HAN POC in late 2009 assuming the issuance of an order approving the Phase I plan prior to that time.

G. Matthew F. Rose. Matthew F. Rose, Principal of Vista, an energy consulting firm specializing in DSM, energy efficiency, demand response management and related energy issues, explained the methodology and results of IPL's DSM program design, cost effectiveness analysis, and evaluation, measurement and verification plans.

Mr. Rose stated that Vista was hired by IPL to assist the Company in crafting a viable portfolio of DSM programs. The effort focused on leveraging IPL's ongoing planning efforts and integrating Vista's insight and knowledge of proven DSM practices based on utility successes across the country. He explained that IPL's programs were developed through a set of sequential planning steps designed to focus current industry and market information to screen and prioritize the relevant opportunities based on their costs and benefits. Mr. Rose stated that a formal economic analysis of each program was conducted, which served to identify the associated costs and benefits as compared to projected electric supply costs to determine cost-effectiveness. The analysis included all the relevant program costs, including program administration, training, incentives and evaluation, as well as estimated annual program participation. These costs were compared to electric avoided costs to provide a net present value impact of all costs and benefits. The result was a cost-benefit ratio and estimate of the economic value of the proposed DSM Plan. By simulating the results of the program using a dedicated cost-effectiveness model, the full range of economic impacts were determined.

Mr. Rose stated that the DSM planning effort leveraged many of the inputs and results of MPS. The DSM analysis incorporated the technology, market and program data from the MPS, wherever possible. Vista also talked directly with the MPS authors to better understand their methodology, inputs and results. In a few cases, data were revised based on obtaining new market and cost information for selected programs. For example, the MPS demand reduction value for the Commercial DLC Program was revised based on the completion of a market study by Cooper Power Systems *Indianapolis Power & Light: Profile and Mass Market Potential for Load Control* (Sept. 2008). Using the recent market information the assumed kilowatt reduction for each commercial participant was decreased from 5.0 kW to 3.5 kW. The other major difference in comparing the approach and results from the MPS reflect changes in IPL's system characteristics. IPL's electric avoided energy and capacity costs changed since the MPS assumptions were provided to Forefront in early 2008.

Mr. Rose stated that the avoided costs were developed by IPL using its planning models and consistent with its IRP process. In this analysis, the electric avoided costs are used as a proxy for utility supply costs to assess the relative cost effectiveness of the DSM programs. The avoided costs consist of both avoided energy (cents per kWh) and capacity (dollar per kW) per year. A twenty-year series of costs are used to allow comparison of DSM to supply-side costs

for measures into the future. All the relevant economic analyses are based on modeling the net present value of costs and benefits to address the time value of money. The end result is a direct comparison of whether a candidate DSM program is more or less expensive than the supply alternative. Programs with positive net present value results and a positive benefit-cost ratio indicate the DSM programs are less expensive than specific supply options.

Mr. Rose stated that the economic analysis results for each program provided an indication of whether the program was cost-effective or whether program costs exceeded the projected benefits. Each of the relevant economic perspectives was analyzed. IPL primarily focused on the TRC Test to assess the primary overall perspective to determine the cost-effectiveness of each program. Programs which did not pass the TRC Test were either re-packaged in a more cost-effective manner or eliminated from the DSM portfolio. The other test perspectives were also reviewed to refine program design elements.

Mr. Rose sponsored the results of the cost-effective analysis in Petitioner's Exhibit MFR-2, which reflects the net present value and benefit cost results for each of the candidate programs for each of the relevant perspectives.

Mr. Rose described the key mechanisms used to market and deliver the Core DSM Programs. He stated that each program was designed to incorporate delivery mechanisms which best allow the program to overcome market barriers and cost-effectively promote the relevant technologies in the marketplace. He stated that the process included looking at successful DSM programs at other utilities across the country to help in determining program elements and design considerations for IPL. The planning process included discussions with other utility program managers and attempted to address important design and "best practice" considerations.

Mr. Rose stated that IPL's effort to look at DSM programs being offered by other Indiana utilities included discussions with other Indiana utilities to attempt to identify similar programs. Although there is no mandatory move to establish statewide programs, there is benefit to identify relevant areas where programs can be similarly implemented and designed. Mr. Rose stated that IPL considered jointly marketing programs with other utilities. He stated that the Core DSM Program does include efforts for IPL to jointly market relevant programs with Citizens Gas. Those programs which result in electric and natural gas impacts include the estimated impacts of joint marketing. This includes programs such as the Residential and C&I New Construction Programs, C&I Custom Program and the Residential On-Site Audit with Direct Install Program. The result of joint marketing includes shared costs for marketing, promotion and evaluation. Mr. Rose stated that all of these impacts are incorporated in the program cost effectiveness analysis.

Mr. Rose stated that other market delivery mechanisms are included in the program design and delivery as well. He stated that the program design includes costs reflecting market outreach activities. These activities reflect the need for IPL to design and communicate broad messages of energy efficiency and resulting benefits to participants. These activities are not associated with any specific program, but rather provide a higher-level dissemination of information to all IPL customers. This is manifest in various activities including media advertising and positioning of IPL as an informed and willing source of helping its customer

efficiently consume its product. Mr. Rose stated that the costs for market outreach were developed by IPL and are included in the cost-effectiveness analysis.

Mr. Rose stated that all of the Core DSM Programs are designed as full scale programs, modeled with a three-year planning horizon. The one exception is the C&I Retro-Commissioning Pilot Program, which is positioned as a pilot program. He explained that the experience from other utility programs points to a range of potential electric savings from facility commissioning, with most being very site specific. He stated that it is difficult to assign a single set of savings given the range of impacts resulting from operations and maintenance activities. The cost-effectiveness analysis includes a set of load impacts from the MPS study and results in the modeled program passing the TRC Test. The recommendation to structure the C&I Retro-Commissioning Pilot Program as a pilot effort is based on the importance of obtaining IPL-specific customer data and results to gauge program cost-effectiveness.

Mr. Rose stated that the programs are designed to attract more than 134,000 participants over the three year program implementation. As modeled, after the three years of proposed implementation, the programs are expected to cumulatively save 129,706 megawatt-hours and 45.3 megawatts of summer peak demand. He stated that the total budget for the Core DSM Programs described herein over the proposed three years is \$25.9 million.

Mr. Rose stated that each of the program designs includes an estimated dedicated budget for program evaluation. The percentage of costs for each program dedicated to evaluation range depending on the size and installation requirements of each program. Mr. Rose stated that in establishing the evaluation budgets, the evaluation estimates developed in the MPS were applied, where appropriate. In some cases, the evaluation budgets were refined based on the comprehensiveness of the proposed program and internal guidance to ensure available funding to adequately evaluate programs in each year of implementation. For some programs, the evaluation costs were developed in alignment with contributions from Citizens Gas. The intent was the inclusion of a joint evaluation effort for programs impacting both electricity and natural gas loads. Mr. Rose stated that the estimated cost of program evaluation as a percentage of total program cost is 5.3 percent.

Mr. Rose opined that IPL's proposed EM&V process is adequate. He explained that at this stage, the proposed DSM Plan does not include a detailed evaluation plan and that the final plan will be established once the portfolio of programs is established. IPL indicated that it plans to contract with a third-party evaluation contractor to assist with evaluation planning and fulfillment activities. In Mr. Rose's opinion, the evaluation approach does not require final details, but rather should include an understanding of the approach and forecast of estimated costs to ensure proper economic modeling as IPL has presented in this proceeding.

He stated that an important element of the evaluation process will be the consideration of using "deemed" savings to characterize impacts. For those adopted measures which produce reliable load (energy and capacity) impacts, he believes it makes sense to consider these "deemed" savings, recognizing that these values can be adjusted prospectively over time, as needed. He stated this helps minimize evaluation budgets and allows the utility to focus measurement on those technologies and programs that may vary greatly due to weather

sensitivities, unknown packages of blended measures or unpredictability of resulting load savings impacts.

Mr. Rose stated that IPL should propose energy savings values for selected efficiency measures for the Commission to deem in its evaluation approach. He stated that the inclusion of deemed savings for selected energy efficiency and DSM measures is a good approach for IPL and is consistent with industry practice. The history of energy efficiency and DSM program implementation and evaluation points to the opportunity to establish deemed savings values for measures that are proven, predictable, and unaffected by variables such as weather, seasonal consumption or intermittent use. In addition, he noted there are a number of well respected data sources focused on establishing documented savings estimates such as the California Database of Energy Efficiency Resources and the Deemed Savings Database Version 9.0-New York State Energy Research and Development Authority. The accepted use of deemed savings is also included in the *NAPEE Model Energy Efficiency Program Impact Evaluation Guide*, November 2007.

Mr. Rose explained that the elegance of integrating deemed savings values for proven technologies is the ability to better manage and become more efficient in allocating evaluation dollars. Since IPL is initiating a more comprehensive efficiency program, it makes sense to use predetermined savings estimates for measures providing proven and predictable impacts. This will allow IPL to focus larger evaluation budgets on those measures and programs that are not well suited for deemed savings, such as some of the new construction, custom projects or weatherization initiatives. Mr. Rose explained that it is still recommended that IPL conduct an impact and process evaluation for its programs, relying on deemed savings estimates for its initial load impact estimates. He stated the Company's continuing evaluation effort will allow for adjustments or refinements in future years, if there is any notable deviation in the results.

As to the type of measures and associated energy impacts that should be considered for possible deemed values for evaluation purposes, Mr. Rose opined that consideration for deemed savings is best applied to the following proposed programs that include standard, predictable measures:

1. Residential Energy Assessment Program. The implementation of the energy kits contain a number of proven, mature technologies which lends it to deemed savings. These include CFLs and low flow showerheads, which will be included in the kit for installation by the customer. The program will still require post installation surveys with participants to identify the specific electric measures installed.
2. Residential On-Site Audit and Direct Install Program. The on-site audit includes the direct installation of various measures including CFLs, low flow showerheads, tank wrap and programmable thermostats. These measures are suited for consideration of deemed savings. The program will still require contractor documentation on the specific measures installed in combination with deemed savings to determine the total estimate of energy savings.

3. Residential Prescriptive Lighting Program. The promotion of CFLs as a stand-alone program serves as a candidate for deemed savings. This program will still require survey follow-up with customers to determine the number of bulbs installed and their relative wattage size.

4. C&I Prescriptive Program. The program includes a series of measures that are proven, well-established and translate to a prescribed set of incentive payments. Some of the proposed measures, including energy efficient lighting, pumps and energy-efficient motors, all reflect good opportunities for the consideration of before-the-fact savings. The program evaluation will still require documentation on the number, size and type of measure actually installed by participants to determine total savings.

Mr. Rose stated that the deemed savings reflect only those measures identified in the above discussion and primarily focus on lighting and water heating measures in the residential sector and lighting, pumps and motors in the commercial and industrial sector. Petitioner's Exhibit MFR-4 presented specific measure energy impact values for consideration as deemed savings.

Mr. Rose stated that the determination of applicable deemed savings was based on a review of various documents and reports. He further stated that as with any evaluation study, there are risks in determining either before-the-fact or post-installation energy impacts. However, if the process of identifying and establishing deemed savings is done properly and grounded on established documentation, the risks are minimized and provide benefits through efficient use of program dollars. The evaluation should also allow for re-visiting the deemed savings estimates as better evaluation and program information becomes available. The deemed savings values can be adjusted prospectively to future years as the evaluation results show adjustments are needed.

Mr. Rose stated that Vista modeled the impacts of proposed performance incentive impacts on the Core DSM Programs. The approach was based on analyzing the costs and benefits of each program, including an additional cost to reflect an assumed performance incentive tied to program costs. The analysis included program cost adders of 20 percent for the various programs with the exception of the Residential Low and Moderate Income Weatherization Program and the Residential and C&I Renewables Incentives program, which were modeled with a performance incentive adder of 15 percent. By adding in the additional costs for the programs, the impact of the proposed incentive was included in the cost-effectiveness analysis.

7. Petitioner's Supplemental Testimony.

A. Ken Flora. Mr. Flora provided an update of developments and proposed a brief delay in IPL's plan to deploy and recover costs associated with AMI. Mr. Flora noted that since the filing of Petitioner's Case-in-Chief, the AMI POC had been completed and the test did not achieve the targeted communication success rate. He stated that L+G replaced some of the system components and plans to repeat testing steps over a 45-day period.

Mr. Flora also explained that there may be an opportunity for federal stimulus funding for smart grid projects, as a result of recent legislation. He stated that the American Recovery and Reinvestment Act (“ARRA”), which was enacted in February 2009, includes \$4.5 billion to stimulate smart grid investment through a sharing mechanism of up to 50 percent matching funds. On April 16, 2009, the Department of Energy (“DOE”) published a draft Funding Opportunity Announcement (“FOA”) for an aggregate \$651 million of funding for demonstration grants and a Notice of Intent for a separate FOA for the balance of unallocated funds through investment grants. The demonstration grant FOA describes regional applicability, includes project timelines of three to five years and includes a minimum per project allocation amount of \$20 million. Mr. Flora noted that an application deadline has not yet been determined. The investment grant Notice of Intent describes smart grid functionality for utility deployments, includes a two year project timeline and a range of per project allocation from \$500,000 to \$20 million. DOE listed application deadlines start as early as July 29, 2009, with two subsequent deadlines; however, DOE explicitly states that there is no guarantee that funds will be available following the first round of funding allocations.

Mr. Flora stated that IPL believes that federal stimulus funding, and in particular an investment grant, could reduce costs and/or increase benefits to customers achieved by its advanced DSM plan. Mr. Flora stated that IPL staff is in the process of evaluating AMI and ways to present near real time data for demand metered customers and possible means to deploy HAN for residential energy only metered customers. The stimulus funding opportunity has prompted IPL to conduct a thorough review of IPL’s proposed advanced DSM project timeline and phased deployment plans. Mr. Flora stated that IPL has decided to modify its DSM Plan because of the extended AMI testing and the stimulus funding. IPL intends to move forward with its Core DSM Programs, but is proposing a brief delay in the current Phase I request to recover costs associated with AMI by removing it from consideration in Phase I to Phase II of this Cause. He stated that IPL believes that this brief delay will improve both its AMI project decision quality, and its opportunity to potentially leverage stimulus funding to reduce net project costs to IPL’s customers.

Mr. Flora stated that IPL continues to seek authority to defer, for recovery following their completion through proposed Standard Contract Rider No. 22, the costs of a HAN POC and a TOU pricing study. He stated that the cost of the HAN POC continues to be estimated at \$300,000 and the cost of the TOU study continues to be estimated at \$100,000. However, IPL also anticipates the need for certain modifications to its customer accounting system to accommodate time-based rates. The current estimate of these costs of \$100,000 was not anticipated or included in IPL’s Case-in-Chief.

Mr. Flora stated that IPL seeks permission to delay consideration of its requested cost recovery for AMI deployment until Phase II of this proceeding and to defer costs necessary to complete the HAN POC and TOU study up to \$500,000. These deferred costs are proposed to be recovered through IPL’s proposed Standard Contract Rider No. 22, coincident with the offering of time-based pricing to its customers.

B. Joan M. Soller. Joan M. Soller, Senior Regulatory Analyst of IPL, discussed the results of the AMI POC and described modifications to the HAN POC and TOU proposals. Ms. Soller stated that the AMI POC achieved the transmittal of interval metering data, including real power (kW) and reactive power (kVAR) related to five specific demand metered customers as well as energy consumption (kWh) for two energy-only metered customers. Specific elements including hardware, software, and meter firmware were successfully integrated. Data gaps occurred due to software and hardware malfunctions, which were not detected over weekend periods, when the server was not monitored by L+G personnel. Integration into IPL's data translation system ("MV 90") was effective for the demand meters following software modifications. Comparative analysis of existing billing meter data and test meter data in MV 90 indicated the transmittal of meaningful and accurate kW and kVAR information; however the actual communication success rate fell short of the L+G goal of 100 percent. The AMI POC also tested the capabilities of the MV 90 system to view the data from the two energy only meters. IPL typically only uses the MV 90 system for data translation on demand metered accounts. Software compatibility issues prohibited the data translation process to energy only meters. The processes tested were only partially successful and resulted in the need for extended testing.

Ms. Soller stated that L+G replaced some test system components and plans to repeat the testing steps over a 45-day period. Specifically, L+G replaced its data collector hardware and upgraded its server software for the extended testing environment. The server would be monitored on a 24x7 basis so local personnel can be notified if system components do not perform as expected. L+G also upgraded meter firmware and will verify its compatibility with software and the MV 90 translation process prior to the start of a timed test. Thirty days of interval usage data will be collected from late April to late May and sent to IPL for evaluation.

Ms. Soller explained what IPL learned about the availability of "near real-time" data for C&I customers. She stated that several AMI vendors directed IPL to consider a separate software system to manage the presentation of energy usage data to end-use customers. Since the data requirements and physical challenges related to the distance between C&I customers meters and potential devices are unique, IPL staff contacted several vendors to discuss solutions that meet C&I needs. IPL is in the process of evaluating the technical system requirements, typical interval reading success rates and cost estimates to implement possible solutions based upon input from several vendors. Research indicates that many utilities provide C&I customers data through internet portals and authentication processes on a one-day delay to allow time for data verification. A small portion of C&I customers have installed equipment and energy management systems to receive pulses directly from electric meters, which is consistent with IPL's experience of working with about one-hundred customers to install this near-real time access functionality.

Ms. Soller stated that IPL investigated several other AMI solutions through discussions with vendors and staff from utilities around the country. Responses to Requests for Information and technical discussions have provided information about other viable alternatives to deploy AMI for C&I customers as well as residential HANs. She stated that many utilities are in the process of deploying AMI systems with similar technological components. IPL has received responses from several vendors and is discussing possible solutions with those that appear to have a viable alternative to the L+G solution. Because many of the tasks associated with a

possible AMI deployment relate to integrating vendor specific systems with IPL's data translation and customer billing systems, discussions about technical requirements have occurred. In addition, IPL staff had discussions with Indiana Michigan Power Company staff that is deploying a Smart Metering Pilot Program in South Bend, Indiana, and IPL planned to visit the pilot site in May.

Ms. Soller stated that IPL plans to continue to investigate AMI options and assess the results of the extended testing in order to select an AMI vendor and solution by July 2009. This timing will allow IPL to develop a project plan to submit to the DOE for consideration to receive a smart grid investment grant. The anticipated application deadline was July 29, 2009. This application deadline factored into IPL's decision to request that consideration of AMI be moved to Phase II of this proceeding.

As to HANs, Ms. Soller explained that IPL's overall objective is to investigate the potential for additional DSM programs that cost-effectively meet the electricity service needs of its customers. While many AMI vendors employ similar techniques to collect meter data, experience with advanced DSM functions vary. In addition, HAN technology is dynamic with several vendors and utilities considering new combinations of technologic solutions. Since IPL filed its Case-in-Chief, IPL learned that HAN equipment that intercepts an AMR signal and converts it to a Zigbee signal that is compatible with in-home devices, is currently undergoing a limited test in the Midwest. IPL believes there is merit in pursuing such testing in its service area to determine the viability of leveraging existing energy-only AMR meter assets to begin collecting information about customer responsiveness to TOU rates. In addition, IPL also plans to test the viability of this AMR HAN technology for purposes of collecting the billing data necessary for implementing TOU rates.

Ms. Soller stated that in light of industry developments related to HAN equipment and the potential for stimulus funding, IPL plans to change its short-term plan for the proposed HAN POC. She stated that IPL proposes to test HAN equipment that will work with the existing AMR system and possibly test HAN equipment that will work with an AMI system. IPL is in the process of investigating specific options with several vendors and plans to limit the recovery of costs associated with HAN testing to the originally estimated cost of \$300,000.

Ms. Soller stated that IPL still intends to complete the TOU study during the second half of 2009 in order to propose a TOU rate that could be tested with HAN participants. The estimated cost of this study is \$100,000. IPL has determined that modifications to its customer accounting system required to accommodate time-based rates will likely span many months. The estimated costs for the implementation and evaluation of time-based rates are an additional \$100,000, which IPL is requesting to defer for future recovery.

C. John E. Haselden. Mr. Haselden presented modifications to the proposed renewable feed-in tariff and included a revised Petitioner's Exhibit JEH-5. He stated that IPL proposes to offer pricing for three types of renewable resources: wind, solar and biomass. Wind and solar pricing will be further delineated into tiers related to the maximum output capacity of the facility. He explained that the pricing tiers relate to the economies of scale that larger projects enjoy relative to smaller projects. These economies take the form of lower cost per kW

of capacity for larger facilities. In addition, for some technologies, larger facilities have better efficiencies or capacity factors that correspond to lower production costs.

Mr. Haselden stated that IPL considered many factors to arrive at the proposed rates, including federal investment tax credits; tax effects of accelerated depreciation; IPL's proposed Renewable Energy DSM incentives; Renewable Energy Credits ("RECs") value; estimates of reasonable outputs for projects based on their technology; project life; discount rate for net present value calculations; operations and maintenance costs; and capital costs based on project size.

Mr. Haselden explained that to arrive at the proposed rates, IPL used a discounted cash flow model wherein a rate was determined such that the net present value was close to zero over the project life and the value of an REC was added. This implies the project earns the discount rate over the life of the project. He explained that upgrades to IPL's distribution system are not included in the pricing. He pointed out that it is important to understand that electric utility distribution systems are designed to deliver electricity from generating plants to loads and not necessarily in reverse. Each project will be required to apply for interconnection to IPL's system to assure safety and compatibility. To the extent upgrades are required, the customer applicant will be required to fund the upgrades.

Mr. Haselden stated that IPL plans to reevaluate the rates when there are significant changes in the factors listed above or if other considerations come into play. While IPL intends to play a role in encouraging the development of renewable energy, it does not believe it is obligated to offer pricing that assures every project is profitable. IPL should also be prudent to make sure pricing does not create a windfall opportunity for some at the expense of IPL's other customers.

As to how the proposed pricing compares to that which other utilities are offering, Mr. Haselden stated that to his knowledge no other utility in Indiana offers special renewable energy pricing, which is sometimes called a feed-in tariff. He stated that on a national basis, IPL is aware of a few electric utilities offering special renewable energy pricing and based upon his review of those other utilities' feed-in tariffs, he believes IPL's proposed Rate REP is reasonable.

D. James L. Cutshaw. Mr. Cutshaw presented revised Phase I cost recovery schedules to reflect the AMI modifications to the Phase I and Phase II proposals. He stated that the format and structure of the revised exhibits are exactly the same as in IPL's Case-in-Chief. He explained that the major change is the removal of all of the AMI costs, which IPL is now requesting to be considered in Phase II of this proceeding. In addition, the projected lost revenues/margin related to the AMI measures was removed. He stated that the impact of the removal of these costs is a reduction of the proposed CA-DSM Adjustment Factor (Mills per kWh) Adjusted for Utility Receipts Tax.

Mr. Cutshaw stated that the exhibits were not modified to reflect the deferral of the HAN POC and TOU study costs. He stated that since these costs were proposed to be recovered in a future period, these costs were not explicitly shown in the original or revised schedules. The recovery of up to \$500,000 will be included in future DSM factors reflecting costs authorized in

Phase II. Mr. Cutshaw reiterated that IPL still proposes to prepare semi-annual filings to recover the forecasted costs of the Company's proposed DSM Plan with semi-annual billing periods of July to December and January to June.

8. OUCC's Testimony.

A. April M. Paronish. April M. Paronish, a Utility Analyst in the OUCC's Resource Planning, Emerging Technologies and Telecommunications Division, described the OUCC's involvement in the development of IPL's proposed DSM Program, the OUCC's support for the proposed programs with some modifications, and explained why the OUCC believes that an oversight board be formed with respect to the operation and EM&V of the programs.

Ms. Paronish stated that the OUCC was somewhat involved in the development of IPL's proposed DSM Plan. She stated that the OUCC participated in meetings with IPL and Citizens Gas during the development of the MPS and provided feedback through the MPS process. She stated that while the OUCC staff had become fairly comfortable with the programs as presented in the MPS, IPL has deviated from the programs outlined in the MPS and the OUCC was not included in the final development of the proposed DSM Plan.

Ms. Paronish stated that IPL is proposing to offer an AMI communication system upgrade to facilitate offering a demand rate for C&I customers as well as residential and small commercial customers in a later phase of this proceeding, which programs the OUCC recommends be addressed as a separate docketed proceeding. The OUCC believes a separate docketed proceeding is warranted for several reasons. First, other Indiana utilities who have filed AMI and DSM cases have done so in separate dockets. Second, the Commission's pending AMI and DSM investigative cases are separate dockets. Third, the OUCC views IPL's Phase II issues as separate from this docket and those separate issues should reside in a separate docket. Finally, the OUCC is requesting additional details be provided and requirements be met prior to approval of IPL's HAN and TOU proposals.

Ms. Paronish stated that the OUCC believes that all utilities' DSM portfolios should include the following set of core programs, together with related outreach and consumer education: (1) Lighting, (2) Audits, and (3) Low-Income Weatherization. Ms. Paronish also stated that the OUCC believes IPL should receive avoided costs and performance incentives, but the OUCC has concerns about how IPL calculated its avoided costs and believes IPL's proposed performance incentive levels are not reasonable.

Ms. Paronish stated that based upon her review, the OUCC has identified six main issues that require modification to IPL's proposed DSM Plan. First, the OUCC believes IPL should not intermingle new DLC participants with existing DLC participants when calculating costs and incentives, since the Commission did not authorize incentives for the existing program. The OUCC recommends that IPL explain how it will differentiate participating in its existing DLC program from the new DLC program.

Second, the OUCC believes that while the TRC Test indicates the Residential Prescriptive Lighting program is cost effective, in Year 1 of the program the cost of the program

on a per/bulb basis is \$3.58. The OUCG believes this may be due to the high level of administrative and M&V costs associated with the program. The OUCG recommends that an Oversight Board review the program costs of this program to ensure that this ratepayer-funded program is being delivered, measured and verified in the most cost-effective manner.

Third, the OUCG recommends that IPL establish an Oversight Board to include, at minimum, stakeholders from IPL and the OUCG that is similar to the Oversight Boards formed in Cause Nos. 43051 (NIPSCO Gas, May 2007), 43046 (Vectren Gas, December 2006) and 42767 (Citizens Gas, August 2007). These boards consist of one voting member from the Commission (if it chooses to participate), the OUCG and the utility, plus other voting and non-voting members. The OUCG recommends that the IPL Oversight Board monitor program process by reviewing monthly reports from IPL similar to the reports provided by third-party administrator(s) to the existing natural gas Oversight Boards. In addition, the OUCG recommends this Oversight Board determine program effectiveness and make decisions regarding program creation, discontinuation and funding allocation. Ms. Paronish stated that an Oversight Board is especially important in this case since IPL is partnering with Citizens Gas to deliver several programs and specific details are not yet finalized. In addition, Ms. Paronish noted that there may be some overlap between the IPL Oversight Board and the Citizens Gas Oversight Board, so coordination of these two entities is important.

Fourth, the OUCG recommends that a third-party evaluator, selected by the Oversight Board, determine and report annually appropriate net-to-gross ratio levels for each program, actual EE participation, estimated rate impact M&V results and actual net-to-gross ratio experiences. These net-to-gross ratios, which include the net effects of free riders and free drivers, will be used to recalculate cost/benefit tests and serve as a benchmark in determining actual energy and demand savings, which will be used to determine future lost margins and performance incentive levels. The OUCG recommends that IPL use the International Performance Measurement Verification Protocol (“IPMVP”) to evaluate program performance.

Fifth, the OUCG recommends that the Residential Low and Moderate Income Weatherization program should not be eligible for incentives. In addition, should the program under-perform, unspent funds in the program should not be eligible for reallocation to other programs.

Finally, the OUCG recommends that IPL work collaboratively with the OUCG to perform a pilot that is inclusive of all customer classes and should develop a comprehensive plan to roll advanced metering technology out to all customers.

Ms. Paronish stated that the OUCG recommends: (1) the Commission approve IPL’s proposed Phase I DSM Program with the recommended modifications discussed above; (2) any Commission order approving IPL’s DSM proposal should also include a provision incorporating any future generic requirements resulting from Phase II of the Commission’s DSM investigation in Cause No. 42693; and (3) the Commission approve an Oversight Board to govern the programs and the EM&V process, to hold IPL accountable, reduce ratepayer risk, and ensure that DSM dollars are used in the most cost-effective manner.

B. Andrew J. Satchwell. Andrew J. Satchwell, Utility Analyst in the OUCC's Resource Planning, Emerging Technologies and Telecommunications Division, stated that IPL's Phase I DSM Program portfolio appears to be cost-effective. He stated that he evaluated the effect of the OUCC's recommended performance incentives on a program-by-program basis for all programs with a TRC Test value greater than 1.0 and all proposed DSM programs remained cost-effective. He stated that IPL's net-to-gross ratio for each program expresses the level of gross participants, net of free riders. He noted that the effect of free-ridership on DSM program cost-effectiveness is an inverse relationship; as free-ridership increases, cost-effectiveness decreases. Mr. Satchwell explained that IPL's estimated 20 percent free-ridership level for its light program is low. He stated that using a free-ridership level of 50 percent for the program returned a TRC Test value that was cost effective.

Mr. Satchwell stated that while IPL's avoided cost methodology is inconsistent with other Indiana electric utility avoided cost methodologies used in screening the cost-effectiveness of DSM programs, he recognized that the Commission has not defined avoided cost methodology. He stated that a consistent approach between utility avoided cost inputs would be advantageous in the understanding and analysis of benefit-cost ratio ("BCR") test results.

Mr. Satchwell recommended the Commission authorize program cost recovery for all proposed residential and commercial DSM programs with a TRC Test value greater than 1.0, as they are shown to be cost-effective. He also recommended that IPL update its free-ridership levels and make annual updates to its cost effectiveness tool based on M&V results.

C. Jenny A. Sumner. Jenny A. Sumner, a Utility Analyst in the OUCC's Electric Division, explained the OUCC's recommendation to modify IPL's proposed performance incentive. Ms. Sumner stated that she investigated electric utility performance incentives approved in other states. Her research indicated that performance incentives can be based on a percentage of program costs, a percentage of net benefits (benefits minus costs) generated, or an increased return on investment for energy efficiency. She noted that IPL proposed a performance incentive based on tiered percentages of program costs. While the proposal for an incentive based on tiered percentages of program costs is consistent with incentives in other states, she asserted that IPL's proposal has one of the lowest threshold values surveyed, accompanied by one of the highest caps. She prepared a summary of her findings.

Ms. Sumner recommended the Commission: (1) modify IPL's proposed tiered performance incentives; (2) deny IPL's request for flat performance incentives on the Residential and Commercial Energy Efficiency Education and Indirect Costs, the Residential and Commercial Renewables Incentives, and the Residential Low and Moderate Income Weatherization; (3) deny IPL's request for performance incentives on the Advanced DSM Program¹¹; (4) approve IPL's Rate REP tariff as a three year pilot and require IPL to report results achieved under the tariff in its annual DSM report; and (5) require IPL to seek Commission approval, at least nine months before the end of the three year pilot, to continue or change the Rate REP options.

¹¹ The Advanced DSM Program refers to IPL's Advanced Metering Infrastructure proposal.

On cross-examination at the hearing, Ms. Sumner testified that the parties had met following IPL's submission of its rebuttal testimony. She testified that IPL had submitted a discovery response, which contained a proposed new level of performance incentives. This discovery response was admitted into evidence as Public's Exhibit CX-1. Ms. Sumner opined that the modified performance incentives were reasonable.

D. Ronald L. Keen. Ronald L. Keen, Senior Analyst in the OUCC's Resource Planning, Emerging Technologies and Telecommunications Division described the concept of a Smart Grid and briefly explained the OUCC's vision for the deployment of Smart Grid technology by a utility. He discussed the OUCC's concerns regarding the proposed AMI POC and the proposed HAN POC. Mr. Keen explained the conceptual differences the OUCC believes exists between a POC and a pilot project. He also discussed the OUCC's concerns regarding the Distribution Automation technology to be implemented by IPL and concerns regarding cybersecurity. Mr. Keen concluded by recommending that the Commission require IPL to develop an overarching master plan for Smart Grid technology deployment, defer consideration of the cost recovery for the AMI deployment to a separate docketed case and deny approving cost recovery for the HAN POC initiative.

E. Greg A. Foster. Greg A. Foster, Utility Analyst in the Electric Division of the OUCC's Energy Group, provided an overview of IPL's CA-DSM cost recovery mechanism, discussed the guidelines for DSM recovery by electric utilities and explained the OUCC's understanding of how the guidelines apply to IPL's proposal. He stated that the OUCC believes that IPL's proposed Phase I DSM Program should qualify for recovery of program costs, lost margin, and performance incentives, with modification as described by Ms. Sumner. He stated that the OUCC does not object to IPL's methodology of estimating the lost margins component of its CA-DSM.

Mr. Foster also explained the OUCC's position on IPL's recovery of TOU study costs. He stated that the OUCC agrees that TOU rates should be viewed as an integral part of a well-developed Smart Grid vision. Mr. Foster stated that a utility should develop a time-based pricing schedule based on an analysis of its costs on a long-term basis, including both operation and investment costs. Mr. Foster also stated that IPL should not be permitted to recover the cost of a TOU study without a clear vision of how, or if, IPL will incorporate the results of the TOU study.

However, on cross-examination, Ms. Paronish agreed that the parties had met and that the OUCC now agreed that IPL should be authorized to defer for future recovery the cost of the HAN and TOU studies. She further stated that the OUCC understood the procedural process for the Phase II proceeding and had no concerns with that process.

9. Petitioner's Rebuttal.

A. Ken Flora. Mr. Flora addressed various issues raised, and recommendations made, by the OUCC. Mr. Flora stated that IPL is encouraged that the OUCC generally supports IPL's proposed Core DSM Programs although they did propose some modifications. He stated that there is, however, a disagreement between IPL and the OUCC regarding the appropriate

incentive levels for DSM. Mr. Flora stated that IPL was disappointed with the OUCC's response to IPL's Advanced DSM Program; in particular, that the OUCC is requesting the development of detailed plans prior to supporting cost recovery for any test of HAN or a TOU study. He noted that throughout the past two months, IPL has worked collaboratively with multiple vendors to select a viable product set and develop a detailed HAN test plan.

In response to Ms. Paronish's indication that IPL's Advanced DSM Program should be considered in a separate proceeding, Mr. Flora stated that IPL believes the OUCC's recommendation is administratively inefficient, fails to recognize AMI as DSM, and ultimately serves only to delay realization of potential benefits to IPL customers. IPL is proposing to conduct a HAN test and to study TOU in Phase I of this proceeding. Phase II will include IPL's proposal to address AMI.

Mr. Flora stated that IPL is unique among the Indiana investor owned utilities because IPL already has installed AMR technology and various one-way distribution automation technologies. Because IPL has already realized many benefits as a result of its early deployment of AMR, IPL's priorities are focused on the incremental benefits of advanced DSM and related TOU pricing. He stated that it is, in part, because of the advanced stage of IPL's AMR technology and related benefits that IPL's vision is not going to necessarily follow the same order of program priorities as utilities without existing system-wide meter automation.

Mr. Flora stated that IPL will also be providing additional information in Phase II of this proceeding to support its Advanced DSM Program. IPL plans to include a description of the AMI solution, preferred vendor, system architecture design, and deployment plans. IPL will preview strategic Smart Grid options in Phase II testimony and include a longer term view of this topic in its 2009 IRP. He noted that if the HAN testing and TOU study occur in parallel with the Phase II regulatory proceeding, the results will be used to drive larger scale program offerings to expedite IPL customer benefits. The anticipated timing of IPL's testimony in support of Phase II is that it will be consistent with the Company's request for stimulus funding with the DOE.

Mr. Flora testified that IPL was one of the first utilities in the country to begin deployment of an AMR system more than a decade ago.¹² He stated that this year, IPL conducted a POC to test AMI and the results of this test, along with extensive due diligence into AMI, will lead to a subsequent advanced DSM program proposal in Phase II of this proceeding. Mr. Flora testified that in Phase I of this proceeding, the Company is proposing to test HAN using its current AMR system. The use of HANs will provide more timely and granular energy consumption information to residential and smaller commercial and industrial customers to help them manage their energy consumption decisions. Mr. Flora stated that a significant benefit that could result from a successful test of the HAN with IPL's AMR system is the ability to deploy HANs without the need to change out all of IPL's AMR systems. Instead, the Company could roll out AMI in a phased approach. This phased approach would mitigate the rate impact to IPL's customers and still provide the energy and demand reduction benefits that are anticipated to come from the use of HANs.

¹² The IPL contract with Cellnet (AMR technology provider) was signed in September 1997. Deployment began in 1998.

Mr. Flora added that IPL formulated high level goals to investigate ways to optimize existing technologies and systematically deploy additional technologies that will bring significant benefits in 2008. Initiating AMI for demand meters, which are currently manually probed, was identified as a short-term initiative to provide customers with near real time energy usage information. The execution of initial goals began in January 2009 with the AMI POC, which was not considered a total success. The ARRA of 2009 was enacted into law in February 2009. He stated that these events led IPL to seek a brief delay in the advanced DSM portion of Phase I of this proceeding to explore whether any changes should be made to its AMI and other Smart Grid initiatives. Mr. Flora testified that the next step is to conduct a test of the HAN to gain information about whether this technology is compatible with IPL's AMR system and to gain valuable information about customer behavior with energy consumption, including the impact of time-based rates on energy consumption simultaneous with Phase II of this proceeding.

Mr. Flora opined that AMR based testing is necessary regardless of what AMI or other advanced technologies IPL proposes to initiate as part of a Smart Grid in the future. He stated that testing is essential to ensure that future investments are prudent. IPL's current proposal in Phase I of this proceeding is to defer the cost of the HAN POC and the TOU study and implementation costs. The total estimated cost for the HAN POC and the TOU study, including implementation costs, is \$500,000.

Mr. Flora stated that IPL is not planning to deploy a full AMI system at this time. The deployment of AMI to all of IPL's customers would likely cost well in excess of \$130 million and would have a significant impact on rates. Any full AMI deployment plan would also likely be coupled with the installation of additional distribution automation equipment. He stated that although the Company is not planning for a full AMI deployment at this time, there are significant benefits that can be achieved from a partial deployment, which IPL plans to more fully discuss in Phase II of this proceeding.

In response to OUCC witness Foster that IPL should not be permitted to recover the cost of a TOU study without a clear vision of how, or if, IPL will incorporate the results of the TOU study, Mr. Flora responded that IPL has indicated that the deferred costs are proposed to be recovered through IPL's proposed Standard Contract Rider No. 22, coincident with the offering of time-based pricing to customers. Thus, IPL's proposal is consistent with Mr. Foster's recommendation. The TOU study will provide a recommendation for the structure of the TOU rate offering(s). Following the completion of the study, IPL plans to propose a new TOU tariff. The target is to time the offering of a TOU rate with the HAN POC test so that, in addition to gaining information about technology feasibility, information will be gained regarding IPL customers' responsiveness to TOU rates.

In response to the incentives proposed by Ms. Sumner, Mr. Flora stated that her proposal is significantly different from IPL's proposal in four respects: (1) it excludes a large portion of the Core DSM Program expenditures from any incentive opportunity; (2) it prevents full recovery of program costs if measurement and verification results indicate that savings are less than 50 percent of the target; (3) it significantly lowers the incentive level for performance at or greater than 100 percent of target; and (4) it removes any incentive to perform above the target by awarding a 12 percent incentive for any performance at or above 100 percent of target. Mr.

Flora noted that Congress has enacted legislation and the National Association of Regulatory Utility Commissioners has adopted resolutions that encourage state commissions to address regulatory incentives and to modify ratemaking practices as necessary to promote investments in energy efficiency.

B. Lester H. Allen. Mr. Allen addressed Ms. Paronish's recommendation that an IPL Oversight Board be established. He noted that IPL has a long standing tradition of working collaboratively with the OUCC, Citizens Action Coalition of Indiana, Citizens Gas and other interested parties to develop programs that provide cost effective DSM and energy efficiency for the benefit of its customers. However, on cross-examination at the hearing, Mr. Allen stated that the parties had met subsequent to the rebuttal testimony being filed and that IPL has agreed to formation of an Oversight Board.

In response to Ms. Paronish's concerns regarding the lack of a detailed program design, Mr. Allen stated that IPL has significant experience in the delivery of the majority of the DSM programs being proposed in this proceeding. Several of the programs that IPL proposes are modifications of existing programs that the Company is currently successfully delivering (*i.e.*, ACLM; Income Qualified Weatherization; Energy Efficiency Education; and Renewable Energy Education). Mr. Allen noted that the delivery approaches and results for these programs have been periodically communicated to the OUCC staff and included in IPL's Annual DSM Reports. He noted that IPL also has extensive experience in the delivery of commercial programs, similar to those contained in this proposal.

Mr. Allen responded to Ms. Paronish's proposal that the funds IPL proposes for use in its Residential Low and Moderate Income Weatherization program should not be eligible for reallocation to other programs. He stated that as indicated in his direct testimony, IPL agrees with this approach.

Mr. Allen responded to Ms. Paronish's recommendation that IPL should separately track existing ACLM switches from new ACLM switches. He stated that since the Commission did not authorize incentives for IPL's existing program, IPL has created a new set of project numbers to separately track ACLM switch installation costs. He stated that IPL will take this approach for all of the programs that represent a continuation from its Current DSM Program. Thus, only the switch installation costs incurred after the effective date of the new DSM programs will be identified as eligible for incentives and lost margins. Likewise, customer accounts will be identified to clearly delineate whether the customer became a participant under IPL's Current DSM Program or under the new DSM program to allow for separate accounting of the incentives paid to participants. With that said, Mr. Allen stated that IPL does not intend to separately track maintenance and replacement costs by ACLM switch vintage. IPL's experience indicates that only a relatively small number of switches will require maintenance and/or replacement each year and will not justify the additional administrative burdens of separately tracking switch maintenance cost by vintage.

In response to Ms. Paronish indicating that the EM&V approach as described by IPL is not adequate and the Oversight Board should select an independent third-party, Mr. Allen stated that IPL proposes to follow the EM&V approach that was suggested by its consultant in the

MPS. He stated that IPL agrees with Ms. Paronish that the evaluation should be conducted by an independent third-party and that the IPMVP will be used, when found appropriate by the third-party, to conduct an assessment of the programs and an analysis of the demand and energy savings achieved by the programs.

Mr. Allen disagreed with Ms. Paronish's questioning of the EM&V budget allocation and her recommendation that the Oversight Board review the EM&V budget on a program-by-program basis. He stated the estimated costs by program were primarily based on recommendations provided by Forefront in the MPS. The estimated costs were based on the professional judgment and significant experience the consultant had with DSM program evaluations conducted by other utilities with similarly situated programs. Mr. Allen stated that the costs as proposed in the MPS were amended to better reflect a three-year implementation period.

C. John E. Haselden. Mr. Haselden disagreed with Mr. Satchwell's assessment that IPL used a free-ridership estimate for its lighting program that is too low. He stated that IPL uses a net-to-gross ratio that includes other factors besides free-ridership, such as free-drivers, persistence, spill-over and take-back effects, and is therefore not too low. In addition, Mr. Haselden stated that, with regard to Mr. Satchwell's reference to Northern Indiana Public Service Company's proposed DSM lighting program in Cause No. 43618, the measures IPL plans to include in its lighting program may be different. IPL recognizes that common CFLs have experienced increased acceptance, have dropped in price in recent years and may not warrant a rebate over the long term that is a high percentage of their retail price. However, newer CFLs that are decorative, more compact, 3-way capable or dimmable, are relatively expensive compared to their incandescent counterparts and will require much higher rebates than that necessary for common CFLs if they are to penetrate the market. The net-to-gross ratio for these product segments, which IPL will include in its program, is expected to be significantly higher than for standard CFLs. Mr. Haselden agreed with Mr. Satchwell's conclusion that there are no adverse consequences of using a 50 percent net-to-gross ratio instead of an 80 percent ratio because the program is robust enough to still pass the TRC Test with only a 50 percent net-to-gross ratio and is cost effective.

Mr. Haselden disagreed with Mr. Satchwell's assessment that the Transmission and Distribution ("T&D") component of the avoided cost estimate was too high. He stated that IPL used 10 percent of avoided generation cost to approximate avoided T&D capacity costs and that the Commission's rules at 170 IAC 4-7-4(16) require that avoided T&D costs be included in the avoided cost estimate for evaluating DSM programs. He noted this same methodology has been used by IPL for many years in its DSM evaluations, IRP and in its calculation of Rate CGS. He stated that determining the impact of DSM program savings on avoided T&D capacity costs cannot be done with a high degree of accuracy for many reasons. The primary reason being that the T&D capacity constraints, and attendant opportunities for possible T&D capacity savings, are geographically specific, while DSM program implementation generally is not. Distribution circuits that have adequate capacity and serve customers that implement DSM measures will not experience any avoided capacity savings that can be attributed to the DSM programs. He stated that the converse is obviously true for circuits nearing capacity, but the degree of impact cannot be predicted nor accurately estimated because of the geographically random nature of DSM

implementation interacting with other sometimes larger impacts of new construction growth or economic decline. Mr. Haselden stated that while IPL's estimate of T&D avoided costs may be higher than estimates of other utilities, even if these avoided costs are completely excluded from the BCR calculations, the programs that were cost effective are still cost effective.

Mr. Haselden responded to Mr. Satchwell's assertion that IPL's avoided cost methodology is inconsistent with other Indiana electric utility avoided cost methodologies. Mr. Haselden stated that all Indiana electric utilities' methodologies are inconsistent to some degree with each other. Mr. Haselden agreed with Mr. Satchwell's statement that, "[a] consistent approach between utility avoided cost inputs would be advantageous in the understanding and analysis of DSM BCR test results" and that this topic would more appropriately be discussed in Phase II of the Commission DSM investigation in Cause No. 42693.

As to Ms. Sumner's proposal of a different shareholder incentive structure than that proposed in Mr. Haselden's direct testimony, Mr. Haselden responded that he appreciates that the OUCC agrees that shareholder incentives are appropriate. However, he disagreed with the exclusions and the levels proposed by the OUCC. Mr. Haselden stated that IPL believes the function of the shareholder incentive is to encourage a high level of implementation performance. He stated IPL is concerned with the penalty for achieving less than 60 percent of target savings and the lack of a tiered incentive for achieving better than 100 percent performance. Mr. Haselden asserted that this is a fundamental and critical aspect of the tiered structure that provides an incentive to the utility for finding ways to get better results for essentially the same expenditures.

On cross examination at the hearing, Mr. Haselden testified that the parties had met following IPL's submission of its rebuttal testimony. He testified that IPL had submitted a discovery response, which contained a proposed new level of performance incentives. Public's Exhibit CX-1 contained the following modification of IPL's proposed performance incentives:

% of Target	Pre-tax Incentive
<40%	-4%
≥ 40 < 60%	0%
≥ 60 < 80%	6%
≥ 80 < 90%	8%
≥ 90 < 100%	10%
≥ 100 < 110%	12%
≥ 110%	15%

Mr. Haselden also explained that OUCC witnesses Paronish and Sumner proposed excluding IPL's programs that do not pass the TRC Test from eligibility to earn a shareholder incentive. On cross-examination, Mr. Haselden stated that IPL has agreed that the Residential Low and Moderate Income Weatherization Program, the C&I Renewables Incentive Program and educational funding that is unrelated to specific programs will not be eligible to earn a shareholder incentive.

D. James L. Cutshaw. Mr. Cutshaw disagreed with Mr. Foster's claim that for AMI costs, IPL initially proposed to defer recovery, including a return on and of capital costs, together with incremental operation and maintenance expenses associated with the new meters. Instead, Mr. Cutshaw explained, IPL initially proposed timely recovery of the costs to install the AMI communications upgrade, including the replacement of approximately 6,400 demand meters for C&I customers in Phase I of its DSM Plan. Mr. Cutshaw pointed out that the Phase I AMI costs were further clarified to be the capital cost of the communication system, including implementation, along with an incentive on the expenditure. He noted that the Phase I AMI costs were clearly reflected in the cost recovery schedules determining the impact of the proposed Core and Advanced DSM Adjustment.

Mr. Cutshaw agreed with Mr. Foster that according to IPL witness Flora's supplemental testimony, IPL intends to move forward with its Core DSM Program, but is proposing a brief delay in its request to recover costs associated with AMI by removing it from consideration in Phase I and addressing it in Phase II of this Cause. He stated that this delay does not represent a request by IPL to defer AMI costs for recovery in a subsequent rate case.

Mr. Cutshaw testified that IPL continues to seek authority to defer, for recovery following their completion, the costs of a HAN POC and TOU pricing study. These deferred costs are proposed to be recovered through IPL's proposed Standard Contract Rider No. 22, coincident with the offering of time-based pricing to IPL's customers. In response to Mr. Foster's statement that generally the use of deferred accounting should be limited to no more than three years after plant goes into service, Mr. Cutshaw stated that it would not be a concern for the HAN POC and TOU pricing study costs because IPL is proposing that these costs be included in future DSM factors reflecting the recovery of costs authorized in Phase II. He stated that the timeline for the HAN POC and TOU pricing study and the proposed implementation of TOU rates in Phase II shows that the deferral would be less than three years.

In response to Mr. Foster's statement that approving cost recovery for the TOU study proposed in this case would be inappropriate at this time and should be evaluated in a separate AMI proceeding, Mr. Cutshaw stated that IPL is not requesting current recovery of the costs of the TOU study. IPL is requesting to defer the costs of the TOU study for recovery in Phase II coincident with the offering of time-based pricing to its customers.

Mr. Cutshaw disagreed with Mr. Foster that IPL should not be able to defer the cost of the HAN POC and TOU study at this time. He found Mr. Foster's position contrary to the OUCC's position taken in previous testimony filed in other causes, including the Commission's investigation of TOU rates in Cause No. 43083.

E. Joan M. Soller. Ms. Soller addressed points made by OUCC witness Keen regarding the timing and detail of IPL's proposed HAN POC and described how IPL's proposed studies synchronize with its overall Smart Grid plans. Ms. Soller agreed that the phrase "Smart Grid" may be defined differently by energy industry stakeholders. She opined that Smart Grid functionality as defined in the EISA encompasses application options ranging from partial to full automation, which utilities may initiate based upon their specific business objectives. A utility may select one or more Smart Grid elements from which to derive operational benefits for its

customers, shareholders or other energy stakeholders. Ms. Soller stated that IPL has identified concrete ways in which it is currently achieving each of these functions or may choose in the future to deploy additional functionality.

Ms. Soller described the five key functions that IPL plans to test: (1) successfully intercept an AMR signal, convert it to Zigbee and interface to in-home display and a programmable communicating thermostat; (2) collect energy usage on a 15 minute interval basis using AMR meters and communicate billing quality information to IPL for purposes of implementing TOU rates of up to 4 “buckets” or pricing periods through a customer broadband connection; (3) enable demand response capabilities through IPL’s control of thermostat set-back through a HAN system; (4) present “near real time” energy information to end-user customers through a web-based application; and (5) provide IPL access to end-use customer data for near real time data for analysis and measurement and verification of demand response resources. She stated that IPL believes testing the HAN with the existing AMR technology in a limited fashion is necessary to determine how to best deploy AMI investments. If a customer broadband service is capable of providing the second leg in a feedback loop to accomplish “two-way” communication, incremental investment in AMI may not be needed in all locations; rather, AMI may be targeted to areas that can best benefit from two-way meters.

Ms. Soller stated that IPL met with Mr. Keen to discuss how the HAN and TOU study components synchronized with its Phase II DSM Program and provided at that time a high level timeline. She noted that many studies that have been completed nationally and internationally to assess the effectiveness of providing energy information to customers as a means to reduce consumption in terms of kW and kWh. In addition, HAN components including programmable communicating thermostats and energy displays have been sold in commercial retail stores for many years. She stated the unique elements of the proposed HAN test are the integration of HAN vendor software to the in-home components using AMR signals, the ability to control the air conditioning through signaling the thermostat, and the ability for the HAN vendor to provide 15 minute billing data to IPL. Ms. Soller testified that since IPL is a summer peaking utility, it seems logical to collect information during the shoulder months of spring and fall in addition to the summer months. Also, the ability to include a larger number of homes for a more robust test is preferred over a longer time period to fit within the proposed budget parameters. She stated that IPL understands that to prolong the HAN test period to collect 12 months of data may require a modest increase in vendor costs, and is willing to negotiate this arrangement if the Commission prefers this strategy.

Ms. Soller described the due diligence that has occurred in the last two months to evaluate and fine tune the HAN testing plans. She stated that IPL staff sought detailed information from the limited number of vendors in this niche market and that three of four vendors responded and met with an IPL due diligence team to discuss and, in some cases, demonstrate hardware and software functionality. She noted that the team scored each vendor according to evaluation criteria.

Ms. Soller described IPL’s efforts to select an effective AMI solution in preparation for Phase II of this proceeding. She stated that technical staff from IPL’s IT, Customer Billing, Metering, Telecommunications, Distribution Operations and Planning, Strategic Accounts, and

Regulatory areas have met regularly with multiple vendors to develop an AMI recommendation. She stated that IPL staff discussed various applications, products and interfaces with staff from utilities around the United States as well.

10. Commission Discussion and Findings.

A. Legal Consideration of DSM Proposals. The Commission has developed a regulatory framework that allows a utility to meet long term resource needs with both supply-side and demand side resource options in a least-cost manner. As part of its IRP, an electric utility must consider alternative methods of meeting future demand for electric service, including a comprehensive array of demand side measures that provide an opportunity for all ratepayers to participate in DSM, including low-income residential ratepayers.¹³

In 1995, the Commission adopted the DSM Rules providing guidelines for DSM cost recovery. The DSM Rules were specifically designed to assist the Commission in its administration of the Utility Powerplant Construction Law, Ind. Code § 8-1-8.5, and to facilitate increased use of DSM as part of the utility resource mix. As further set forth in 170 IAC 4-8-3(a), the purpose of the DSM Rules was to:

(a) ...[provide] a regulatory framework that allows a utility an incentive to meet long term resource needs with both supply-side and demand-side resource options in a least-cost manner and ensures that the financial incentive offered to a DSM program participant is fair and economically justified. The regulatory framework attempts to eliminate or offset regulatory or financial bias against DSM, or in favor of a supply-side resource, a utility might encounter in procuring least-cost resources. The commission, where appropriate, will review and evaluate the existence and extent of regulatory or financial bias....

(c) To ensure a utility's proposal is consistent with acquiring the least-cost mix of demand side and supply-side resources to reliably meet the long term electric service requirements of the utility's customers, the commission, where appropriate, will review and evaluate, as a package, the proposed DSM programs, DSM cost recovery, lost revenue, and shareholder DSM incentive mechanisms.

This regulatory framework acknowledges the possibility of financial bias against DSM, recognizes the need to evaluate the extent of any bias, and provides ways for the Commission to eliminate any bias through adoption of a package of cost recovery and incentive mechanisms designed to facilitate the use of DSM to meet the long-term resource needs of customers.

B. Commission Order in Phase II of the DSM Investigation. On December 9, 2009, the Commission issued its Phase II Order in Cause No. 42693, *In the Matter of the Commission's Investigation into the Effectiveness of Demand Side Management Programs* ("Phase II Order"). In this Order, the Commission found that jurisdictional electric utilities, of which IPL is one, are required to offer certain core DSM programs ("Core Programs") to all customer classes and market segments. The Core Programs are to include the following: (1)

¹³ 170 IAC 4-7-6(b).

Home energy audit program, (2) Low income weatherization program, (3) Residential lighting program, (4) Energy efficient schools program, and (5) Commercial and Industrial program. To implement these programs, electric utilities are required to pursue coordinated marketing, outreach and consumer education strategies on a statewide basis.

The Commission also determined that an Independent Third Party Administrator should be utilized by the electric utilities to oversee the administration and implementation of the Core Programs. In addition, a DSM Coordination Committee is to be formed to address DSM program oversight generally within the State of Indiana. The Commission also found that a single statewide evaluation protocol was necessary in order to track achievement with DSM goals. Consequently, jurisdictional electric utilities are required to contract with an independent entity to conduct the EM&V with respect to the Core Programs.

Finally, the Commission found that the associated ratemaking and cost recovery issues associated with an electric utility's DSM programs, as well as smart grid technologies and advanced rate design, should be addressed on a case by case basis in individual utility proceedings.

C. IPL's Proposed Phase I DSM Program. Based on the evidence presented, IPL's proposed three-year Phase I DSM Program appears to contain several programs determined by the Commission in its Phase II Order to be Core Programs. As we have already found that these Core DSM programs are required offerings for jurisdictional electric utilities, the Commission approves IPL's offering of DSM programs that are considered and determined to be Core Programs in accordance with the requirements of the Phase II Order.

Although the specifics of the Core Programs have yet to be determined, it is clear that IPL's proposed Phase I DSM Program also includes programs that exceed or go beyond the type of programs contemplated to be Core Programs. In addition, when the specifics of the Core Programs are determined in accordance with the procedure set forth in the Phase II Order, it is possible that additional aspects of IPL's proposed Phase I DSM programs may exceed what is determined to be part of a Core Program. The Commission considers these DSM programs, or portions of DSM programs, that exceed the Core Programs to be "Core Plus Programs" and hereby approves IPL's offering of these programs consistent with the evidence presented in this Cause as modified by the findings set forth below.

Even though the Commission finds the cost recovery authorized herein to be reasonable at this time to encourage IPL to make every effort in the implementation and development of cost-effective DSM programs, the Commission notes that it will again have the opportunity to review and consider the reasonableness of program cost recovery, lost revenues or incentives, such as in a proceeding to approve a new DSM program upon expiration of the one approved herein or as part of additional filings required by the Phase II Order. IPL, in contrast to other Indiana utilities, has been engaged in DSM programs for a number of years. Thus, we assign considerable credibility to its motives and performance. Nonetheless, as expenditure levels increase dramatically as envisioned by the Commission's directive, a better developed mechanism to confirm the appropriateness of the expenditures is required. In the Phase II Order (at pp. 43-44), we noted the critical importance of EM&V, as well as the lack of a consistent

approach across similar programs in Indiana. Both the Commission and Indiana utilities are disadvantaged by the lack of a robust EM&V methodology that allows substantiation of the efficacy of the DSM programs, whether Core or Core-Plus Programs. Establishment of the value for money equation is vital to the acceptance and success of the programs and until such EM&V becomes more generally available and accepted, the Commission intends to proceed, but with an intense focus on this issue in the interim. We fully expect that upon the expiration of the DSM program approved herein and the submission of new programs, either in accordance with the Phase II Order or in a separate proceeding, the Commission will have better tools available to document the program benefits.¹⁴ Therefore, the Commission finds that IPL shall be authorized to offer its Phase I DSM programs as set forth below.

1. Cost Recovery. The DSM Rules provide that the Commission will determine the cost recovery mechanism for a DSM program when the DSM program is submitted for Commission approval. This is also consistent with the Commission's findings in the Phase II Order.

Therefore, IPL is authorized to recover the costs incurred to implement the Core and Core Plus Programs through Standard Contract Rider No. 22. IPL will prepare semi-annual filings to recover the forecasted costs of the Core and Core Plus Programs over six-month periods that match the billing periods of the Standard Contract Rider No. 22 tracker. The semi-annual periods will be July to December and January to June. The Core and Core Plus expenditures will be forecasted semi-annually and reconciled to actual expenditures in a subsequent semi-annual filing.

IPL is also granted authority to defer, for recovery following its completion through Standard Contract Rider No. 22, the costs of a HAN POC and a TOU pricing study up to the estimated study costs described herein. The cost of the HAN POC is estimated at \$300,000 and the cost of the TOU pricing study is estimated at \$200,000, which includes \$100,000 for certain modifications to its customer accounting system to accommodate time-based rates.¹⁵ IPL will provide monthly updates to all Parties and the Commission regarding the progress of the HAN POC and TOU pricing study and will meet bi-monthly with the other parties to discuss any issues arising out of the studies.

IPL will continue to recover the ACLM customer incentives for existing participants through Standard Contract Rider No. 13. In addition, IPL's proposed changes to its Standard Contract Rider No. 9 (Net Metering for Customers with Solar Photovoltaic, Wind, or Hydroelectric Systems) and Standard Contract Rider No. 13 (Air Conditioning Load Management Adjustment) shall be approved.

2. Lost Revenues. IPL proposes the recovery of any lost revenue due to decreased kWh consumption and kW demand from the DSM programs. The company argues that absent approval of such recovery, the playing field between demand- and supply-side alternatives will

¹⁴ We also recognize that the Commission's DSM Guidelines at 170 IAC 4-8 *et seq.* may also require further review for possible revision.

¹⁵ Cost recovery and other issues associated with the proposed deployment of HANs will be addressed in Phase II of this proceeding.

not be level. IPL also contends that any reduced consumption due to the implementation of its DSM programs will result in less revenue, less capital to invest in plant and therefore less rate base growth as an earnings driver. Finally, IPL states that its level of commitment to energy efficiency and DSM will depend on its ability to recover any lost revenue due to its efforts.

Mr. Cutshaw testified that IPL will calculate the amount of lost revenue to be recovered by multiplying the estimated kWh consumption and kW demand reductions by rate class by the revenue margin rates per kWh and kW from IPL's last rate case. IPL's most recent rate case was concluded in 1995 pursuant to a Commission order approving a settlement among IPL, the OUCC and several intervenors. *See, Petition of Indianapolis Power & Light Company, Cause No. 39938 (IURC, 08/24/1995)*. Notably, the settlement fails to indicate whether the revenue margin rates per class were adopted from IPL's previous rate case in 1985 or if those rates were reflective of IPL's 1995 costs.

The Commission recognizes that general, and likely material, changes in the use of electric energy by customers, such as per customer energy consumption, have occurred since the revenue margin rates per kWh and kW proposed to be used were determined. The effect of such changes on the accuracy of the proposed inputs is unclear. The determination of a revenue requirement charged to ratepayers via a lost revenue calculation must be based on reasonably accurate inputs. Petitioner provided no evidence to demonstrate that the revenue margin rates per kWh and kW it proposes to use are reasonably reflective of its operating system today. The significant amount of time that has elapsed since the proposed inputs were determined necessitates the presentation of such evidence.

Accordingly, the Commission finds that it cannot reasonably approve lost revenue recovery for IPL's Core or Core Plus Programs at this time because we lack sufficient evidence demonstrating the revenue margin rates per kWh and kW to be used in determining such lost revenue amounts are reasonably reflective of its present operating system. However, if IPL believes that it can demonstrate the revenue margin rates are reasonably reflective of its present operating system, the Commission is willing to consider such evidence in a subdocket to this proceeding should IPL file such a request within sixty (60) days of the date of this Order.

3. Shareholder Incentives. IPL has also proposed that its DSM programs, except for the Residential Low and Moderate Income Weatherization Program, the C&I Renewables Incentive Program and educational funding and indirect costs that are unrelated to specific programs, be eligible for certain shareholder performance incentives as agreed upon with the OUCC. IPL proposes to earn specified levels of incentives based upon the percentage of program savings achieved. IPL believes that incentives are necessary to position DSM on a level playing field with construction of new generation and to provide a level of financial opportunity that is meaningful to management and investors.

The Commission's DSM Rules at 170 IAC 4-8-7(a) authorize the Commission to "provide the utility with a shareholder incentive to encourage participation in and promotion of a demand side management program" when the Commission determines it is appropriate to do so. With respect to the Core Programs, the Commission found in its Phase II Order that jurisdictional electric utilities should have a standard group of core DSM programs as part of its

basic utility service offering. As the Core Programs are required offerings, we find the structure of the regulatory compact in Indiana provides the necessary incentive to encourage the implementation and administration of such programs.

With respect to the Core Plus Programs, the Commission is administratively aware that IPL's recent earning condition has been the subject of periodic review and consideration.¹⁶ The Commission must balance any concerns related to this review with the recognition that incentives are supportive of the aggressive energy savings goals contained in the Phase II Order. We also understand that the incentives proposed herein are applicable for the limited timeframe of 3 program years. As a result, we find that the shareholder performance incentives discussed further below are appropriate at this time.

We have previously indicated that the reasonableness of any incentive opportunity hinges on the robustness of the back end evaluation of program results. IPL proposes to establish an Oversight Board similar to that utilized in the Vectren Gas collaborative.¹⁷ The Oversight Board will monitor IPL's DSM programs, evaluate and determine program effectiveness and make decisions regarding program creation, modification, funding and discontinuation. In addition, the Oversight Board will select an independent third-party to evaluate program performance. The utilization of an independent third-party evaluator and the establishment of an Oversight Board provide reasonable safeguards to having an incentive and are critical to our review of the proposed performance incentive.

As noted above, the Commission, in its Phase II Order (at p. 41-43), established a DSM Coordination Committee to oversee the Core Programs. The Phase II Order (at p. 46) also requires jurisdictional utilities to seek "proposals from independent entities to conduct EM&V with respect to the Core Programs and additional DSM Programs undertaken by the parties to ensure that the overall savings objectives identified in [the] Order are being met in a timely and cost effective manner." Consequently, the Commission encourages IPL to consider utilizing the Core Program DSM Coordination Committee and third-party evaluator for its Core Plus Programs.

IPL has proposed that it be eligible for the following shareholder performance incentives for all of its DSM programs, except the Residential Low and Moderate Income Weatherization Program, the Commercial and Industrial Renewables Incentive Program and educational funding and indirect costs that are unrelated to specific programs:

¹⁶ See, e.g., IPALCO Enterprise, Inc.'s November 6, 2009 Form 10-Q filing with the U.S. Securities and Exchange Commission at <http://www.sec.gov>.

¹⁷ See, e.g., Cause Nos. 42943 and 43046 (December 1, 2006 Order approving settlement), Paragraph 18 of the Settlement Agreement (Exhibit JAB-S2, p. 14).

% of Target	Pre-Tax Incentive
< 49%	-4%
≥ 40% < 60%	0%
≥ 60% < 80%	6%
≥ 80% < 90%	8%
≥ 90% < 100%	10%
≥ 100% < 110%	12%
≥ 110%	15%

The Commission finds these proposed shareholder performance incentives for the Core Plus Programs to be reasonable and should be approved.¹⁸

IPL also proposed that any shareholder incentive earned as a result of this proceeding should be excluded from IPL’s fuel adjustment clause earnings test. In each FAC proceeding, IPL’s actual net operating income (“NOI”) is compared to its authorized NOI and if the actual exceeds the authorized, any excess is returned to customers.¹⁹ IPL believes that its authorized NOI for purposes of the FAC earnings test needs to be adjusted by the amount of the actual incentive earned to ensure that the incentives can be retained.

The authorized NOI approved by the Commission is generally determined in the context of a base rate case and based upon an allowed rate of return for a given investment amount in full consideration of the risks confronting the utility’s investors. The inclusion of any DSM incentive as a component of a utility’s NOI for purposes of the FAC earnings test prevents the utility from earning more than the allowed rate of return embodied in the utility’s authorized NOI. The proposed exclusion of such incentive revenue from the NOI evaluation overrides this prevention. This exceptional treatment goes beyond overcoming the general financial bias that the Commission’s DSM regulatory framework is designed to accomplish. Accordingly, we deny IPL’s proposal to adjust the FAC earnings test by the amount of actual incentive earned.

D. Approval of IPL’s Rate REP (Renewable Energy Production). In this proceeding, IPL has presented evidence of the following:

- (1) A description of the proposed Rate REP.
- (2) Consideration of the factors and methodology used to determine the proposed initial rates and their reasonableness.
- (3) The proposed cost recovery mechanism of renewable energy purchased under Rate REP will be administered through IPL’s FAC proceedings (or successor mechanism) and will not be subject to the Section 42(d)(1) test or any FAC benchmarks. This relief is consistent with the treatment of IPL’s purchase of wind

¹⁸ To the extent that the Residential Low and Moderate Income Weatherization Program, the Commercial and Industrial Renewables Incentive Program and educational funding and indirect costs that are unrelated to specific programs, or any portions of thereof, are considered Core Plus Programs, such programs are not be eligible for shareholder performance incentives as proposed by IPL.

¹⁹ Any return to customers is, of course, subject to the earnings bank calculation provided for in Ind. Code § 8-1-2-42.3.

power pursuant to a Power Purchase Agreement in Cause No. 43485 and is consistent with Ind. Code § 8-1-8.8-11.

Based on the evidence presented, the Commission finds that IPL shall be authorized to recover its purchased power costs related to renewable energy purchased under Rate REP via a rate adjustment mechanism on an accrual basis in accordance with Section 42(a) and Ind. Code § 8-1-8.8-11 contemporaneously with the processing of IPL's FAC proceedings (or successor mechanism). We further find that RECs or other environmental attributes generated for IPL shall be utilized to the benefit of jurisdictional ratepayers.

We also note that IPL agreed with the OUCC that the Rate REP tariff shall be a three year pilot, and we find that IPL shall report results achieved under Rate REP in its annual DSM report. In addition, IPL shall seek Commission approval at least nine months prior to the end of the three year pilot to continue or change its Rate REP options.

E. Compliance Filing. In order to implement the Commission's findings contained herein, IPL shall make a Compliance Filing in this Cause of its revised Standard Control Rider No. 9, Rider No. 13, Rider No. 22, and Rate REP and all supporting documents incorporating the findings herein. Given the significant alterations made in this Order to IPL's proposed Phase I DSM Program, the Commission finds that upon IPL's filing of its revised Riders, Rate REP and supporting documentation, the parties to this proceeding shall have ten (10) days to review the filing and notify the Commission of any objections to the filing. If the parties do not raise any objections and the Commission does not otherwise notify IPL within ten (10) days of its Compliance filing, the revised Riders and Rate REP will be approved and become effective upon the date of approval.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

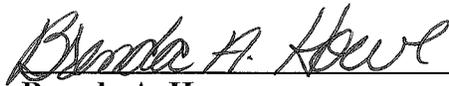
1. IPL's proposed Phase I DSM Program is approved as modified in Finding Paragraph 10.C. above.
2. IPL's proposed new Rate REP (Renewable Energy Production) is approved as set forth herein.
3. IPL shall file with the Electricity Division of the Commission, prior to placing into effect, the revised and new tariff sheets of IPL's Tariff for Electric Service reflecting the approval of changes to Rider No. 9 and Rider No. 13, and new Rider No. 22 and Rate REP (Renewable Energy Production).
4. IPL is hereby authorized to recover the costs incurred under Rate REP pursuant to Ind. Code § 8-1-2-42(a) and Ind. Code § 8-1-8.8 to be administered within its FAC proceedings (or successor mechanism). This recovery shall not be subject to any FAC benchmark review or the Ind. Code § 8-1-2-42(d)(1) test.

5. If IPL chooses to monetize RECs associated with renewable energy purchased under Rate REP, IPL shall use the revenues to first offset the costs of the purchased power and next to credit the jurisdictional ratepayers through the FAC proceeding.
6. Any long-term contracts between IPL and its customers wishing to sell renewable energy under Rate REP shall be submitted to the Commission for approval utilizing the 30-day filing process.
7. Changes to the standard rates contained in Rate REP shall be submitted to the Commission for approval utilizing the 30-day filing process.
8. IPL is hereby authorized to defer for future recovery the costs of its HAN POC and TOU study.
9. This Order shall be effective on and after the date of its approval.

HARDY, ATTERHOLT, GOLC, LANDIS, AND ZIEGNER CONCUR:

APPROVED: FEB 10 2010

**I hereby certify that the above is a true
and correct copy of the Order as approved.**



**Brenda A. Howe,
Secretary to the Commission**