

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED JOINT PETITION OF INDIANA GAS)
COMPANY, INC., SOUTHERN INDIANA GAS AND)
ELECTRIC COMPANY, AND INDIANA OFFICE OF)
UTILITY CONSUMER COUNSELOR FOR APPROVAL)
OF AN EXTENSION OF THE PROVISION OF A)
PORTFOLIO OF DEMAND SIDE MANAGEMENT)
PROGRAMS, INCLUDING INTEGRATED GAS AND)
ELECTRIC PROGRAMS, AND APPROVAL OF THE)
CONTINUATION OF THE ENERGY EFFICIENCY)
RIDER UNDER IC 8-1-2-42(a) AS APPROVED IN)
CAUSE NOS. 42943 AND 43046)

CAUSE NO. 44019

APPROVED:

AUG 18 2011

BY THE COMMISSION:

David E. Ziegner, Commissioner
Loraine L. Seyfried, Administrative Law Judge

On April 14, 2011, Joint Petitioners Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of Indiana, Inc. ("Vectren North"), Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. ("Vectren South")(together "Vectren Energy" or "Company") and the Indiana Office of Utility Consumer Counselor ("OUCC") filed a Verified Petition in Cause No. 44019 requesting approval of a settlement agreement between Vectren Energy and the OUCC (collectively the "Joint Petitioners" or "Settling Parties") dated April 14, 2011 ("2011 Efficiency Settlement"), which extends Vectren Energy's natural gas conservation programs and the Energy Efficiency Rider ("EER"), including both the Energy Efficiency Funding Component ("EEFC") and the Sales Reconciliation Component ("SRC"), and proposes the planned integration of certain gas and electric programs.

Pursuant to notice duly published as required by law, proof of which was incorporated into the record by reference and placed in the official files of the Indiana Utility Regulatory Commission ("Commission"), an Evidentiary Hearing was held on June 22, 2011 at 9:30 a.m., EDT, in Room 224 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. No members of the general public appeared or sought to testify at the hearing.

Based upon the applicable law and evidence presented herein, the Commission now finds as follows:

1. Notice and Jurisdiction. Due, legal and timely notice of the hearing in this Cause was given as required by law. Vectren North and Vectren South are each a "public utility" within the meaning of Ind. Code § 8-1-2-1 of the Public Service Commission Act, as amended, and are subject to the jurisdiction of the Commission. The Commission has

jurisdiction over Vectren North, Vectren South and the subject matter of this Cause in the manner and to the extent provided by the laws of the State of Indiana.

2. **Petitioners' Characteristics.** Petitioners Vectren North and Vectren South are operating public utilities incorporated under the laws of the State of Indiana and have an office at One Vectren Square, Evansville, Indiana. Vectren South has charter power and authority to engage in, and is engaged in, the business of rendering both gas and electric public utility service in the state of Indiana and owns, operates, manages and controls, among other things, plant and equipment within the state of Indiana used for the production, transmission, delivery and furnishing of such service to approximately 145,000 ultimate electric customers and 110,000 ultimate gas customers in southwestern Indiana. Vectren North owns, operates, manages and controls, among other things, plant, property, equipment and facilities which are used and useful for the production, storage, transmission, distribution and furnishing of gas service to approximately 565,000 ultimate consumers in 311 communities and adjacent rural areas in 49 counties in the north central, central and southern portions of Indiana.

Petitioner OUCC is an Indiana state agency created pursuant to Ind. Code ch. 8-1-1.1 that represents utility ratepayers, consumers and the public in cases before the Commission, appellate courts and federal regulatory agencies.

3. **Background.** By its Order dated December 1, 2006 in consolidated Cause Nos. 42943 and 43046, the Commission approved a settlement agreement by and between the Joint Petitioners ("2006 Efficiency Settlement") that, among other things, provided for implementation of a portfolio of natural gas conservation programs and the creation of the EER. Vectren Energy recovers costs associated with its conservation programs through the EEFC and the SRC effectuates the decoupling of Vectren Energy's fixed cost recovery from sales of natural gas to its residential and commercial customers. The five (5) year term of the initial Gas Demand Side Management ("DSM") Program will end on November 30, 2011. Based on current projections, the portfolio will have saved over 10.6 million therms of gas at the end of that 5 year period, exceeding the 2006 Efficiency Settlement target of 1% of energy consumption by residential and commercial customers. In addition, the Vectren Energy web-based audit tool has been used over 730,000 times by customers and Vectren Energy has followed through on its commitment to increase customer education and awareness of natural gas conservation opportunities.

Based upon the savings obtained to date and the Vectren Energy Delivery of Indiana, Inc. Natural Gas DSM Action Plan: Final Report ("Action Plan"), Joint Petitioners have agreed upon terms for a four (4) year extension of the 2006 Efficiency Settlement. The terms for the four (4) year extension are set forth in the 2011 Efficiency Settlement.

4. **The 2011 Efficiency Settlement.** Joint Petitioners request the Commission find the 2011 Efficiency Settlement to be in the public interest and approve it as presented, without any modifications. The 2011 Efficiency Settlement was presented as a continuation of the progress in implementing natural gas conservation programs and increasing education efforts begun by Vectren Energy, with the support of the OUCC, during the five (5) year term of the 2006 Efficiency Settlement. The 2011 Efficiency Settlement provides as follows:

(i) Introduction. The 2011 Efficiency Settlement contains an introduction, which recaps Vectren Energy's history with gas conservation programs, including the terms of the 2006 Efficiency Settlement. The introduction restates the overall goal established in the 2006 Efficiency Settlement, which was a reduction in energy consumption by residential and commercial customers of one (1) percent. While the initial goal was silent as to whether the gas usage goal should be determined using a gross or a net measurement, the 2011 Efficiency Settlement will require those savings be measured on a net basis. The 2011 Efficiency Settlement reaffirms the Settling Parties' commitment established in the 2006 Efficiency Settlement that in exchange for proactive energy efficiency efforts, Vectren Energy will continue to decouple the recovery of its fixed costs from sales of gas to residential and commercial customers.

The 2011 Efficiency Settlement indicates that, by the end of the initial five (5) year term, Vectren Energy's natural gas conservation programs will have exceeded the 2006 Efficiency Settlement target of a 1% reduction in energy consumption by residential and commercial customers.

Under the 2006 Efficiency Settlement, the Settling Parties agreed that in year 5 of the initial Gas DSM Program Period, performance results and the decoupling/program cost recovery mechanism would be reviewed, and Vectren Energy would make a filing to extend the conservation programs and the EER. The 2011 Efficiency Settlement affirms the Settling Parties met, reviewed program performance, and agreed that the conservation programs had been successful and should be extended for an additional four (4) year term.

(ii) Efficiency Settlement Terms. The 2011 Efficiency Settlement defines the extension period as December 1, 2011 through December 31, 2015, with program year 1 being the 13 months ending December 31, 2012. The 2011 Efficiency Settlement includes the following key terms:

(A) a new portfolio of efficiency programs, as detailed in the Action Plan, which includes program year budgets and planned integration of electric and gas efficiency programs consistent with the Commission's directives set forth in the December 9, 2009 Order issued in Cause No. 42693 ("Phase II Order");

(B) continued oversight of efficiency programs by the Oversight Board and the addition of the Citizens Action Coalition of Indiana ("CAC") as a voting member of the Oversight Board;

(C) continued use of an independent evaluation, measurement and verification ("EM&V") administrator to measure program results;

(D) use of one or more third party administrators ("TPA") to implement energy efficiency programs;

(E) extension of the EER, including both the EEFC and the SRC;

(F) implementation of an annual SRC “cap” as a safeguard against the potential level of volatility in residential customer bills; and

(G) limits on the increase in the amount of residential customer facilities charges during the extension period.

The Settling Parties agree that on or before March 1, 2015, they will review the program results and Vectren Energy will file to extend, modify or discontinue the programs.

5. Evidence.

A. Vectren Energy’s Testimony in Support of 2011 Efficiency Settlement. L. Douglas Petitt, Vice President of Marketing and Conservation at Vectren Utility Holdings, Inc. (“VUHI”), the immediate parent company of Vectren North and Vectren South, discussed both the 2006 Efficiency Settlement and the 2011 Efficiency Settlement.

Mr. Petitt testified the 2006 Efficiency Settlement provided for the implementation of both a portfolio of natural gas conservation programs and an alternative rate design that allowed Vectren Energy to aggressively pursue conservation with full recovery of Commission approved fixed costs from customers subject to the SRC, regardless of usage per customer. According to Mr. Petitt, the 2006 Efficiency Settlement established an efficiency call center to handle customer questions, provided for the roll out of a web-based audit tool for customer use and included a media campaign to raise awareness of the new programs and of conservation, in general. He stated the 2006 Efficiency Settlement created the Vectren Gas Oversight Board (“OSB”) to govern program administration, review the effectiveness of programs and suggest changes to program design and funding. Mr. Petitt identified the energy efficiency programs Vectren Energy implemented as part of the 2006 Efficiency Settlement. He testified that based upon current projections, by November 2011, those programs will have saved more than 10.6 million therms of natural gas, which exceeds the 2006 Efficiency Settlement target of a 1% reduction in energy consumption by residential and commercial customers on both a gross and net basis for the five year period.

Mr. Petitt described the 2011 Efficiency Settlement and acknowledged that the Settling Parties agreed to: (A) a new portfolio of efficiency programs, with program year budgets, including planned integration of electric and natural gas energy efficiency programs consistent with the Commission’s directives as set forth in its Phase II Order; (B) continued oversight of efficiency programs by the OSB and the addition of the CAC as a voting member of the OSB; (C) continued use of an independent EM&V administrator to measure program results, with the potential to use the same administrator used for electric programs; (D) use of a TPA to implement energy efficiency programs; (E) extension of the EER, including both the SRC and the EEFC; (F) implementation of an annual SRC “cap” as a safeguard against the potential level of volatility in residential customer bills; and (G) limits on the increase in the amount of residential customer facilities charges during the extension period.

Mr. Petitt testified that Vectren Energy worked with Terra Vista Energy Group, LLC (“Terra Vista”) to design the Action Plan that was presented to and approved by the OSB. The

Action Plan was attached as Exhibit A to the 2011 Efficiency Settlement and identified the natural gas energy efficiency programs Vectren Energy will either continue offering or implement during the four year extension period. In his testimony, Mr. Petitt identified the energy efficiency programs that comprise the Action Plan and made clear that the programs are for residential and small commercial customer classes only.

Mr. Petitt discussed the differences between the energy efficiency portfolio approved in the 2006 Efficiency Settlement and the 2011 Efficiency Settlement. He testified that the 2011 Efficiency Settlement included joint natural gas and electric programs and that this significant change resulted, in part, from the Phase II Order, in which the Commission directed electric utilities named to the Demand Side Management Coordination Committee (“DSMCC”) to “ensure coordination with utility-administered natural gas programs where appropriate....” Phase II Order at 42. Mr. Petitt stated Vectren Energy has proposed several joint programs to be implemented in Vectren South’s service territory and will continue working through the challenges of coordinating joint programs with those electric utilities that overlap Vectren North’s service territory.

Mr. Petitt testified that extension of the SRC is important because it allows Vectren Energy to aggressively promote conservation. He noted states throughout the country have acted to align the interests of consumers with the gas utilities that serve them through alternative ratemaking mechanisms that support energy efficiency. He stated that at the time of the 2006 Efficiency Settlement only a few states had approved use of a decoupled rate design to support gas efficiency efforts, but that today, in 32 states, approximately 44 million residential natural gas customers are served by natural gas utilities that no longer have volumetric rate design.

Mr. Petitt testified that in July 2004, the American Gas Association (“AGA”) and the Natural Resources Defense Council (“NRDC”) issued a Joint Statement, which identified five benefits that could be realized with properly designed energy efficiency programs. According to Mr. Petitt’s testimony, the AGA and NRDC followed up that July 2004 Joint Statement with a Second Joint Statement issued May 2008, in which they continue to support energy efficiency initiatives and rate design mechanisms that align the utilities’ interests with those of their customers regarding conservation. Mr. Petitt testified decoupling allows Vectren Energy to recover its fixed costs in the face of declining usage from the energy efficiency programs in which it has encouraged its customers to participate, as well as the education and other supportive efficiency efforts being made by Vectren Energy.

He stated the 2006 Efficiency Settlement was a significant milestone for Vectren Energy, its employees and customers. According to Mr. Petitt, the 2006 Efficiency Settlement aligned Vectren Energy’s interests with those of its customers and allowed Vectren Energy to embrace a culture of energy efficiency and conservation. Mr. Petitt testified the foundation created by implementation of the conservation programs approved in the 2006 Efficiency Settlement will support Vectren Energy’s electric energy efficiency efforts, which began in April 2010. Mr. Petitt stated that the 2011 Efficiency Settlement supports the ability to now integrate gas and electric programs to gain efficiencies and maximize savings.

Mr. Petitt testified there are many uses of natural gas, and that given the many uses, conservation is still in the public interest and the 2011 Efficiency Settlement represents a negotiated set of programs and an extension of ratemaking mechanisms that offer Vectren Energy an opportunity to continue partnering with its customers to reduce usage and conserve natural gas. He stated the energy efficiency benefits of the 2011 Efficiency Settlement include reduced customer bills, economic development benefits related to the provision of efficiency products and services and potentially reduced commodity prices. He also indicated that the programs have resulted in a market transformation towards energy efficient appliances.

Mr. Petitt testified that the 2011 Efficiency Settlement is consistent with the Energy Independence and Security Act of 2007 (“EISA”), where both Congress and the President recognized the importance of removing disincentives and motivating utilities to pursue energy efficiency through incentive mechanisms included in the EISA. Mr. Petitt also testified that the 2011 Efficiency Settlement is consistent with policies adopted by the State of Indiana, such as the Hoosier Homegrown Energy Strategic Plan, which supports initiatives that allow Indiana to become more self-sufficient with respect to its energy needs. According to Mr. Petitt, the 2011 Efficiency Settlement includes programs and ratemaking mechanisms that further the State’s policy goals by encouraging reductions in energy consumption and increases in energy efficiency.

Mr. Petitt concluded the 2011 Efficiency Settlement is in the public interest and should be approved as proposed, without modification.

Robert C. Sears, Director of Conservation for VUHI, testified that Vectren Energy began implementing conservation efforts immediately after the Commission issued its Order in consolidated Cause Nos. 42943 and 43046 on December 1, 2006. Mr. Sears stated that since launching the Conservation Connection program, Vectren Energy has made conservation a priority within not only its workforce, but also its customer base. According to Mr. Sears, Vectren Energy’s conservation-based partnership with its customers is expected to result in 10.6 million therms of natural gas savings, which exceeds the goal set for this program by the OSB.

Mr. Sears testified that since the inception of the program, approximately 92,000 combined rebates and measures have been implemented by customers. He stated energy savings from conservation programs will exceed the 2006 Efficiency Settlement target of a 1% reduction in energy consumption by residential and commercial customers on both a gross and net basis. He testified Vectren Energy began measuring the results of its conservation programs by contracting with KEMA, an independent EM&V administrator, to evaluate program year 2 results and later collaborating with the Joint Oversight Board, which consists of Investor Owned Utilities and consumer advocates in Indiana, to issue an RFP, which resulted in the selection of Cadmus Group as the vendor to evaluate natural gas energy efficiency programs across the state of Indiana.

Mr. Sears identified lessons learned over that past five years of conservation program implementation that will assist in improving conservation programs during the extension period. Mr. Sears testified that Vectren Energy has played an integral role in partnership with the TPA to ensure program success. According to Mr. Sears, Vectren Energy took an active role in the

oversight, delivery and marketing of the programs and maintained the overall responsibility for achieving program goals to meet regulatory requirements. Mr. Sears identified several ways Vectren Energy assisted the TPA in program implementation and delivery.

Mr. Sears discussed the conservation programs to be implemented as part of the 2011 Efficiency Settlement. He stated the Action Plan provided a detailed look at the energy efficiency programs in the portfolio, including a proposed budget breakdown for each program. He identified a total program budget for all four program years estimated at \$33.3 million, which is expected to reach approximately 177,000 customers across all programs.

Mr. Sears testified Vectren Energy engaged Terra Vista, the same firm used to assist with creating the initial conservation program portfolio, to develop the Action Plan. He stated Terra Vista, and specifically Mr. Matthew Rose, has years of experience in DSM program design and testing and has assisted Vectren Energy since 2005. For the efficiency programs found in the 2011 Efficiency Settlement, Terra Vista and Vectren Energy established a series of research and planning objectives to guide the process, which included: (1) building Vectren Energy's internal utility experience and capabilities to conduct the market potential study; (2) leveraging past experience in improving existing programs and analyzing opportunities for new programs, as relevant; (3) integrating new information or market data, which was not previously available to help in the program planning and implementation; (4) reevaluating or designing programs to best fit the distinctive nature of Vectren Energy's service area; (5) implementing integrated natural gas and electric programs in Vectren South's territory, where feasible, to provide the greatest energy savings; and (6) utilizing lessons learned at Vectren South to develop integrated programs with electric utilities in Vectren North's territory. Mr. Sears stated that Vectren Energy then worked closely with the OUCC to vet the programs and create the Action Plan.

Mr. Sears pointed out the Action Plan only applies to residential and general service (or non-transport) customers and does not include conservation programs for large, transport customers. He testified that the proposed program plan contains both existing and new programs and that during the operation and evaluation of the programs, the OSB may need to modify or eliminate programs from the portfolio. Mr. Sears also testified that there may be a need to find new programs to continue to achieve energy savings which may require the OSB to modify budgets to include new programs. According to Mr. Sears, there is uncertainty with regards to the pace that customers will adopt these programs as well as economic and other factors that may impact program performance; therefore, Mr. Sears testified it is essential for the OSB to continue to have the same level of program funding flexibility as currently practiced by the OSB.

Mr. Sears stated that in the event implementation exceeds targets in a specific program, the OSB should have the flexibility to allow additional funds to be allocated to that program. Additionally, he stated, the OSB should have the flexibility to consider the approved spending levels as 4-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 Total Resource Cost ("TRC") test and the overall 4-year DSM budget is not exceeded. Mr. Sears testified the OSB should be allowed to shift funds within a program budget, as needed, and to shift funds between programs, as needed. He also stated the OSB should continue to have the flexibility to consider appropriate modifications to the programs based upon EM&V results.

In response to the Commission's concern about whether allowing the OSB the requested flexibility could result in under-funding for programs in the last year, Vectren Energy indicated the OSB's priority would be to shift funds between programs during a program year to manage budget and maximize savings. Pet.'s Ex. 2 at 2. Whereas the need to shift program funds from future years would be utilized only after all budget management efforts had been exhausted. Vectren Energy also stated that if the OSB was presented with a significant opportunity to increase program savings that required additional funding, such request would be presented to the Commission for approval. *Id.*

Mr. Sears testified that Vectren Energy will continue to work with the Vectren OSB and Joint Gas Oversight Board to evaluate energy efficiency program results and develop evaluation plans that accurately measure program performance.

Mr. Sears testified that Vectren Energy worked with Terra Vista to conduct cost benefit testing, which consisted of a full range of market perspectives including: the Participant Test, Utility Cost Test ("UCT"), Rate Impact Measure Test and the TRC Test. According to Mr. Sears, each of the tests was conducted for each program and all of the economic tests were based on the cost-effectiveness methodologies from the publication: *California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects*, California Governor's Office of Planning and Research, 2002. Mr. Sears provided a detailed explanation of each test and the data that was used in the cost effectiveness modeling.

According to Mr. Sears, all of the programs, with the exception of the Vectren North Targeted Income Weatherization (TRC - 0.95) and the Vectren North Residential Home Performance and Direct Install (TRC - 0.98) programs, passed the TRC test. However, he stated the Vectren North Residential Home Performance and Direct Install program passed the Utility Cost Test (UCT - 1.22) and both of the programs have the potential to be delivered jointly with electric utilities, which could add additional benefits and make the programs pass the TRC test as well. He testified both of these programs passed the TRC test in Vectren South, where they will be delivered jointly with electric programs. According to Mr. Sears, the TRC in Vectren South for the Low Income Program is 1.02 and the Residential Home Performance and Direct Install Program is 1.28.

Mr. Sears testified that given Vectren South's status as a combination utility, working out the details of integrated energy efficiency programs is not only less complicated, but is also expected to yield valuable insight into program delivery and performance expectations for Vectren North. Mr. Sears testified that if the Action Plan is approved as presented, Vectren South will jointly implement the following integrated programs: (1) School Based Education Program; (2) Residential Audit and Direct Install Program; (3) Low Income Weatherization Program; (4) Multi-Family Direct Install Program; (5) Residential New Construction; (6) Residential Online Audit Program; (7) Residential Behavioral Savings Program and (8) Commercial Custom Program. According to Mr. Sears, the first three programs listed above are Core Electric Programs, which means delivery of them will need to be coordinated with the electric statewide TPA, selected by the DSMCC and approved by the Commission.

Vectren Energy's Response to the Commission's June 17, 2011 Docket Entry provided additional explanation for Vectren Energy's proposal to split costs and savings related to integrated programs between Vectren South's gas and electric divisions. Vectren Energy explained that Vectren South-Gas will pay for incremental gas specific measures and claim those savings and Vectren South-Electric will pay for incremental electric specific measures and claim those savings. Where costs and savings are not incremental and derive from the same measure, Vectren South will allocate costs based on the gas and electric savings benefits from the measure.

Mr. Sears testified that Vectren North shares its natural gas service territory with many different electric utilities and that coordinating integrated programs will take significantly more work in that service territory. According to Mr. Sears, Vectren North has had informal preliminary discussions with electric utilities regarding joint programs and plans to work with the three investor owned electric utilities with whom it shares a significant portion of its service territory as well as the DSMCC and the electric statewide TPA, once selected, if the 2011 Efficiency Settlement is approved.

Mr. Sears stated integrated programs are beneficial because they provide greater benefits to the customer, lower program delivery costs and improve the cost effectiveness of the programs. He indicated it could also improve customer service by allowing for a single coordinated visit to the home to address both gas and electric energy efficiency improvements.

Mr. Sears testified the OSB will continue to operate in the same manner as approved and established in the 2006 Efficiency Settlement, with the addition of the CAC as a voting member. The Oversight Board will have three voting members including: Vectren Energy, the OUCC and the CAC.

Finally, Mr. Sears testified that the 2011 Efficiency Settlement provides the framework necessary to continue to offer cost effective energy efficiency opportunities for Vectren Energy's customers. According to Mr. Sears, it addresses three key components for a utility's successful energy efficiency efforts: robust, cost-effective, customer-friendly efficiency programs, an alternative rate design that aligns Vectren Energy's interests with those of its customers and supervision by an active and engaged oversight board. Mr. Sears testified the 2011 Efficiency Settlement provides for the continued utilization of third party administration for program delivery and independent EM&V to ensure that savings are realized.

Scott E. Albertson, Director of Regulatory Affairs at VUHI, offered testimony to support continuation of Vectren Energy's EER. Mr. Albertson testified the EER, which was first approved in consolidated Cause Nos. 42943 and 43046, serves two complementary purposes and consists of two (2) components. First, the EEFC recovers the costs of conservation programs designed to provide customers with tools and information they can use to reduce their consumption and, therefore, the gas cost portion of their bills. Second, the SRC breaks, or decouples, the link between customer usage and fixed cost recovery, thus removing what would otherwise be Vectren Energy's disincentive to provide conservation programs and promote energy efficiency. He said the EER allows Vectren Energy to recover base revenues approved by the Commission in its last rate case, aligns the interests of customers and Vectren Energy and

removes Vectren Energy's disincentive to promote energy conservation.

Mr. Albertson noted the EER is applicable to residential and general service customers only. For Vectren North, the applicable Rate Schedules are: Residential Sales Service (Rate 210), General Sales Service (Rate 220), and School Transportation Service (Rate 225); and for Vectren South, the applicable Rate Schedules are Residential Sales Service (Rate 110), General Sales Service (Rate 120) and School Transportation Service (Rate 125). Mr. Albertson testified the EEFC will continue to recover Vectren Energy's costs of funding conservation and customer education efforts throughout Vectren Energy's service area.

Mr. Albertson testified that while Vectren Energy will continue to defer, on a per customer basis and as approved in consolidated Cause Nos. 42943 and 43046, the total difference between actual margin and adjusted order granted margin each month, the 2011 Efficiency Settlement includes a provision that residential margin differences that may be included in an annual EER filing are capped at 4% of adjusted order granted residential margins in the previous year. Additionally, any actual residential margin differences in excess of this 4% cap, up to an annual limit, will be deferred for future recovery either in a future EER filing (with the annual residential SRC amount still subject to the 4% cap) or in a future rate case. Mr. Albertson stated the annual limit on deferral in excess of the 4% cap is \$4.5 million per year for Vectren North and \$1.5 million per year for Vectren South. He stated that as a result, during the extension period to the extent customer usage decreases dramatically in a given year, the 2011 Efficiency Settlement caps the amount that is recoverable via the SRC, thereby providing protection against a more significant impact on customer bills in the ensuing 12 months.

Mr. Albertson testified the 2011 Efficiency Settlement does not include a cap on the annual SRC amount applicable to general service customers and that 100% of the margin difference applicable to general service customers (Rates 120, 125, 220 and 225) will be included in the determination of the SRC in each annual EER filing. He also provided an example to further explain how the residential SRC cap would be applied.

Mr. Albertson testified that Vectren Energy proposes to make annual EER filings by March 31 and implement new EER rates on May 1 of each year. Vectren Energy also proposes to continue to utilize the Commission's 30-Day administrative filing process for its EER filings. Mr. Albertson stated the residential SRC cap will be applicable "beginning with the twelve month period ending December 31, 2012" (which will be reflected in the March 2013 EER filing). The SRC filed in March 2012 (the last EER filing under the terms of the Settlement Agreement approved in Cause Nos. 42943 and 43046) will apply to the twelve month period ending December 31, 2011.

Mr. Albertson testified the Settling Parties agreed upon certain terms that allow the OUCC to oppose continuation of the SRC if Vectren Energy proposes, in a base rate case filed prior to March 1, 2015, to increase residential customer facilities charges by more than \$1.50 per month. However, Vectren Energy may propose larger increases to these monthly charges, or a Straight Fixed Variable ("SFV") rate design, in a base rate case filed on or after March 1, 2015. Mr. Albertson stated the 2011 Efficiency Settlement stipulates that SFV, if proposed and

approved, cannot be implemented prior to January 1, 2016 (the first day following the extension period in this proceeding).

B. OUCC's Testimony in Support of 2011 Efficiency Settlement. Brendon J. Baatz, Utility Analyst in the Resource Planning and Communication Division of the OUCC, discussed the details of the 2011 Efficiency Settlement and explained why approval is in the public interest.

Mr. Baatz testified the 2011 Efficiency Settlement extended many of the provisions outlined in the 2006 Efficiency Settlement. He identified the DSM program portfolio implemented by Vectren Energy as a result of the 2006 Efficiency Settlement and acknowledged that those programs have been successful and that Vectren Energy has achieved savings of approximately 5.5 million net therms of gas and 8.3 million gross therms of gas.

In comparing the 2006 Efficiency Settlement with the 2011 Efficiency Settlement, Mr. Baatz identified the following key provisions that were included in both settlement agreements: (1) authority to recover energy efficiency program costs via the EEFC; (2) authority to decouple fixed costs from gas sales; (3) ability to reconcile the differences between the order granted base margins and collected revenue through the SRC; (4) authority to recover the SRC and the EEFC jointly through the EER; (5) use of an OSB to coordinate energy efficiency programs and activities undertaken by Vectren Energy; and (6) implementation of a portfolio of mutually agreed upon energy efficiency programs.

Mr. Baatz next identified the following key distinctions between the 2006 Efficiency Settlement and the 2011 Efficiency Settlement: (1) reduction in the term from five years to four years; (2) establishment of a new program portfolio; (3) a determination that the savings goals will be measured on a net, rather than a gross basis; (4) establishment of an SRC cap; (5) establishment of a cap on the increase in the monthly residential customer facilities charges in any base rate proceeding of \$1.50 per month; (6) integration and joint administration of gas and electric DSM programs; and (7) the addition of two new programs to the program portfolio.

Mr. Baatz also testified that joint administration of gas and electric DSM programs is in the public interest because the programs will be more efficient and cost effective. Mr. Baatz identified the programs that Vectren Energy intends to jointly administer. He testified that contracting with one or more TPAs to administer Vectren Energy's gas only and integrated energy efficiency programs is beneficial to the public for multiple reasons. First, Vectren Energy has an opportunity to take advantage of the specialized resources and expertise that a TPA can offer in administering specific programs. In addition, the use of a formal competitive bidding process ensures ratepayers receive those benefits at a reasonable cost.

Mr. Baatz identified the following two new programs in his testimony that Vectren Energy intends to offer as part of the 2011 Efficiency Settlement: the Residential Behavioral Savings Program and the Residential Home Performance Program. Mr. Baatz recommended the Commission approve the Residential Behavioral Savings Program as a one year pilot program and cited to a recent Indiana Michigan Power Company ("I&M") case, Cause No. 43959, where the Commission approved implementation of a similar program on a pilot basis.

Mr. Baatz testified that while the overall Action Plan passed all of the cost effectiveness tests, two programs, the Targeted Weatherization Program and the Residential Home Performance Program for Vectren North, failed the TRC test. Mr. Baatz stated that the Residential Home Performance Program's TRC score of 0.98 is nearly cost effective, so Vectren Energy and the OSB have committed to working collaboratively to closely monitor this program and identify ways to increase its cost effectiveness. He went on to state that based upon the public policy behind the Targeted Weatherization Program and potential cost savings of the Residential Home Performance Program, the OUCC supports inclusion of both programs into the overall portfolio.

Mr. Baatz testified it was appropriate to measure the energy savings targets in terms of net energy savings. He stated that net savings accounts for free riders, free drivers and spillover, and is the more appropriate measurement because it more accurately measures a program's direct influence on customer behavior. However, Joint Petitioners, in their Response to the Commission's June 17, 2001 Docket Entry, indicated that Vectren Energy and the OSB will continue to measure and report both gross and net therm savings. Pet.'s Ex. 2 at 9.

Mr. Baatz discussed the SRC and testified the OUCC supports extension of the SRC as long as a cap is placed on it. Mr. Baatz testified that amounts greater than 4% of the adjusted order granted base margins (up to \$4.5 million for Vectren North and \$1.5 million for Vectren South) will be deferred to be recovered in a future EER filing or in a future rate case. The SRC cap will only apply to customers in the residential rate class. He opined the SRC cap is in the public interest because it offers residential ratepayers protection against large variations in individual bills as a result of an SRC rate change.

Mr. Baatz also testified the limitation placed on the residential service customer facilities charge is also in the public interest. Pursuant to that limitation, Vectren Energy will not be allowed to increase this charge by more than \$1.50 per month in any base rate proceeding occurring prior to March 15, 2015. Should Vectren Energy propose to increase the customer facilities charge by more than \$1.50 per month, the OUCC reserves the right to oppose the continuation of the SRC throughout the remaining term of the 2011 Efficiency Settlement.

Mr. Baatz testified as to his belief that decoupling remains an appropriate rate design to promote the energy efficiency efforts of Vectren Energy. He acknowledged that traditional ratemaking links revenues with volumetric sales of natural gas, which means the natural incentive would be for a utility to promote the sale of more gas, not less. He said that decoupling, when properly designed, removes this incentive and enables a utility to pursue reductions in customer usage, while ensuring recovery of appropriate operating costs.

Mr. Baatz also discussed the role of the OSB. He said the OSB has provided a forum for the OUCC and Vectren Energy to resolve issues related to program funding and other relevant decisions regarding Vectren Energy's program portfolio. The OSB has also allowed consensus decision making on the matters pertaining to Vectren Energy's program portfolio that has benefited both Vectren Energy and its ratepayers. Mr. Baatz stated the OUCC supports the addition of the CAC as a voting member on the OSB.

Finally, Mr. Baatz testified the OUCC recommends the Commission approve the 2011 Efficiency Settlement as submitted and find it to be in the public interest. The OUCC maintains that approval of the 2011 Efficiency Settlement will allow Vectren Energy to implement the Action Plan and continue to pursue its conservation efforts in ways that benefit ratepayers.

6. Commission Discussion and Findings. As reflected in the 2011 Efficiency Settlement, a portion of which is attached hereto¹, Vectren Energy and the OUCC reached consensus on the details regarding extension of Vectren Energy’s gas conservation programs and the associated decoupled rate design. In evaluating the 2011 Efficiency Settlement, the Commission begins with the general statement that settlements presented to the Commission are not ordinary contracts between private parties. *U.S. Gypsum v. Ind. Gas Corp.*, 735 N.E.2d 790, 803 (Ind. 2000). When the Commission approves a settlement, the settlement “loses its status as a strictly private contract and takes on a public interest gloss.” *Id.* (quoting *Citizens Action Coalition v. PSI Energy*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the Commission “may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement.” *Citizens Action Coalition*, 664 N.E.2d at 406.

In all cases involving a settlement, the Commission decision, ruling, or order—including approval of a settlement—must be supported by specific findings of fact and sufficient evidence. *U.S. Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition v. Public Serv. Co.*, 582 N.E.2d 330, 331 (Ind. 1991)). The Commission’s own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before the Commission can approve the 2011 Efficiency Settlement, we must determine whether the evidence in this Cause sufficiently supports the conclusions that the agreement is reasonable, just, and consistent with the purpose of Ind. Code ch. 8-1-2, and that such agreement serves the public interest.

Based upon the evidence presented, the Commission finds that the 2011 Efficiency Settlement represents a reasonable agreement setting forth terms for the ongoing pursuit of gas conservation in Indiana. We are encouraged that, consistent with our Phase II Order in Cause No. 42693 recommending that the integration of electric and gas DSM programs be undertaken to the extent possible, the 2011 Efficiency Settlement and attached DSM Action Plan makes such integration and joint administration an important objective. The 2011 Efficiency Settlement terms, which build upon the successful implementation of gas DSM programs and the savings that have been achieved to date, support a finding that the extension of the programs are in the public interest, just and reasonable and that the 2011 Efficiency Settlement should be approved.

We note that the OUCC, as the other member of the OSB for the past few years, is supportive of continuing Vectren Energy’s conservation efforts, which speaks to the ability of the parties to work together to achieve savings for customers. The addition of the CAC to the OSB will also bring more expertise and another viewpoint for the OSB’s consideration in making its decisions. Moreover, based on the evidence submitted, Vectren Energy continues to proactively support efficiency programs and assist its customers in reducing gas use. As the

¹ The 2011 Efficiency Settlement includes as an attachment Vectren Energy’s DSM Action Plan: Final Report. While the entire 123 page Report is included as, and considered, part of the 2011 Efficiency Settlement, only the Executive Summary is included as an attachment to this Order.

programs continue, we will review the savings reports submitted by Vectren Energy and expect that such efforts will continue. However, it is generally recognized that energy savings become more difficult to attain over time as customers adopt the energy saving measure. Consequently, in the future, we look for Vectren Energy to consider accepting more responsibility for ensuring their energy savings goals are met, through such measures as performance based incentives and penalties.

As noted above, we are encouraged by Vectren Energy's proposal to integrate its gas and electric efficiency programs and, to the extent possible, utilize the same EM&V administrator for the combined programs. This should provide further efficiencies and cost savings opportunities for customers receiving both gas and electric service from Vectren Energy. Utilization of a single EM&V administrator will also provide consistency in measurements between the programs. We also encourage Vectren Energy to use the same EM&V administrator throughout the four-year term of the programs to ensure consistency in measurement and verification, which will provide a more accurate view of the program's effects on energy usage.

The 2011 Efficiency Settlement also includes caps on the SRC and customer facilities charge to provide some protection against future bill volatility. The parties agreed that any amounts exceeding those caps will be deferred for future recovery in a base rate case. Based on the evidence, it appears that Vectren North could defer \$18 million (\$4.5 million/year) and Vectren South could defer \$6 million (\$1.5 million/year) over the life of the programs. While we don't expect Vectren Energy to exceed the caps to this extent, it could adversely impact rates if they do. Therefore, we find that should Vectren North or Vectren South exceed either the annual SRC cap or the cap on the customer facilities charges, they shall notify the Commission by making a filing under this Cause indicating the amount that exceeds the cap.

The OUCC's testimony recommended approval of the 2011 Efficiency Settlement as submitted, but noted that one new program, the Residential Behavioral Program, be considered a pilot program in order to gain experience with the program's costs and results. Given the history of the OSB's ability to manage programs in a cooperative manner, we anticipate that the parties will continue to work together to make program design and funding decisions to maximize program efficiencies. To the extent necessary, in requests and other filings, the parties may bring such issues to the Commission for consideration, as necessary.

In approving the 2011 Efficiency Settlement, we also extend the reporting requirements for Vectren Energy established in Cause No. 43046. On May 24, 2011, the Commission issued a docket entry in Cause No. 43046 requiring Vectren Energy to file minutes of the quarterly Joint Gas Oversight Board meetings within fourteen (14) days from the date the quarterly meetings conclude. That docket entry also required Vectren Energy to submit the following information in order to keep the Commission apprised of program goals and achievements:

1. Annual operating plan and quarterly updates on performance during the program year;
2. Annual final report; and
3. Annual EM&V results.

Vectren Energy shall also continue to report both gross and net savings impacts to the Commission. Vectren Energy is encouraged to continue working collaboratively with the Joint Gas Oversight Board to standardize and simplify reporting information to the Commission.

Finally, the Settling Parties agreed the 2011 Efficiency Settlement would not be used as precedent in any other proceeding or for any other purpose, except to the extent necessary to implement or enforce its terms. Consequently, with regard to future citation of the 2011 Efficiency Settlement, we find that our approval herein should be construed in a manner consistent with our findings in *Richmond Power & Light*, Cause No. 40434, 1997 Ind. PUC LEXIS 459 (IURC, 3/19/1997).

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

1. The Settlement Agreement between Vectren Energy and the OUCC, a copy of which is attached, shall be and hereby is approved.
2. Vectren Energy shall comply with the reporting requirements set forth above in Finding Paragraph 6.
3. This Order shall be effective on and after the date of its approval.

ATTERHOLT, LANDIS, AND ZIEGNER CONCUR; BENNETT AND MAYS NOT PARTICIPATING:

APPROVED:

AUG 18 2011

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



**Sandra K. Gearlds,
Acting Secretary to the Commission**

EXHIBIT SA

Settlement Agreement

Southern Indiana Gas and Electric Company ("Vectren South"), Indiana Gas Company, Inc. ("Vectren North"), (together, "Vectren Energy"), and the Indiana Office of Utility Consumer Counselor ("OUCC"), (collectively referred to as the "Settling Parties"), solely for purposes of compromise and settlement, stipulate and agree that the terms and conditions set forth herein represent a fair, reasonable and just resolution of the matters raised herein, subject to their incorporation into a final order of the Indiana Utility Regulatory Commission (the "Commission" or "IURC") without modification or further condition that may be unacceptable to any Party.

I. Introduction

1. On May 5, 2006, the Settling Parties entered into a settlement agreement providing for the implementation of the first portfolio of utility offered gas energy efficiency programs in Indiana (the "2006 Efficiency Settlement"). The 2006 Efficiency Settlement represented the Settling Parties' collaborative effort to provide tools to gas customers to help them reduce gas use, and thereby address the largest portion of their bills.

2. In evaluating the potential benefits of cost effective gas efficiency programs, the Settling Parties relied upon a Market Assessment performed by Forefront Economics and H. Gil Peach & Associates that showed significant opportunities to reduce customer use. The Settling Parties agreed that over time

a reduction in energy consumption by residential and commercial customers of one (1) percent would be a reasonable goal.

3. In exchange for these proactive efficiency efforts, the Settling Parties agreed that Vectren Energy could decouple the recovery of its fixed costs from sales of gas to customers. As stated in the 2006 Efficiency Settlement, "The Settling Parties intend that during the five year Program period, a foundation for cost effective energy efficiency will be established, and that Vectren Energy's rate design should be consistent with the utility's ability to promote these efficiency programs." (Settlement, p. 24). Decoupling was accomplished through creation of the Sales Reconciliation Component (SRC), a rider that recovers the differences between actual margins and the level of margins approved in the most recent rate cases for Vectren North and Vectren South, as adjusted for changes in customer counts, thereby providing for full recovery of Commission approved fixed costs from customers subject to the SRC regardless of declines in usage per customer.

II. 2006 Efficiency Settlement Terms.

4. In addition to the creation of the SRC, the 2006 Efficiency Settlement contained the following terms:

- (a) Efficiency program cost recovery via a rider mechanism;
- (b) Vectren Energy's commitment to becoming an efficiency advocate, including creation of an efficiency call center to handle customer questions, implementation of a web based audit tool, and use of a variety of media and communication channels to promote efficiency education;

- (c) Creation of an Oversight Board to govern the administration of programs and review the effectiveness of programs and potential changes to program design and funding;
- (d) Implementation of an agreed upon portfolio of residential and commercial efficiency programs that had passed cost effectiveness testing;
- (e) An RFP process to select a third party administrator for the programs; and
- (f) An EM&V process to measure program results.

5. On December 1, 2006, the Commission found the 2006 Efficiency Settlement to be in the public interest, stating that, "The long term interests of customers and stakeholders are served by efforts to reduce the 70-80% of their bills representing gas costs. These efforts will be most successful when the serving utility and its customers have the same interests in efficiency, i.e., when service is provided by a utility that can promote energy efficiency without impairing its opportunity to recover its reasonable and authorized operating costs." (2006 Settlement Order, Cause No. 42943, p. 39).

III. Efficiency Program Implementation.

6. The five (5) year term of the Gas Program Portfolio will end on November 30, 2011. Based on current projections, the programs will have saved over 10.6 million therms of gas. Additionally, program savings will exceed the 2006 Efficiency Settlement target of 1% of energy consumption by residential and commercial customers. In addition, the Vectren Energy web-based audit tool has been used over 730,000 times by customers and customer education

through paid media, public forums, weatherization campaigns and other forms of communication has occurred, as promised.

IV. Efficiency Program Extension.

7. The 2006 Efficiency Settlement provided that after engaging in discussions with the OUCC regarding program results and cost recovery mechanisms, Vectren Energy would make a filing to extend the efficiency programs and the decoupling/program cost recovery rider (the "Energy Efficiency Rider"). Consistent with this provision, the Settling Parties have reviewed the success of the programs and have discussed implementation of a new portfolio of efficiency programs to continue to achieve reductions in customer use.

8. Based on these discussions and review of information related to program effectiveness and an updated market assessment, the Settling Parties have agreed upon a four (4) year extension of the 2006 Efficiency Settlement. The terms for the "2011 Efficiency Settlement" are set forth below.

V. 2011 Efficiency Settlement Terms.

9. Term. In order to have program years be on a calendar year basis which makes reporting of program year results clearer, the 2011 Efficiency Settlement covers the period of December 1, 2011 – December 31, 2015. The first program year during this period will consist of the 13 month period ending December 31, 2012.

10. Extension. The Settling Parties will review the results of the 2011 Efficiency Settlement, and on or before March 1, 2015, Vectren Energy will file for an extension of the Settlement, or propose to discontinue or modify the Settlement terms. To the extent a final order of the Commission related to that filing has not been issued prior to December 31, 2015, the 2011 Efficiency Settlement terms will remain in effect until such time as the final order has been issued.

11. Program Portfolio. The Efficiency Program Portfolio, including the program year budgets, for the Settlement period of December 1, 2011 – December 31, 2015 is set forth in Exhibit A.

12. Oversight Board. The existing Oversight Board shall continue to perform its duties as set forth in the 2006 Efficiency Settlement. The Citizens Action Coalition of Indiana, Inc. shall be added as a voting member to the Oversight Board. The Board shall set reasonable energy savings targets for the programs.

13. EM&V. The Oversight Board will continue to use the results of EM&V to make decisions regarding program design and funding. An RFP shall be conducted to select the EM&V administrator. To the extent feasible, for gas programs that are integrated with electric programs, EM&V shall be conducted by the administrator that conducts EM&V for the corresponding electric programs. The applicable energy savings targets shall be measured on a net savings basis.

14. Program Administration. Energy efficiency programs will be administered by one or more Third Party Administrators (TPA). Vectren Energy will develop an RFP with input from the Oversight Board, subject to the Board's consideration of use of the TPA administering core electric programs for purposes of administering at least the integrated gas programs. The Settling Parties further agree to support the creation of a state-wide centralized administration if proposed in a Commission rulemaking proceeding.

15. Energy Efficiency Rider (EER). The EER established in the 2006 Efficiency Settlement, comprised of both the Sales Reconciliation Component (SRC) and the Energy Efficiency Funding Component (EEFC), shall remain in effect consistent with the terms of the 2006 Efficiency Settlement.

16. SRC Cap. The Settling Parties have agreed to an annual cap on the SRC applicable to the residential class as a safeguard against customer bill volatility. Specifically:

Vectren Energy shall continue to defer and recover, on a per customer basis and as applicable, the differences between actual margins and adjusted order granted margins for the applicable rate schedules. Beginning with the twelve month period ended December 31, 2012, the residential margin differences eligible for recovery in the EER annually are capped at 4% of adjusted order granted residential margins applicable to the previous year. Further, any actual margin differences in excess of the 4% SRC cap (up to \$4.5 million for Vectren North and \$1.5 million for Vectren South, per year) will be

deferred for future recovery either in a future EER filing, with the annual residential SRC amount still subject to the 4% cap, or in a future rate case.

17. Customer Facilities Charges. The Settling Parties have agreed that residential service customer facilities charges will not be increased in any base rate proceeding by more than \$1.50 per month (with the exception noted below), and will in no instance be increased outside of a base rate proceeding; provided that, Vectren Energy may propose either a larger increase in customer facilities charges, or Straight Fixed Variable (SFV) rate design, on or after March 1, 2015, but SFV cannot be implemented prior to January 1, 2016. To the extent Vectren Energy proposes to increase customer facilities charges by more than \$1.50 per month in a base rate proceeding filed prior to March 1, 2015, the OUCC reserves the right in that proceeding to oppose the continuance of the SRC.

VI. Settlement Scope and Approval.

18. Except to the extent provided for herein, this Settlement shall not be used as precedent in any other proceeding or for any other purpose, except to the extent necessary to implement or enforce this Settlement.

19. This Settlement is conditioned upon and subject to IURC acceptance and approval in its entirety, without any change or condition that is acceptable to any party to this Settlement.

20. The Settling Parties will request Commission acceptance and approval of this Settlement in its entirety, without any change or condition that is unacceptable to any party to this Settlement.

21. The Settling Parties will work together to finalize and file an agreed upon proposed order with the IURC. The Settling Parties will offer supporting testimony for the Settlement.

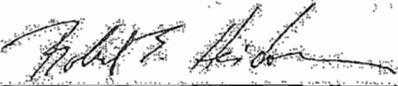
22. The Settling Parties will either support or not oppose on rehearing, reconsideration and/or appeal, an IURC Order accepting and approving this Settlement in accordance with its terms, including the submission of any applicable briefs and pleadings.

Agreed To And Accepted this 14th day of April, 2011.

Indiana Office of Utility Consumer Counselor

By 

Vectren Energy Delivery of Indiana, Inc.

By 

I. EXECUTIVE SUMMARY

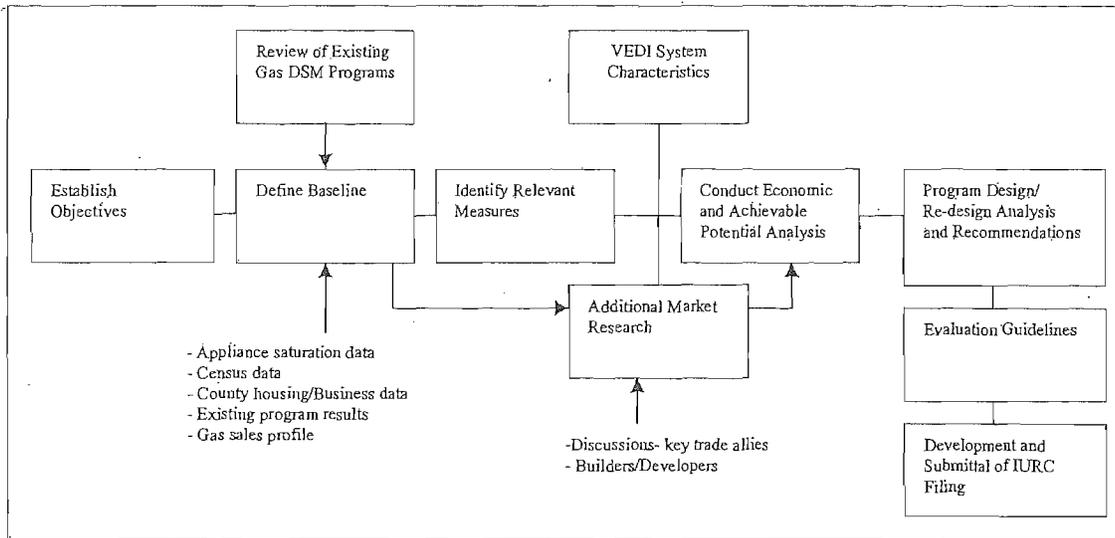
The following report presents a long-term demand-side management (DSM) market potential analysis for residential and commercial natural gas customers of Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of Indiana, Inc. (“Vectren North” or “VEDN”) and Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. (“Vectren South” or “VEDS”). Together, Vectren North and Vectren South will be referred to herein as Vectren Energy Delivery of Indiana, Inc. (“VEDI”). The analysis was completed in collaboration with the Terra Vista Energy Group, LLC. The purpose of this report is to identify and characterize the natural gas energy efficiency potential in VEDI’s service territory and to estimate the amount of savings achievable by the continuation of energy efficiency programs and the addition of potentially new programs.

Approach

The VEDI market potential analysis was developed through a sequential set of planning steps aimed at taking the most current industry and market information to screen and prioritize the relevant opportunities based on their costs and benefits. The primary input into the process was the identification, review and application of technology, market and industry information. The process included efforts to capture VEDI-specific market data to characterize the situation in the local market. This included conducting a saturation survey with residential customers and the review of local demographic data.

The approach also included personal communications with utility DSM program managers at companies with successful gas DSM initiatives. These discussions focused on obtaining current program data in order to learn about the critical factors associated with successful DSM programs. Specific utilities included: CenterPoint Energy, Xcel Energy, South Jersey Gas Company, Baltimore Gas & Electric Company and Focus on Energy-Wisconsin.

Figure 1. Framework for Conducting the Market Potential Analysis



In conducting the analysis, the approach included a number of guiding objectives. These are noted as follows:

- Conduct and develop an updated market potential analysis to ensure VEDI's energy efficiency programs remain relevant and cost effective and identify the economic and achievable potential in VEDI's service area.
- Identify any additional measures and programs that may be cost effectively added to the current portfolio.
- Identify any measures and programs that may be cost effectively integrated with Vectren South's electric DSM programs.
- Conduct VEDI-specific market research and data collection to ensure capturing information that best reflects local market conditions.
- Craft an action plan to guide the process of designing and implementing relevant programs to VEDI Residential and Commercial rate class customers.
- Craft an action plan that considers how best to capture lost opportunities to achieve energy efficiency, minimize free ridership and integrate natural gas efficiency program with other initiatives.

Technical and Economic Potential Results

A comprehensive technical and economic potential analysis was conducted for VEDI. These analyses provide a theoretical forecast of possible savings while omitting barriers associated with program delivery and market dynamics. This analysis is only applicable to residential and small commercial (non transport) customers as energy efficiency programs designed by Vectren will impact these particular segments. A summary of the technical and economic potential results for VEDI follows:

Table 1. Comparison of Achievable Potential Estimates to Total VEDI Sales

	Therms (THMs)	Percent of Total
Total Usage*	765,540,900	100%
Technical Potential Savings	329,037,905	43%
Economic Potential Savings	185,828,159	24.3%
Achievable Potential Savings**	16,449,784	2.15%

*The total usage estimates are based on 2009 therm sales

**Achievable Potential estimates based on cumulative savings after five years

In presenting these results it is important to note that the technical and economic potential reflect values based on immediate adoption of all applicable measures. It does not consider any limiting factors such as market dynamics, resource requirements, or economic constraints. The results provide a theoretical upper-limit on what the market could bear in an unconstrained and fully subscribed market. In contrast, the achievable potential reflects a forecast of the impacts taking all the market conditions, consumer behavior, and the timing of energy investment into account. The differences in the results between the various analyses point to the reality of market timing, competition of consumer dollars and measured diffusion of technologies in the marketplace. A review of results at other utilities across the country suggests the results from the VEDI analysis are in close alignment with other studies across the country (see National Action Plan for Energy Efficiency, Guide for Conducting Energy Efficiency Potential Studies, November 2007) while still providing the company with a healthy goal to guide its efforts.

Achievable Potential Results

The results of the economic potential analysis were used to identify the program concepts for the achievable potential analysis. This included developing market adoption estimates, incentive and program delivery strategies. The programs were analyzed using the standard benefit-cost analysis methodology as set by the California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, California Governor's Office of Planning and Research, 2002. This included review of all the relevant tests, with a focus

on the Total Resource Cost Test. A summary of the specific programs that were analyzed as part of the achievable potential analysis follows in Table 2.

Table 2: Summary of Analyzed Programs

	Currently Offered by VEDI	Recommended New Program	Potential Gas/Electric Integration (VEDS)
Residential Energy Efficient Gas Heating Incentive Program	x		
Residential Energy Efficient Gas Water Heating Program	x		
Residential On-Line Audit Program	x		x
Residential New Construction Program	x		x
Residential Home Performance Program (Vectren North Only)	x		
Residential Home Audit and Direct Install Program			x
Multi-Family Direct Install Program	x		x
School-Based Education Program	x		x
Residential Low Income		x	x
Residential Targeted Income	x		
Behavioral Campaign		x	x
Program Commercial Energy Efficient Heating Replacement	x		
Program Commercial Energy Efficient Water Heating Replacement	x		
Commercial Custom	x		x

A complete summary of the achievable potential results follows in Table 3. Some of the key results and findings are shown below:

Table 3. Summary Achievable Potential Results

SUMMARY - ALL PROGRAMS*

Year	Participants	Incremental Gross Therms Savings	Incremental Net Therms Savings	Incentives, 000\$	Program Costs, 000\$	Budget, 000\$
2012	62,141	3,193,808	2,381,452	\$3,820	\$3,723	\$7,543
2013	47,436	3,277,857	2,456,937	\$4,295	\$3,903	\$8,198
2014	32,849	3,330,645	2,523,424	\$4,836	\$3,747	\$8,583
2015	34,145	3,536,283	2,682,400	\$5,134	\$3,823	\$8,957
TOTAL	176,571	13,338,593	10,044,213	\$18,085	\$15,196	\$33,281

*All values are shown as annual impacts

**Budget allocation reflects all costs (incentives, program and unallocated costs)

A review of some additional findings follows below:

- The cost-effectiveness analysis for all the program results in a positive net present value forecast of \$26.7 million and an overall benefit-cost ratio of 1.44.
- The analysis did not include any state or federal incentives for installing energy efficiency measures. Although, the inclusion of additional incentives would improve the economics for any of the relevant programs particularly for the participating customer.
- The analysis includes VEDI outreach and education costs to educate customers on the overall importance of energy efficiency. These costs are allocated across the entire portfolio of programs.
- The total program budget requirement for all four program years is estimated at \$33.3 million.
- This plan includes the opportunity to address a number of additional participants across various markets. The plan calls for participation of approximately 177,000 customers across all the programs.

The program by program results follow in Table 4. In some cases, the programs are modeled as stand-alone offerings. For programs with various technologies packaged together, such as the high efficiency heating and water heating offerings, each of the measures were modeled separately to avoid reliance on blended impacts. In these cases, the various measures are aggregated together and combined program results are shown.

Table 4: Cost Effectiveness Analysis Results

VEDI Prescriptives (VEDN and VEDS):

Program Name - Residential	Participant Test		Utility Test		RIM Test		ERC Test	
	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR
High Efficiency Furnace 80-92 AFUE	\$7,831	2.50	\$3,678	3.11	(\$1,740)	0.76	\$221	1.04
High Efficiency Furnace 80-94 AFUE	\$25,992	2.31	\$21,268	4.38	(\$6,293)	0.81	\$7,888	1.39
High Efficiency Boiler 80-91% AFUE	\$109	1.41	\$17	1.15	(\$111)	0.54	(\$141)	0.48
Programmable Thermostat	\$3,249	3.26	\$1,647	4.16	(\$521)	0.81	\$559	1.33
Efficient Tankless Water Heater	\$2,231	2.03	\$1,520	4.36	(\$452)	0.81	(\$193)	0.91
Condensing Water Heater (.88 Thermal Efficiency)	(\$3)	0.93	\$24	4.38	(\$7)	0.81	(\$18)	0.63
High Efficiency Water Heating .59-.67 EF	\$2	1.00	\$196	2.43	(\$137)	0.71	(\$152)	0.69
TOTAL	\$39,410	2.33	\$26,958	3.53	(\$10,654)	0.78	\$6,770	1.21

Program Name - Commercial	Participant Test		Utility Test		RIM Test		ERC Test	
	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR
High Efficiency Boiler 90% AFUE	\$4,433	2.93	\$2,766	7.07	(\$456)	0.88	\$1,004	1.44
High Efficiency Furnace 92% AFUE	\$536	4.02	\$247	4.80	(\$65)	0.83	\$133	1.71
High Efficiency Furnace 94% AFUE	\$1,532	3.18	\$1,194	6.55	(\$215)	0.87	\$712	1.98
High Efficiency Water Heating .67 EF	\$9	1.83	\$7	1.99	(\$7)	0.67	\$2	1.12
Efficient Tankless Water Heater	\$51	2.16	\$56	5.73	(\$12)	0.85	\$22	1.48
Boiler Modulating Burner Control	\$150	1.98	\$158	4.47	(\$46)	0.82	\$54	1.35
Boiler Reset Control	\$220	59.86	\$169	40.37	(\$4)	0.98	\$172	41.08
Commercial Boiler Tune Up	\$6,796	24.51	\$5,189	22.85	(\$237)	0.96	\$5,201	17.25
High Efficiency Unit Heaters	\$646	7.05	\$491	9.10	(\$61)	0.90	\$448	4.94
Programmable Thermostat	\$136	8.60	\$52	3.51	(\$21)	0.78	\$43	2.37
Steam Trap Buy Down	\$102	12.31	\$76	10.64	(\$8)	0.91	\$73	6.89
Condensing Water Heater (.88 Thermal Efficiency)	\$187	2.22	\$252	27.42	(\$10)	0.96	\$112	1.72
TOTAL	\$14,797	4.73	\$9,642	5.47	(\$2,155)	0.85	\$6,961	2.37

Program Name	Participant Test		Utility Test		RIM Test		ERC Test	
	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR	NPV, 000\$	BCR
PRESCRIPTIVES TOTAL	\$54,207	2.62	\$36,600	3.86	(\$12,809)	0.79	\$13,732	1.37

VEDS (Integrated):

Program Name	Participant Test		Utility Test		RIM Test		BRC Test	
	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR
Residential Multi Family	\$814	29.14	\$641	4.96	(\$162)	0.83	\$652	5.03
Residential On-Line Audit	\$465	19.93	\$168	3.73	(\$61)	0.79	\$174	3.84
Residential School Based Education and Audit	\$2,103	9.90	\$922	2.74	(\$531)	0.73	\$951	2.79
Residential Home Audit and Direct Install	\$1,745	21.22	\$252	1.26	(\$956)	0.56	\$272	1.28
Residential New Construction	\$1,123	2.05	\$1,038	3.19	(\$475)	.76	\$ 271	1.21
Residential Behavioral Letters	\$ 505	0.00	\$28	1.06	(\$469)	.51	\$ 35	1.07
Residential Low Income Weatherization	\$3,040	2.69	\$21	1.01	(\$2,977)	0.50	\$63	1.02

Program Name	Participant Test		Utility Test		RIM Test		BRC Test	
	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR
Commercial Custom	\$2,920	3.33	\$2,288	5.00	(\$572)	0.83	\$1,395	1.92

VEDN

Program Name	Participant Test		Utility Test		RIM Test		BRC Test	
	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR
Residential Multi Family	\$4,212	30.36	\$3,351	5.18	(\$803)	0.84	\$3,409	5.25
Residential On-Line Audit	\$1,926	20.75	\$706	3.90	(\$244)	0.80	\$733	4.01
Residential School Based Education	\$3,097	0.00	\$2,158	3.41	(\$896)	0.77	\$2,201	3.46
Residential New Construction	\$2,004	2.11	\$1,313	2.02	(\$1,284)	0.67	\$71	1.03
Residential Home Performance	\$1,347	1.98	\$327	1.22	(\$1,383)	0.57	(\$36)	0.98
Targeted Weatherization	\$1,070	2.19	(\$74)	0.93	(\$1,129)	0.48	(\$60)	0.95

Program Name	Participant Test		Utility Test		RIM Test		BRC Test	
	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR
Commercial Custom	\$11,576	3.42	\$9,011	5.05	(\$2,224)	0.83	\$5,607	1.96

VEDI (All Programs)

Program Name	Participant Test		Utility Test		RIM Test		BRC Test	
	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR	NPV, 000s	BCR
Total for All Programs	\$92,156	2.96	\$56,073	2.88	(\$29,651)	0.74	\$26,793	1.44