STATE OF INDIANA INDIANA UTILITY REGULATORY COMMISSION

PETITION OF THE BOARD OF DIRECTORS)
FOR UTILITIES OF THE DEPARTMENT OF)
PUBLIC UTILITIES OF THE CITY OF)
INDIANAPOLIS, AS SUCCESSOR TRUSTEE)
OF A PUBLIC CHARITABLE TRUST, D/B/A)
CITIZENS GAS & COKE UTILITY FOR)
AUTHORITY TO INCREASE ITS RATES AND)
CHARGES FOR GAS UTILITY SERVICE AND)
FOR APPROVAL OF A NEW SCHEDULE OF)
RATES AND CHARGES APPLICABLE)
THERETO, APPROVAL UNDER IC 8-1-2.5 OF AN)
ALTERNATIVE REGULATORY PLAN)
IMPLEMENTING AN UNCOLLECTIBLE EXPENSE)
ADJUSTMENT MECHANISM, A DEMAND SIDE)
MANAGEMENT AND RATE DECOUPLING)
MECHANISM AND APPROVAL OF OTHER)
CHANGES TO ITS GENERAL TERMS AND)
CONDITIONS FOR GAS SERVICE)

FILED March 16, 2012 INDIANA UTILITY REGULATORY COMMISSION

CAUSE NO. 42767

SUBMISSION OF ANNUAL OPERATING PLANS THROUGH AUGUST 31, 2012

Pursuant to the Commission's May 24, 2011 Docket Entry in this Cause, the Board of Directors for Utilities of the Department of Public Utilities of the City of Indianapolis, as successor trustee of a public charitable trust, d/b/a Citizens Gas, hereby submits the Citizens Gas Annual Operating Plan and the Joint Citizens Gas/Indianapolis Power & Light Operating Plan through August 31, 2012.

Respectfully submitted,

<u>/s/ Jill A. Phillips</u> Jill A. Phillips

Jill A. Phillips Manager, Rates & Regulatory Affairs Citizens Energy Group 2020 N. Meridian St. Indianapolis, IN 46202 Telephone/Fax: 317-927-4427 E-mail: jphillips@citizensenergygroup.com

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Submission of Annual Operating Plans

Through August 31, 2012" was served upon the Office of the Utility Consumer Counselor via

electronic mail on March 16, 2012 to the following:

Leja D. Courter Office of the Utility Consumer Counselor 115 West Washington Street Suite 1500 South Indianapolis, IN 46204 <u>lcourter@oucc.in.gov</u> <u>infomgt@oucc.in.gov</u>

> /s/ Michael E. Allen Michael E. Allen (Attorney No. 20768-49) Ruth A. Hardy (Attorney No. 29275-49)

Attorneys for Petitioner, Citizens Gas

Michael E. Allen (Attorney No. 20768-49) Ruth A. Hardy (Attorney No. 29275-49) Citizens Gas 2020 N. Meridian St. Indianapolis, IN 46202 Telephone/Fax: 317-927-4318 Telephone/Fax: 317-927-4398 E-mail: <u>mallen@citizensenergygroup.com</u> rhardy@citizensenergygroup.com

Citizens Gas

Natural Gas DSM Program Operating Plan

Program Year 4



Prepared by:

Wisconsin Energy Conservation Corporation Submitted: August 26, 2011 Revised January 24, 2012



Citizens Gas Program Year 4 Demand Side Management Operating Plan Table of Contents

Prepared by: Wisconsin Energy Conservation Corporation

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Citizens Gas Program Year 4 Demand Side Management Operating Plan Executive Summary

Prepared by: Wisconsin Energy Conservation Corporation

Introduction

WECC is pleased to present the Oversight Board its revised proposed Program Year 4 Demand Side Management Operating Plan for the period September 1, 2011 through August 31, 2012. The Operating Plan contains both an Executive Summary of the proposed portfolio as well as detailed Program Operating Plans. In the plan dated August 26, 2011 WECC has provided TRC's and net benefits for each program based on the 2011 EIA Reference Case, as per the recommendation of the Oversight Board.

Below is a summary the inputs that have changed from the August 26th Operating Plan.

Original Plan

The original plan used the \$4.30 per Mcf 2011 NYMEX commodity price of natural gas along with a yearly gas price inflation rate equal to a CPI inflation of 2.1%. The cost of gas transportation was \$.50 per Mcf and a winter adder of \$.60 per Mcf was based on NYMEX futures winter prices above summer prices. This yields a year round savings value of \$4.80 per Mcf (\$.48 per therm) and a winter only savings value of \$5.40 per Mcf (\$.54 per therm). A 7.66% discount rate was used based on previous year planning values. The results of the original plan are shown in column 1 of the Table A below.

Original Plan With EIA Prices

The original plan (deemed savings values, budgets, participation, etc.) was used but with a \$4.70 per Mcf 2012 commodity price of natural gas from EIA's AEO 2011. While price inflation varies by year in the EIA, the average year price inflation is ~3.8% which is above a CPI inflation of 2.1%. The winter adder of \$.30 per Mcf based on Citizens storage cost was used instead of the \$.60 based on NYMEX futures winter prices above summer prices. This yields a year round savings value of \$5.20 per Mcf (\$.52 per therm) and a winter only savings value of \$5.50 per Mcf (\$.55 per therm). A 6.4% discount rate was used to reflect Citizens current discount rate. The results are shown on column 2 of the Table A below.

Proposed Enhanced Plan With EIA Prices

The BC results from proposed enhancements to the plan are shown in Column 3 of Table A below. The gas price and discount rate assumptions from Column 2 continue to be used in Column 3.

CITIZENS GAS –Natural Gas DSM Program Summary Program Year 4 Page 2

- Prescriptive program. 92% AFUE furnaces are phased out of this program with 50% lower participation compared to the original filed planned to reflect the discontinuation of this technology because of cost-effectiveness concerns and recognizing the market for furnaces has evolved. The kWh saved from the higher efficiency furnaces from using more efficient fans (ECM) and multi-stage heating are included consistent with the direction to include gas, electric and water benefits in the Total Resource Cost test. However, these savings are only included when they are not associated with a high efficiency ac unit, because these savings will be counted in a proposed IPL program.
- 2. Low-income weatherization. Insulation, air sealing, and efficient furnaces save electricity as well as gas in gas heated homes. These kWh savings are from the furnace fan not running as long because less heating energy is needed, air conditioning savings from lower heat gains, and the efficient ECM fan motors in efficient furnaces also save electric energy. Both gas and electricity are resources that are counted in a Total Resource Cost BC.
- 3. Home Retrofit. The home retrofit program uses software that calculates cost effectiveness of each measure. Insulation and air sealing proposals will only include measures that are cost effective. The \$3,000 incremental cost per house is a historical value from a program delivered when a significantly higher gas prices (~\$7.50 per Mcf)/savings existed. Using the EIA AEO 2011 gas price forecast as a guide for cost-effectiveness, the amount of conservation costs proposed to the customer will be lower than initially planned. The lowering of the incremental costs from \$3,000 to \$2,500 will reduce the 50% share of incentives paid to \$1,250. While additional program management attention to this issue will likely be necessary, no change to the program administrative budget has been made.
- 4. Retrofit Ramp-up. No changes in the program savings or costs have been made. The life of direct install water low-flow kits has been reduced to 7 years because a 30 year life was inadvertently used for the original plan.
- 5. New Construction. Citizens will be ending their new construction program effective May 31, 2012 (see below). After this point the program will continue as an IPL only plan. The deadline for new construction permits under the phase out of the Citizen's New Construction program is January 31, 2012. Submission of applications must be on or before May 31, 2012, which accounts for a completion window of 120 days.
- 6. Evaluation expenses were maintained at \$120,000.

The TRC results for each CG only program and for the joint CG/IPL programs are displayed in Table A the following page. Following Table A is a graph showing the natural gas fuel price for each of the price scenarios considered in Table A. For comparison purposes, we have also graphed natural gas prices under two other EIA forecast scenarios.

Table - A

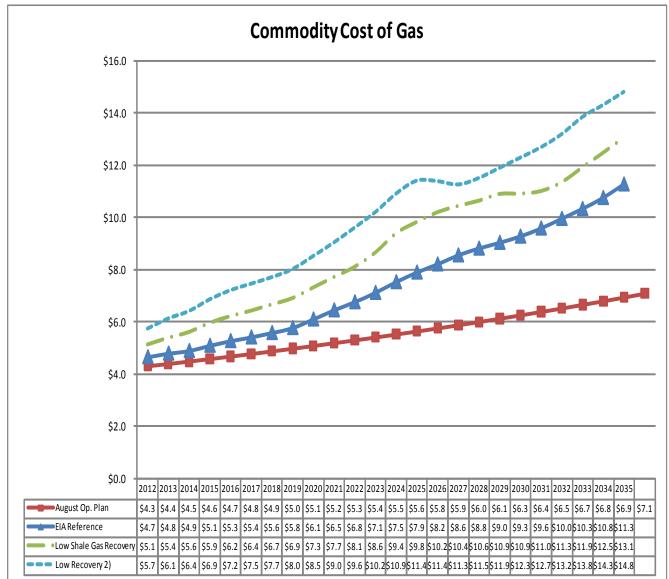
Comparison of TRC Results

	1)	2)	3)	
	August 2011 Citizens	Aug. 2011 Ops Plan -	Citizens Proposed Ops Plan	
	Gas Operating Plan,	Discount Rate 6.4% &	Discount Rate 6.4% & Fuel Price	
	Discount rate 7.66%	Use EIA Ref. case (~ 3.8%	(EIA Ref. Case ~ 3.8% Gas	
	(Escalation 2.1% CPI, 6	Gas Escalation, 3 cents	Escalation, 3 cents winter gas	
	cents winter adder)	winter gas adder)	adder)	
Program Name				Comments
Residential prescriptive	0.8	0.94	1.19	Phase out 92% AFUE Furn.
				(-50%) + kWh for ECM
Low-income weatherization	0.3	0.43	0.49	Count kWh savings
Home retrofit	0.6	0.87	1.20	Cost \$3,000 to \$2500
Retrofit ramp-up	2.3	2.71	1.56	Reduce life of D.I. 30 to 7
Multifamily pilot	0.8	1.04	1.02	
Commercial Prescriptive	1.5	1.64	1.64	
All Citizen only programs	0.8	1.04	1.08	

Joint Programs Comparison of TRC Results

	1)	2)	3)	
	Aug. 2011 Citizens Gas	Aug. 2011 Ops Plan -	Citizens Proposed Ops Plan	
	Operating Plan,	Discount Rate 6.4% &	Discount Rate 6.4% & Fuel Price) ·
	Discount rate 7.66%	Use EIA Ref. case (~ 3.89	6 (EIA Ref. Case ~ 3.8% Gas	
	(Escalation 2.1% CPI, 6	Gas Escalation, 3 cents	Escalation, 3 cents winter gas	
Program Name	cents winter adder)	winter gas adder)	adder)	Comments
New Construction	0.7	0.9	1.0 Total (.8 Gas, 1.1 El.)	Reduce WECC Budget
Online Assessment	5.4	6.1	6.1 Total (5.5 Gas, 6.4 El.)	
Multi Family Direct Install	4.4	5.0	5.0 Total (6.3 Gas, 4.4 El.)	
Commercial Custom	1.4	1.8	1.8 Total (1.1 Gas, 2.3 El.)	
All shared programs	2.0	2.4	2.4 Total (2.0 Gas, 2.7 El.)	
			Portfolio Total TRC BC: 1.75	1/24/2012

Chart B - Commodity Cost of Gas



Note: All commodity prices shown above represent pricing at Henry Hub, which is representative of a utility's avoided cost.

The Executive Summary provides for each program:

- Measures and inputs
- Changes and events occurring since Program Year 3 expected to impact programs going forward and driving Year 4 program modifications
- Savings (energy and financial), and
- Benefit-cost analyses

The Executive Summary also details programs WECC plans to deliver jointly with Indianapolis Power & Light and a method for allocating joint costs. The Detailed Operating Plans provide for each program:

- Program objectives and target markets
- Program logic, description, and measure characterizations
- Marketing strategies
- Measurement and verification plans and program metrics
- Administration requirements and plans for utility coordination; and, where applicable
- Leverage opportunities, including ways to leverage third-party resources to benefit the program

Executive Summary

Portfolio Objectives

WECC's proposed portfolio strives to: (1) align Citizens Gas DSM programs with those of other Indiana gas utilities; (2) sustain the coordinated effort with trade allies on the successful market based programs; (3) address changes to federal, state and industry energy standards and trends; (4) continuously improve program results to achieve greater cost effectiveness; and (5) provide equity among ratepayers as directed by the Oversight Board.

Program Coordination

Continuing from Program Year 3 into Program Year 4, the portfolio seeks to capture cost savings by coordinating program design and delivery with Indianapolis Power and Light (-IPL") whenever possible. The proposed plan jointly delivers four programs under WECC administration: (1) Residential New Construction, (2) Multi-family Direct Install, (3) Online Energy Assessment with kit, and (4) General Service Custom.¹ These programs have consistent administration, implementation, subcontractors, and trade allies; consequently, coordinated delivery produces cost savings. The table below provides for coordinated programs the cost allocation method discussed with the Oversight Board during the previous Executive Summary review of these programs.²

¹Citizens Gas and IPL also jointly deliver an Energy Education Program (not administered by WECC).

²The Citizens Gas/IPL Joint Program Operating Plan per Oversight Board recommendation separately provides benefit-cost analyses for joint programs.

Cost Allocation Assumptions (Only Customers with Natural Gas) CG = Citizens Gas

Program	WECC Labor	Implement Costs	Incentives Split	Incentives CG (100%)	Incentives IPL (100%)				
Residential New Construction	50% - CG 50% - IPL (while joint) 100% IPL (remaining time)	50% - CG 50% - IPL (while joint) 100% IPL (remaining time)	Energy Star Home Rating (HERS) 95% - CG 5% - IPL	Furnaces, Water Heater	ECM Motor, High Efficiency AC/Heat Pump, Heat Pump Water Heater				
Rationale	and gas ben based on the	e split for the buil efits for the Energ Net Present Val Energy Star home	gy Star rating. ue of benefits	These costs ha produced by the	ive been split e measure to				
Multi-family Direct Install	50% - CG 50% - IPL	None	None	Low Flow Gas Water Heat	CFL's, Low Flow Electric Water Heat Only				
Rationale	receive CFL'	is derived around s which IPL will p ion costs are base	ay for the bulb	s and the instal					
Online Energy Assessment w/kit	50% - CG 50% - IPL	50% - CG 50% - IPL	89% - CG 11% - IPL	None	None				
Rationale	Customer participation can occur via either the online assessment tool or Citizens online option and the kit contains the same co-branded materials. Targeting fuel specific does not allow for the low flow measures to be appropriately allocated and therefore the kit cost of the measures is based on the Net Present Value of the benefits produced by the kit.								
General Service Custom	50% - CG 50% - IPL	Project Dependent	None	Gas Benefits	Electric Benefits				
Rationale		ion costs are spe of energy saved.	cific to each pr	oject. Incentive	es are completely				

The proposed allocation method entirely allocates to a utility fuel specific and program costs uniquely attributable to that utility.

Benefit-Cost Information

Recent reductions in short-term natural gas spot market prices affect program net-benefits achieved over the life of programs and measures, and overall cost effectiveness. The impact of this reduction in the projected value of natural gas savings is particularly evident in the residential programs as some programs did not pass the Total Resource Cost (TRC) test in the August version of the Operating Plan. In the October 25, 2011 revised Operating Plan, all programs (except Low Income) pass the TRC using the EIA Reference Case for natural gas prices.

Influencing Factors

<u>Program Success</u> - Program Year 3 has been a good year for several of the programs within the portfolio. The General Service Program produced solid energy savings with particular improvements in market participation. Participation was much higher than forecasted for the General Service Prescriptive program which required a substantial mid-year budget adjustment. We were also able to provide additional funding from last year's carryover to deliver additional savings in the Low Income Weatherization Program, the Residential Online Assessment with Kit, and the Multifamily Direct Install Program. The Residential Prescriptive Program and Residential New Construction performed up to expectations. The General Service Custom programs slightly underperformed. Meanwhile, the two new pilot programs have been slow to ramp up to expected levels.

WECC proposes established utility programs embraced by the marketplace continue to remain in place for the long-term sustainability of energy efficiency. Residential Programs remain an important component to the portfolio and are necessary to influence customers facing investment decisions related to energy consumption (often long-life measures). The proposed portfolio places additional emphasis on the commercial sector where WECC believes there is room for growth in participation and an opportunity to improve the cost effectiveness of the portfolio overall.

<u>State and Federal Programs</u> The Program Year 4 Portfolio reflects the fact many of the external factors on the market which effected program participation in Year 3 have been concluded including the short-term infusion of stimulus at both the state and federal level through the Indiana Heating and Air Conditioning Incentive Program (IHIP) and federal tax credits up to \$1500 per home for completing specific energy efficiency improvements. Additionally, changes to state building code requirements and ENERGY STAR changes will continue to influence New Construction requirements going into 2012.

<u>Program Leverage and Coordination</u> Citizens Gas would like to continue a program that leverages the funding for the EcoHouse project (formerly the Retrofit Ramp-up Program (renamed Better Buildings) administered by the city of Indianapolis. Citizens Gas is working directly with the city of Indianapolis to serve low to moderate residents of Indianapolis who will be offering complete energy efficiency audits and retrofit upgrades through low interest loans. Citizens Gas is offering incentives similar to the Home Retrofit Program WECC additionally proposes Citizens Gas continue to work with IPL to offer Online Energy Assessments that will provide energy efficiency kits to customers that complete certain activities online. These kits provide low cost measures such as energy efficient showerhead and aerators, CFL's, along with other educational information and measures to provide customer education. The program is discussed in more detail below.

Proposed Changes

WECC proposes for Program Year 4 to maintain all existing programs with two additions which include continuing the multifamily equipment pilot and with the major addition of Audit add-on and Weatherization Program to the Third Party Administrator's Core audit program. The audit add on is to cover the cost of the Third Party Administrator recommending additional gas measures. This will be followed up by an offer of a home retrofit incentive which seeks to convince customers to install weatherization measures. The exact nature of this coordination is unknown at this point but will be developed more in the upcoming months. New standards and improvements based on lessons learned drive modifications that we believe are consistent with the direction provided by the Oversight Board. Maintaining the consistency and reliability of programming is critical to gaining the trust and participation of market providers and end-use customers. WECC expects the Program Year 4 portfolio will produce cost-effective results.

Key program modifications include:

 Residential Prescriptive Incentive Program – Overall program design will remain consistent for Program Year 4. However, WECC has taken the results from the recently concluded Cadmus evaluation to adjust the net and gross savings for a 92% or greater AFUE Furnace, a 62% or greater EF storage Water Heater, an 82% of greater EF Tankless water heater and programmable thermostats.

With the October 25, 2011 operating plan revision, WECC plans to phase out incentives for 92% furnaces as of December 31, 2011 (incentives will be honored through January 31, 2012) because the market has shifted to primarily furnaces with AFUE efficiencies of 95% or greater. WECC will notify trade allies in advance of the change and make changes to program materials. WECC has also included the kWh savings that result from the inclusion of an ECM fan with virtually all furnaces with 95% efficiency. In addition, WECC is continuing to implement initiatives to improve program attribution by enhancing outreach to non-participating dealers focusing especially on those who do not offer the high efficiency option as a standard offering.

Last year the joint gas utilities and Oversight Boards collectively introduced a two-tiered incentive approach to maintain support of the existing .62 EF water heater for some time allowing dealers to adjust their inventory and begin promotion of the 0.67 EF ENERGY STAR model. This process is designed to encourage dealer stocking practices similar to the market transformation that has occurred on the 0.62 EF current water heaters since that technology was introduced. WECC recommends continuing the two tier incentive structure for the upcoming program year.

2. **ENERGY STAR Homes Program** - The proposed program retains a joint approach through the end of May for both IPL and Citizens and then an IPL only program through

the balance of the program year 2011-2012 (and at a minimum until statewide building codes have been determined) a tiered incentive structure for energy efficient homes as well as an ENERGY STAR Home package. ENERGY STAR has changed its requirements to meet the ENERGY STAR certification due to most states approving the 2009 International Energy Conservation Code (IECC 2009). As a result Citizens and IPL will offer builders two additional options to the new Version 2.5/3.0 ENERGY STAR Standards until the end of May with IPL continuing to offer the electrically heated home options on their own until the end of the program year. These programs are called the Citizens and IPL Silver Star and the Citizens and IPL Gold Star program. These two programs are identical to the Version 2.0 ENERGY STAR Standards including a \$500 incentive for achieving a HERS Score ≤85 and a \$750 incentive for achieving a HERS Score ≤ 70 . The program design has performed well in Program Years 3 and 1, respectively moving experienced energy efficiency builders to a higher overall home efficiency. We will continue to promote the program changes that encourage first time energy efficient home builders or partners, allowing new builders to claim incentives on up to 30 homes at a HERS Score of ≤85 whereas incentive payments to builders who participated in the incentive program in the prior year will be limited to 12 homes at a HERS Score ≤85. All builders will be allowed to claim incentives on an unlimited number of homes with a HERS Score ≤70 in order to encourage builders to strive for the higher efficiency standard, resulting in nearly twice the first year natural gas savings. These quantity restrictions appear to successfully influence better building practice among the participating builders while allowing new participating builders to learn new techniques and building practices. The overall objective is to increase the percent of homes built to high efficiency or ENERGY STAR specifications in Indiana and to improve (lower) the average HERS rating per home. The new Construction Program will coordinate with the Citizens and IPL Electric New Construction to also include homes heated by electric as well as gas customers served by Citizens and IPL electric for the saving for reducing kwh for cooling due to higher equipment standards and more stringent shell standards. As discussed earlier cost sharing of 50/50 between electric and gas has been included in this plan for customers that are both Citizens and IPL gas and electric customers through the end of Citizen's involvement in the program.

Changes to the ENERGY STAR Standards beginning 2011 require transition to Version 3.0 and derive energy savings relative to the building code IECC2009 that is expected to be adopted by the state of Indiana. Version 3.0 increases documentation checklists and, consequently, administrative costs, raising some concern the build of higher efficiency homes will decrease. WECC will plan to educate and support the new standard in the marketplace; however, WECC is currently researching other best practices and additional options that may include energy performance packages to offer builders.

WECC continues to recommend that IPL deliver the Gold/Silver/Energy Star Homes Program, expanding builder's options and increasing the number of newly constructed homes that perform with higher efficiency. After May 31 IPL will bear all implementation costs and costs of incentive payments required for the home to achieve an ENERGY STAR (HERS rating) qualification. Previously, the gas programs have allowed builders to take advantage of prescriptive measures with the home. IPL will continue to provide -bonus" incentives on high efficiency electrical mechanical equipment because IPL currently does not offer a Residential Prescriptive Program for these measures (although one is being developed.) IPL will limit these incentives to newly constructed homes. WECC will estimate the cost-effectiveness of this program by including both Citizen's and IPL's costs and benefits in cost-benefit analyses based upon it being a joint program for the first eight months and an IPL program for the final four months which will include the required furnaces and water heaters in gas homes. However, these gas measures (furnaces and budget tracking. Homes with dual fuel systems for home heating will not be eligible for a furnace rebate

- 3. Low Income Weatherization Program. WECC secured some additional Program Year 4 Low Income Weatherization funds through the existing grant request to IHCDA. Accordingly, WECC proposes the Low Income Weatherization program assist an additional 62 homes in Program Year 4. The costs for these homes will be at a much higher value than the costs in the past because the co-funding from IHCDA will be limited for this program year as the ARRA funds are almost exhausted. With the October 25, 2011 Operating Plan revision, WECC has included kWh savings resulting from reduced furnace run time (from air sealing and insulation measures) and from 39% of the homes installing a new furnace with an ECM fan.
- 4. Multifamily Direct Install Program WECC proposes continuing the multifamily direct install program to serve this demographic group within Citizens Gas service territory. This program produces highly cost-effective results through the direct installation of a showerhead and faucet aerators. WECC proposes providing service to 5,439 units in PY4. A direct install program of this type requires no investment by the customer, and therefore is immune to decreases in discretionary spending. Further, it can be scaled to increase or decrease volume depending on the performance of other programs.³ Pending approval by the IPL Oversight Board, this program will be jointly delivered and include CFL's to enhance program funding and address electric savings.
- 5. Residential Online Energy Assessment w/kit WECC proposes Citizens Gas and IPL continue the partnership to deliver kits from their online activities. WECC proposes to market the utilities tools and information using a combination of marketing materials, including promoting the online tools and information on the utilities websites. The Energy Assessment Program and online tools and information will educate consumers on: (1)

³Nevertheless, the supply of multifamily units is limited and will become more difficult to attain over time. Accordingly, WECC will need to shift emphasis other programs as the market potential is exhausted and economic conditions improve.

how a customer's energy costs compare to other homes in the area, (2) ways of reducing energy consumption, and (3) how a customer's energy bill is calculated. Armed with this information, consumers are better equipped to make informed decisions in managing their consumption and energy costs. Customers that complete the assessment will be provided an energy efficiency kit that includes energy saving water fixtures and CFL's for self-install. The kit will also help gather information to use in the cost effective delivery of a Retrofit based program.

6. EcoHouse (formerly Residential Retrofit Ramp/Better Buildings PILOT) - Citizens Gas proposes to continue to provide a collaborative option that leverages the funding secured by the city of Indianapolis through the EcoHouse (Better Buildings) Grant Program. The program targets low to moderate income households in Marion County and completes energy efficiency upgrades through low interest loans. Citizens Gas proposes funding secured by the city of Indianapolis cover the costs of the home assessments and that Citizens Gas cover 50% of the recommended air sealing and insulation measures up to \$1,600 of the total cost. A low-interest financing mechanism will cover the remaining costs of measure installation.

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- 7. Multifamily Equipment Efficiency PILOT WECC recommends that Citizens continue this pilot program in Program Year 4 which we believe will help the transformation of this market in Indiana. The purpose of this program is to positively affect the installation of high efficiency, natural gas fueled space and water heating equipment in those dwellings units within a multifamily dwelling unit that are individually metered for natural gas. The reason for this program is that in this market segment that the lowest first cost for furnaces and water heaters is traditionally considered, rather than lifecycle operating costs, when making purchasing decisions. In the end this program will deliver energy efficiency services to an underserved ratepayer market segment (tenant) that traditionally does not participate in the decision to purchase energy efficient equipment.
- 8. Home Retrofit Program This newly proposed program by WECC will attempt to piggyback onto audits provided by the third party administrator to get them to spend the extra time to recommend gas measures and to get information from them to offer customers the home retrofit services. This home retrofit program concept will directly address past barriers to achieve meaningful energy savings with these two specific strategies including bundled measures and incentives and installation contractor coordination.
- 9. General Service Prescriptive Incentive Program Overall program design will remain consistent for Program Year 4. However, WECC has taken the results from the recently concluded Cadmus evaluation to adjust the net and gross savings for a 92% or greater AFUE Furnace, a 62% or greater EF storage Water Heater, and Boiler Tune ups. In addition, WECC is continuing to implementing initiatives to improve program attribution by

enhancing outreach to non-participating dealers focusing especially on those who do not offer the high efficiency option as a standard offering.

- 10. **General Service Custom –** WECC recommends maintaining the existing joint Citizens /IPL program design as detailed in the joint operating plan and offering \$0.75 per therm for projects that generate less than 7,500 therms of natural gas savings annually and \$1.00 per therm for those that produce annually 7500 therms or greater. These incentives will continue to motivate customers to act as natural gas prices remain low. Coordinating efforts with IPL has reduced management and outreach costs, and allowed customers to consider a whole systems approach that may include both natural gas and electrical energy efficiency solutions. IPL's Plan for the Custom Program is to continue to offer \$.05/kWh and \$200/kW for all projects. Each utility will continue to offer up to \$25,000 per project for a maximum of \$50,000 for a single customer project. This program supports the customer/project initiatives for applications where retrofit solutions, new equipment specifications or new construction are being completed and higher efficiency is being installed relative to standard equipment specifications or code building requirements.
- 11. **Administration –** WECC's Administration budget remains consistent for Program Year 4 per the amount agreed upon in our contract.
- 12. **Evaluation –** WECC has allocated \$120,000 in Program Year 4 for the evaluation budget to be consistent with Program Year 3. This budget was allocated to programs in proportion to the total implementation costs.
- 13. **Consumer Education and Marketing –** Funding for Program Year 4 has been reduced to \$275,000.
- 14. **Program Year 4 Funding -** The available funding for Program Year 4 is \$3,802,188 plus the remaining carryover funds from year 2 of \$449,013 plus year 3 carryover funding in the amount of \$800,050. Citizens Gas will retain \$134,000 of this amount to fund the K-12 Energy Education program (also delivered in collaboration with IPL) and an additional \$100,000 for Low Income programs. WECC will manage \$459,122 for Low Income contributions that will be combined with IHCDA funding to weatherize low income homes and a portion to be allocated to the proposed Retrofit Ramp-up Pilot. The remaining operating budget of \$4,817,215 will be for all other program operations outlined in for the Operating Plan of which \$4,156,589 is currently allocated to programs.

Citizens Gas Program Year 4 Total Budget	
Revenue Source	
General Program Budget	\$ 3,802,188
Remaining PY2 Budget Carryover	\$ 449,013
PY 3 Budget Carry Over	\$ 800,050
Starting Portfolio Budget	\$ 5,051,251
PY 4Obligations	
NEF Program - Managed by Citizens Gas	\$ 134,000
Managed by Citizens (\$100K)	\$ 100,000
PY3 Obligations Total	\$ 234,000
Program Yr 4 Working Budget Programs Only	\$ 4,817,251
Current Portfolio Budget without Citizen Managed Amounts	\$ 4,156,589
Portfolio Budget Difference (Unallocated)	\$ 660,662
Potential Reserve Outside Current Portfolio	\$ 660,662

- 15. **Program Year 3 Carryover** Program Year 3 operations were a little behind initial projections. WECC assembled this plan using \$800,050 in carryover from Year 3 and \$449,013 from Year 2.
- 16. **Funding Total –** The available funding total for Program Year 4 is currently established at \$5,051,251.
- 17. **Unallocated Budget** The Program Year 4 operating budget established herein includes an estimated \$660,662 in unallocated funding. WECC will present a plan to the Oversight Board for recommended allocation to existing or new program offerings.

Evaluation and Planning

Although WECC believes our planning assumptions related to energy savings and free ridership are conservative, third-party evaluation will inevitably result in adjustments as they did for this program year. We revised assumptions in both the Residential Prescriptive Program and the Commercial Prescriptive Program for program Year 4 based on the results of the recently completed Cadmus evaluation. This involved update the savings estimates in the Residential Prescriptive Program to adjust the net and gross savings for a 92% or greater AFUE Furnace, a 62% or greater EF storage Water Heater, and an 82% of greater EF Tankless water heater. As evaluation results become available, WECC will assess changes in assumptions, model costeffectiveness using the revised assumptions, and recommend changes to the portfolio as new information becomes available. For example, because of feedback from third-party evaluation results for programs sponsored by NIPSCO and Citizens, changes to program operations have been consistently executed with the intent to improve program results and attribution.

Cost Effectiveness

Please find as the attached documentation the complete benefit-cost analysis for the proposed Program Year 4 plan. Consideration has been given to cost-effectiveness at the (1) measure, (2) program, and (3) portfolio levels using the Total Resource Cost (TRC) and Utility Cost tests. Net benefits calculated in dollars are also provided. Note that the benefit-cost report has been set up to accommodate programs funded jointly by gas and electric utilities in anticipation of future collaborative efforts.

Detailed Program Operating Plans

The portfolio of proposed programs for Program Year 4 consists of gas only programs, as well as programs to be jointly delivered with IPL. The detailed program operating plans below provide for each program:

- Program objectives and target markets
- Program logic, description, and measure characterizations
- Marketing strategies
- Measurement and verification plans and program metrics
- Administration requirements and plans for utility coordination; and, where applicable
- Leverage opportunities, including ways to leverage third-party resources to benefit the program

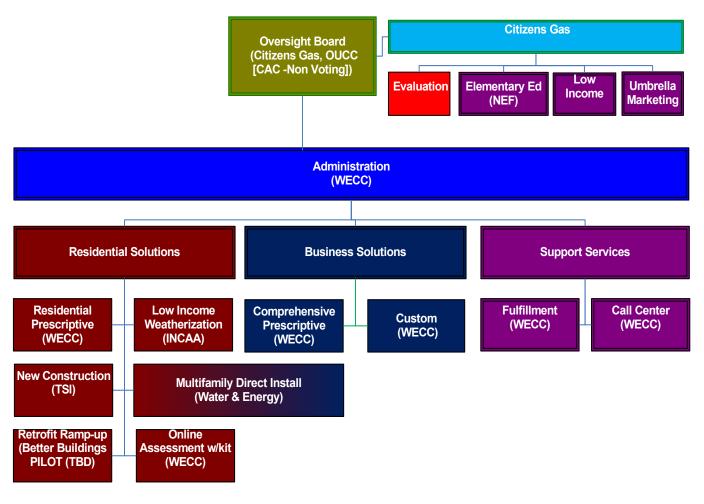
Detailed program plans for jointly delivered programs are included in a separate attachment that will serve as the joint program Operating Plan. All program plans include a summary of all projected participation, energy savings, budget requirements, and measures of program cost-effectiveness.

Citizens Gas Program Year 4 Demand Side Management Operating Plan Program Structure

Prepared by: Wisconsin Energy Conservation Corporation

Program Year 4 Portfolio Structure

(Sept 1, 2011 through August 31, 2012)



CITIZENS GAS – Draft Natural Gas DSM Program Summary Program Year 4 Page 17

	Citizens Program		Portfolio Summary Program Budget		Est. Gross Savings get (Therms)	Est. Net Savings (Therms)	% Gross Savings Therms	TRC	ист		l Overall UCT	Net Benefits Total
1.10	Residential Prescriptive *	S	638,997	15%	245,696	165,610	13%	1.2	1.8			\$ 222,538
1.20	Residential New Construction *	\$	31,647	1%	8,734	7,281	0.4%	0.7	1.4	1.0	2.4	\$ (31,176
1.30	Residential Low-Income Wx	\$	459,122	10%	18,290	18,290	1%	0.5	0.5	-	200	\$ (242,677
1.40	Multi Family Direct Install	s	198,585	5%	407,925	407,925	21%	6.3	6.3	5.0	5.0	\$ 1,129,204
1.50	Residential Online Assessment w/Kit	\$	104,509	2%	216,000	172,800	11%	5.5	4.7	6.4	5.2	\$ 464,190
1.70	EcoHouse/Sweeps Pilot (Better Buildings)	\$	235,392	5%	91,100	91,100	5%	1.6	2.6			\$ 224,451
1.80	Multifamily Efficient Equipment Pilot	S	201,985	5%	66,750	66,750	3%	1.0	2.4	1.00		\$ 8,506
1.90	Home Retrofit Program	\$	662,320	15%	99,000	94,050	5%	1.1	1.8			\$ 159,064
2.10	General Service Prescriptive	\$	334,983	8%	485,541	386,478	25%	1.7	2.5			\$ 396,151
2.20	General Service Custom	\$	509,758	12%	307,487	230,615	16%	1.1	2.8	1.5	3.7	\$ 189,538
_	Sub Total	\$	3,377,298	77%	1,946,524	1,640,899	100%	-	A	1.2	-	\$ 2,519,789
	National Education Foundation	\$	134,000	3%								
	Low Income Working Poor	\$	100,000	2%	:		$\mathbf{i} := \mathbf{i}$		201	2.11		
	Sub Total	\$	234,000	5%								
	Support Services	p to		-	E == 1			11.1		2.11		
3.00	Program Admin **	\$	384,291	9%		8		34	9	3		\$ (326,953
4.00	Marketing & Consumer Education **	\$	275,000	6%	 	E 18	3-51	3	9	1.2.1		\$ (68,750
5.00	Evaluation	\$	120,000	3%	-	<u>1</u>	2	2	94	- C.	- 21	\$ (120,000
	Sub Total	\$	779,291	18%	1	·	1.3-21	18.1	8	1.2.1	1941	\$ (515,703
	Total Budget	\$	4,390,589	100%	1,946,524	1,640,899	1	-			_	\$ 2,004,086
_	UnAllocated Funds	\$	660,662	-					-			

* Benefit Cost Model allocates furnace and water heater costs and savings into New Construction per Oversight Board

** Note: For clarity, the budget is summarized by Program and Support Services. The specific program write-ups have laid out the breakdown of support services (Umbrella Marketing, Program Administration, and Evaluation) allocated to each program as applicable and are included in the costbenefit modeling (TRC, UCT and Net Benefits) outlined in table. The Net Benefits presented reflect the allocation of funding to each program

> CITIZENS GAS – Draft Natural Gas DSM Program Summary Program Year 4 Page 18

Pro	Citizens Gas gram Year 4 Demand Side Management Operating Plan
Pre	pared by: Wisconsin Energy Conservation Corporation
Program	1.1 Residential Prescriptive Incentive Program
Objective	Affect the installation of high-efficiency, natural gas-fueled space and water heating technologies in residential dwellings by customers who would not have done so in the absence of the program.
Target Market	The residential program will broadly target homeowners and builders participating in the new construction and replacement markets for targeted products. Eligible dwellings include single-family homes and duplexes.
Program Description	The program will affect the purchase and installation of efficient technologies through a combination of market push and pull strategies that stimulate demand while simultaneously increasing market provider investment in stocking and promoting them. Demand side tactics will focus on educating customers about the energy and money-saving benefits associated with targeted products via advertising, web site, and equipping trade allies to communicate the benefits to customers. Financial incentives (i.e., cashback, mail-in rebates) to purchase eligible products will address customer objections to paying more for them than standard efficiency products. Tax credits will also be leveraged to influence customers to take action.
	The program will stimulate market provider investment in stocking and promoting efficient products through a proactive effort to train and equip providers to convey the energy- and money-saving benefits to consumers. Further, the existence of cash-back incentives and tax credits will elevate efficiency to a competitive issue that will naturally motivate market providers to stock and energy efficient equipment.
Program Logic	The primary barriers to increasing market penetration of high-efficiency, natural gas space and water heating technologies include:
	 Higher cost to upgrade from standard to high-efficiency products. Recent economic factors reducing disposable income. Lack of awareness regarding the energy and money saving benefits. Lack of immediate availability of efficient products. Higher product costs associated with introduction of new Energy Star standards in the early years until stocking practices lower incremental costs.
	The first cost barrier will be addressed through a combination of financial incentives and educating consumers about the <u>-payback</u> " or <u>-dividend</u> " they will receive in the form of lower energy bills. With economic conditions

	remaining at the worst they have been in decades, consumer purchasing decisions may be influenced by lowest first cost and not the lifecycle costs. Sustained utility rebates for these residential products will continue to influence consumers to elect high-efficiency equipment when making purchases.
	Awareness regarding the financial payback and other benefits associated with efficient products will be promoted via Citizens Gas' advertising, web site, and the distribution of educational collateral materials through market providers. Market providers will be supplied with training to equip them to convey the benefits of efficient products to customers at the point of sale.
	Product availability will be addressed as market providers adjust to meet increased demand generated by incentive offers and consumer education activities. In addition, aggressive outreach to market providers via direct mail, telephone contacts, in-person visits, and group presentations will reinforce the availability of incentives and targeted products.
	New efficiency standards bring new product technology to market often demanding a higher price premium. Until competition, stocking practices, market demand, and consumer education can catch up to drive down incremental costs, incentives provided must be an influencing factor.
	Strategies for reducing the free-ridership risk include:
	 Incentive claims must be submitted within 60 days of purchase. Efficiency standards are set well above baseline levels. Incentive amounts are sufficiently meaningful to influence purchase decisions. Emphasis on training dealers and retailers on how to up-sell to high efficiency.
Measure Characterization	All efficiency standards are consistent with Program Year 3 with the exception of the four measures updated as part of the Cadmus evaluation, the changes as a result of the status of Energy Star labeling for programmable thermostat and the transition of the energy star label for water heaters efficiency standards.
	Energy Star is also expected to introduce new criteria for Residential Climate Controls systems formerly referred to as programmable thermostats. The new product requirements advance additional elements for energy savings and home comfort. WECC will continue to monitor the new specifications and product availability and will advise and solicit input on adoption once product becomes available. Programmable thermostats

will continue to be offered with improvements to consumer education

regarding their use to maximize energy efficiency potential.

The proposed natural gas saving measures and corresponding efficiency standards, incentive amounts, and per-unit gross or *-deemed*" therm savings are listed at the end of this program plan.

With the October 25, 2011 plan, 92% AFUE furnaces are being phased out of this program with 50% lower participation compared to the original filed planned because of cost-effectiveness concerns and recognizing the market for furnaces has evolved. Incentives will be available on the 92% furnaces for installations through 12/31/2011. The kWh saved from the higher efficiency furnaces from using more efficient fans (ECM) and multi-stage heating are included consistent with the direction to include gas, electric and water benefits in the Total Resource Cost test.

Marketing Strategy

The program will be marketed to consumers via Umbrella Marketing activities, web site, and print materials (e.g., incentive claim forms, product fact sheets) distributed through market providers.

WECC staff will continue to manage and conduct outreach to market providers in cooperation with Citizens Gas Energy Efficiency staff. Activities will include in-person visits to train and equip market providers to communicate program information to customers as well as information on how to Up-Sell to high efficiency. Direct outreach will be conducted at market providers' places of business and through trade associations. Key market providers that will be targeted include:

- HVAC distributors and retail contractors for furnaces, boilers, thermostats, water heaters. Emphasis is placed on dealers that have not typically sold high efficiency or participated in Year 1-2 programs.
- Water heater distributors and retail contractors (e.g., plumbers, HVAC contractors) for water heaters.
- Big-box retailers (e.g., Menards, Home Depot) for water heaters, thermostats, furnaces.

Outreach activities will include:

- A mass mailing of program materials and update letter will be sent to market providers communicating program changes.
- Follow-up telephone calls to ensure market providers received information through the mail, answer questions, and an offer to provide in-person training for sales people.
- Face-to-face visits with trade allies at their place of business to provide training on program terms, conditions, and sales aids.

- Organizing group training opportunities (e.g., participate in annual product knowledge training hosted by manufacturers).
- Supplying equipment manufacturers and distributor representatives with material and information they can pass on to retailers and contractors. Also, WECC will work with equipment distributors to identify dealers who are not selling condensing furnaces. We will strive to influence these dealers to begin selling high efficiency (as a typical offering) via information on the incentive program, training on how to use it and training how to sell high efficiency. WECC is also proposing to pay bonus SPIFFS to newly participating dealers (targeting those that are not already selling high efficiency in order to increase program attribution). These SPIFFS are relatively small but are designed to compensate the newly participating dealer for the time and effort to get acclimated to the program.
- Also in pursuit of increasing non-participating dealer understanding of the program, WECC proposes a marketing program (including direct mail) to non-participating dealers. These dealers can be identified by cross referencing our fulfillment databases with inclusive dealer lists that WECC has developed for the State of Indiana.
 WECC is also working with equipment distributors (wholesalers) to identify elements of their dealer network that will most benefit from WECC's one-on- one and large group training and program promotion.

The anticipated effect of this outreach activity is a broadening of the network of participating dealers. WECC wants to add dealers who are not using the programs, but moreover who are not selling the high efficiency option as a standard offering. In essence, attribution may not increase if we add dealers who already sell high efficiency as a standard offering. WECC staff will provide technical support as needed to contractors and customers who need help qualifying or specifying equipment or have technical questions that are beyond the ability of call center staff to answer.

Educational strategies include the addition of an ENERGY STAR video and potentially an interactive tool related to both purchase recommendations and programming instructions. Customers who participate in the rebate program will also be educated on where they can get further information on the proper use of the programmable thermostat on the letter attached to their rebate check.

Measurement &
VerificationTo facilitate accurate measurement and verification, WECC will collect the
following information on each incentive transaction:

- Customer data (e.g., name, address, telephone, e-mail)
- Installation data (e.g., address, date, contactor)

- Measure information (e.g., quantity, model, serial number, efficiency)
- Transaction data (e.g., invoice, measure cost, purchase date)

The information will be available to Citizens Gas via an electronic interface and will be supplied to a third-party evaluator upon request.

WECC will verify that each product on which incentives are paid meets the prescribed efficiency standards using third-party databases (e.g., ENERGY STAR[®], Gas Appliance Manufacturers Association (GAMA), and Air-Conditioning Refrigeration Institute (ARI)). Products that cannot be verified using a credible third-party database will be considered on a case-by-case basis; product performance information will be requested from the contractor, distributor, or manufacturer and efficiency will be verified by a qualified engineer.

WECC staff will conduct on-site inspections of 2% of equipment for which customers receive incentives to verify: (1) products were installed, and (2) model and serial numbers match those provided on the incentive claim. Any inconsistencies will be researched and the resolution recorded. Contractors associated with inconsistencies will receive follow-up inspections on projects that they are associated with. This activity is designed to prevent fraud based on the threat that installations will be verified; however, it is important to note that the chances of detecting fraud are statistically low given the small sample size.

As an additional fraud prevention measure, WECC will cross-reference all incentive claims as they are processed to identify duplicate serial numbers and multiple matching model numbers associated with individual customers or installation addresses.

To facilitate planning and accurate estimates of free-ridership rates, WECC staff will collect sales data on key measures from participating trade allies. Key measures include furnaces and water heaters. This information will provide WECC and the Oversight Board with an indication of the market share of high-efficiency products, though it will not be statistically accurate given key vendors such as Home Depot and Lowe's have policies against sharing sales data due to competitive concerns.

Finally, WECC will work with Citizens Gas to set up an online resource for customers to provide feedback on their experience with the program. Customers will be directed to this resource via a note that accompanies their incentive claim check. The survey tool will serve to assess the quality of the customer's experience with the program and its influence on their purchase decision.

Administration	WECC will provide the administrative services listed below in support of the
Requirements	program, as outlined in our contract:
	 Budget tracking Fulfillment services Contact (call) center services Accounting services Enforcing customer service standards Data tracking (database) systems On-site verification of incentive claims Managing public relations Problem resolution Managing and overseeing procurement Supporting evaluation activities
	Reporting to the Oversight Board
	These services are included in the program administration budget and are listed in WECC's contract with Citizens Gas.
Program Metrics	The primary program metrics will include:
	 Annual gross and net therm savings Number of participating customers Delivery at or below budgeted costs Achieving forecasted benefit-cost results
	Proposed secondary program metrics include:
	 80% customer satisfaction rating based on survey results In-person visits to 25% of trade allies targeted for the initial mailing Develop group training opportunities
Leverage Opportunities	WECC will pursue the following opportunities to leverage third-party resources to benefit the program:
	 Leverage national marketing messages from ENERGY STAR. Coordinate program delivery with other Indiana utilities to minimize confusion in the marketplace and reduce costs through economies of scale. Leverage existing market provider relationships to recruit new participants.

Utility	WECC will coordinate the following activities with Citizens Gas Energy
Coordination	Efficiency staff:
	 Provide training to utility staff on program content, terms and conditions as needed. Assist Citizens Gas Corporate Communications staff with the development of marketing materials and web page as needed. Coordinate outreach to large commercial customers, builders and other trade allies with Citizens Gas business managers.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

	PY4 Program Year								
Citizens Gas Stand Alone Programs	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Tota	l Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
Residential prescriptive									
92%-94.9% AFUE Furnace	500		\$ 200	\$	100,000	84.00	42,000	36%	26,880
95% + AFUE Furnace	1500		\$ 250	\$	375,000	94.00	141,000	36%	90,240
Programmable T-Stat	1292		\$ 20	\$	25,840	37.47	48,411	22%	37,761
.62 EF Water Heater (9/11 thru 8/12)	214		\$ 50	\$	10,700	13.21	2,827	9%	2,573
.67 EF Water Heater (9/11 to 8/12)	60		\$ 150	\$	9,000	37.00	2,220	5%	2,109
88% TE Water Heater	0		\$ 150	\$	-	80.00	-	20%	-
.82 EF Water Heater Tankless	127		\$ 150	\$	19,050	62.19	7,898	37%	4,976
90% AFUE Boiler	20		\$ 500	\$	10,000	67.00	1,340	20%	1,072
Sub Tota	3713			\$	549,590		245,696		165,610

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case										
					Est. Gross	Est. Net	% Gross				
				%	Savings	Savings	Savings			Net	Benefits
	Citizens Program	Progr	am Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT		Total
1.10	Residential Prescriptive *	\$	638 <i>,</i> 997	15%	245 <i>,</i> 696	165,610	13%	1.2	1.8	\$	222,538

Program Budget Detail and Overhead Allocation

	PY4 I	Budget Detail
Residential Prescriptive *		
Incentives	\$	549,590
WECC Labor	\$	70,907
WECC Direct Costs	\$	18,000
Subcontractor(s)	\$	500
Implementation Subtotal	\$	638,997
Evaluation Allocation	\$	22,731
WECC Admin Allocation	\$	38,987
Umbrella Marketing Allocation	\$	96,250
Allocated Subtotal	\$	157,968
Sub Total	\$	796,965

Program	1.3 Residential Low-Income Weatherization Program
Objective	This program intends to leverage funding and provide resources to customers that could not afford to install energy efficient measures. High-level goals include:
	 Delivering weatherization services to electric and gas heated homes for total of 62 homes from September 2011 to August 2012 Continuing to expand the expertise of the Indiana Community Action Association (INCAA) and Community Action Association (CAA) network to deliver these services to this income level of client; and Leveraging funding from electric and natural gas utilities as well as American Recovery and Reinvestment Act resources
Target Market	The target market for this program is Citizens Gas customers with household incomes between 100% and 200% of the Federal Poverty Guidelines. The program will select participants from the existing low-income weatherization waiting list in Marion county in accordance with the Indiana Community Housing and Development Authority (IHCDA) requirement to leverage American Recovery and Reinvestment Act (ARRA) funds.
Program Description	The program seeks in total to weatherize 62 Citizens Gas and customers' homes. The program will be funded through a combination of funding from Citizens Gas, and any remaining ARRA funding through the IHCDA. The funding commitment from IHCDA is unknown at this time; Citizens Gas in the amount of \$403,000; for Low Income Weatherization.
	All ARRA funds will be exhausted by November 30, 2011, so all homes completed after November 30 th will be fully funded by Citizens Gas. If additional funding opportunities arise through community block grants or additional DOE funding we will adjust the number of homes accordingly. Citizens Gas program will operate through the program year until the program goals have been achieved or funding has been exhausted.
	Once eligible customers have been identified and recruited for the program, WECC will coordinate the scheduling of the initial home assessments with one of the qualified home audit firms. All audit firms that are engaged for both initial and final home audits have completed the Indiana Weatherization training requirements and are registered with IHCDA. Once the initial audit is complete, WECC reviews the audit reports and work orders produced by audit firms for completeness, accuracy and compliance with the program guidelines. Work orders will be presented to The Indiana Community Action Association (INCAA), which will provide weatherization services for this program, and determine pricing and prioritization of measures and scheduling

	of work. Once the work orders have been completed, final home audits will be conduction to ensure that all necessary measures previously identified have been completed to satisfaction. INCAA provides training services for the IHCDA sponsored community development home energy efficiency service program and is highly qualified to support this effort. All income qualified services including customer education, energy audits and the installation of weatherization services will be delivered in accordance with the Indiana Low Income Weatherization Guidelines. Lessons learned from previous program years has enabled us to better forecast the time needed to complete the initial recruiting of program participants, schedule audits and prepare overall program delivery schedule. After two program years we have also been able to establish an extremely qualified network of home auditing firms that will enable WECC to ensure that all necessary weatherization measures are being identified and addressed.
Program Logic	Common customer barriers for achieving reduced consumption include:
	 Lack of funding Lack of knowledge about opportunities to improve energy efficiency Lack of knowledge about personal choices influencing consumption and costs of energy bills
	The main barrier for this program is the first cost barrier as the customers targeted through this program generally do not have the means to pay for the weatherization of their homes without assistance. The measures installed through this program will be delivered by leveraging funding from various sources to cover the full cost of improvement made to low income customers' homes. To be clear, there will be no out of pocket cost to participants.
	The second key barrier that will be addressed is the lack of knowledge among homeowners about how to reduce energy consumption in the home. Each homeowner will receive an energy audit by a qualified building science professional to aid in identifying cost effective energy savings opportunities. Customers will also receive education about the measures installed and how to maintain them along with energy conservation education to address behaviors that will assist in reducing energy consumption in concert with the newly installed measures.
Measure Characteristics	The scope of services provided will mirror the Indiana Home Weatherization Assistance Program and include the following:
onaracteristics	 Health and safety measures to verify that combustion appliances are in

	 safe operating condition. Units may be repaired or replaced as indicated. Blower-door directed air-sealing of major shell leaks, bypasses and leaks in ductwork. Install water heater tank wraps and pipe insulation. Install low-flow showerheads and faucet aerators. Complete in-home customer education. Insulate attics with existing R-19 insulation or less up to R-38. Insulate heating/cooling ducts that are outside the thermal boundary. Insulate using high-density tube-in approaches where insulation is not present. Insulate box sills to R-19. Install foundation insulation. Complete other approved repairs or minor air-sealing. Clean refrigerator coil. Refrigerator replacement. Install bath/kitchen fans. Install five (5) Compact Florescent Lights (CFL) in most frequently used receptacles. Electric water heater replacements.
Marketing Strategy	Customers will be selected from the IHCDA Low Income Weatherization wait list. Letters inviting the customers to participate in the program will be mailed inviting them to attend a weatherization class and sign up for a home audit. If sufficient responses are not received, WECC will work with INCAA to contact the prospective customers via phone calls to coordinate these activities.
Measurement and Verification	 To facilitate accurate measurement and verification INCAA, will collect the following information on each incentive transaction: Customer data (e.g., name, address, telephone, e-mail) Installation data (e.g., address, date, contactor) Measure information (e.g., quantity, model, serial number, efficiency) Transaction data (e.g., invoice, measure cost, purchase date)
	Upon completion of weatherization measures, WECC will coordinate and schedule final home audits to ensure and verify (1) products were installed correctly and (2) services and products are operating at designated efficiency levels. Any inconsistencies with equipment installation or services provided will be researched, corrected, and the resolution recorded. Agencies or contractors associated with inconsistencies will receive follow-up inspections on projects they are associated with.

Administrative Requirements	INCAA will provide the administrative services listed below in support of the program.
	 Delivering customer education, audits and weatherization services. Budget tracking Fulfillment services Contact (call) center services Accounting services Enforcing customer service standards Data tracking systems On-site verification of measures installed Problem resolution Managing and overseeing procurement Supporting evaluation activities INCAA will provide monthly reporting on program progress to IHCDA, Wisconsin Energy Conservation Corporation (WECC), Citizens Gas and IPL.
Program Metrics	The primary program metrics will include:
	 Annual net therm, kWh⁴ and kW savings Number of participating customers Delivery at or below budgeted costs Achieving forecasted benefit-cost results Proposed secondary program metrics include:
	 80% customer satisfaction rating based on survey results PRISM analysis results
Leverage Opportunities	This program is an exceptional example of leveraging funds from natural gas, electric and stimulus package funding to assist customers lower their natural gas and electric consumption.

⁴ IPL electric savings defined for low flow showerhead are per the IPL Market Potential Study submitted to the IURC which considers a 2.0 gallon per minute (gpm) showerhead vs. the 1.5 gpm unit included in the program. WECC has achieved higher proportion savings (therms) for the showerhead measure within other Indiana gas utility program implementation and verified by third party evaluation. If program evaluation is not performed on this program future program design may consider introducing this evidence to capture savings per WECC field results.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

		PY4 Program Year						
	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Total Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
Low-Income Wx (Joint with IHCDA)								
Gas Homes	62	45%	\$ 6,500.0	\$ 403,000	295.00	18,290	0%	18,290

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case									
					Est. Gross	Est. Net	% Gross			
				%	Savings	Savings	Savings			Net Benefits
	Citizens Program	Prog	ram Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	Total
1.30	Residential Low-Income Wx	\$	459,122	10%	18,290	18,290	1%	0.5	0.5	\$ (242,677)

Program Budget Detail and Overhead Allocation

Residential Low-Income Wx	
Incentives	\$ 403,000
WECC Labor	\$ 30,397
WECC Direct Costs	\$ 1,500
Subcontractor(s)	\$ 24,225
Implementation Subtotal	\$ 459,122.00
Evaluation Allocation	\$ 16,332
WECC Admin Allocation	\$ -
Umbrella Marketing Allocation	\$ -
Allocated Subtotal	\$ 16,332
Subtotal	\$ 475,454

Program	1.7 EcoHouse Program (Residential Retrofit Ramp-up (Better Buildings)) PILOT
Objectives	This program intends to leverage funding and loans obtained by the City of Indianapolis through the EcoHouse (Better Buildings Program.) There are two distinct programs:
	 Delivering weatherization services through a loan fund to homeowners in the City of Indianapolis (Eco-House). Deliver Weatherization Services to the NearEast side neighbor through a grant process.
Target Market	The target market for this Eco-House program is any homeowner in the City of Indianapolis. The City of Indianapolis's Better Buildings - NearEast Neighborhood Sweeps Program which will retrofit a total of 800 homes in the Near Eastside between May 2011 and May 2013 will targeted focus areas in the Near Eastside of Indianapolis.
Program Description	INHP Eco-House Project The Indianapolis Neighborhood Housing Partnership (INHP) is currently offering the Eco-House Project, a low-interest loan program administered by INHP, to cover the costs of energy-efficient improvements to homeowners throughout Indianapolis. INHP has selected WECC to serve as the program implementer of the Eco-House Project. As program implementer to INHP, WECC will oversee the following:
	 Home Energy Audits to customers marketed to by INHP with signed agreements and approved financing to implement energy efficiency recommendations.
	 Home Weatherization Project Management Services to oversee implementation of the measures outlined in the work order defined by the customer and INHP.
	 Incentive fulfillment for Citizens Gas air sealing/insulation measures selected by the customer.
	Citizens Gas is committed to offer incentives to the INHP Eco-House Project, with reserved funding for qualified building shell measures for air sealing and insulation. WECC currently administers programs for Citizens Gas and will orchestrate the collaborative leveraging of funds to move customers to implementation with financing through INHP. Citizens Gas funding would cover 50% of the air sealing/insulation measure installation, up to \$1,600-per home. A recommended list of measures, confirmed by Citizens Gas, includes:

- Air infiltration reduction
- Duct sealing (15% leakage base)
- Attic insulation (open blown ceiling and/or cavity fill)
- Band joist insulation
- Floor insulation
- Sidewall insulation
- Kneewall insulation
- Duct insulation

Citizens Gas funding is estimated to cover approximately 100 homes up to the total of \$160,000 of incentives for projects completed through August 2012. Citizens Gas incentive contribution, along with a financing mechanism provided by INHP, is expected to have a direct impact to overcome financial barriers for the customers INHP is targeting.

WECC will provide the administration and management of the Citizens Gas funding. WECC will work with INHP to reserve and track funding per project, as well as the rebate fulfillment services. INHP will provide WECC a reservation request of funds for the qualified air sealing/insulation measures. WECC will ensure the INHP work order request and funding request meets Citizens Gas requirements. WECC will provide approval of funding reserved for the project implementation. At the conclusion of the project, WECC will administer payment of the incentive to the contractor.

Direct Install Program

In addition to the insulation and air sealing incentives, WECC has also proposed to INHP additional energy savings mechanisms, such as the direct installation of additional low cost energy savings measures. WECC proposes Citizens Gas in collaboration with Indianapolis Power & Light Company provide funding to cover the costs of the hot water and Compact Fluorescent Lamps (CFLs) measures and their installation. This direct install would occur at the final inspection and would include the installation up to eight (8) (CFLs), one (1) 1.5 gpm showerhead, and up to three (3) aerators (kitchen and bath).

NearEast Neighborhood Sweeps Program

WECC was selected to develop and manage the City of Indianapolis's Better Buildings - NearEast Neighborhood Sweeps Program which will retrofit a total of 800 homes in the Near Eastside between May 2011 and May 2013. Neighborhood Sweeps will take place within targeted focus areas in the Near Eastside of Indianapolis. The program will include pre and post retro-fit audits/inspections and weatherization/retrofits costing up to \$1,500 per residential structure, including equipment and labor, to cover one of the following measures selected by the customer:

• Air sealing of the building envelope including weather stripping and caulking

	 Attic, wall and floor insulation Heating, Ventilation and Air Conditioning (HVAC) equipment upgrades Ductwork repair and sealing Water heater replacement Energy-efficient lighting Direct Install Program In addition to the retrofit measures provided through the Sweeps program, WECC proposes that Citizens Gas in collaboration with Indianapolis Power & Light Company provide funding to cover the costs of the hot water and Compact Fluorescent lamps (CFLs) measures and their installation. This direct install effort would occur at the time of the final inspection and would include the installation
	up to eight (8) Compact Fluorescent lamps (CFLs), one (1) 1.5 gpm showerheads and up to three (3) aerators (kitchen and bath).
Program Logic	Common customer barriers for achieving reduced consumption include:
	 Lack of funding Lack of knowledge about opportunities to improve energy efficiency Lack of knowledge about personal choices influencing consumption and costs of energy bills
	The main barrier for this program is the first cost barrier as the customers targeted through this program generally do prioritize or have access to funds for the weatherization of their homes. The measures installed through this program will be delivered by leveraging funding to cover the cost of improvement made to customers' homes either through a grant or loan program.
	The second key barrier that will be addressed is the lack of knowledge among homeowners about how to reduce energy consumption in the home. Each homeowner will receive an energy audit by a qualified building science professional to aid in identifying cost effective energy savings opportunities. Customers will also receive education about the measures installed and how to maintain them along with energy conservation education to address behaviors that will assist in reducing energy consumption in concert with the newly installed measures.
Free Ridership	These program will target customers who are unlikely to be in the market for upgrading the overall performance of their home and/or do not have access to capital to make these investments, Aggressive outreach to a targeted customer segment within a targeted geography maximizes the likelihood that those customers taking action do so as a direct result of the program outreach and intervention. WECC has assumed 0% free ridership rate for this program consistent with planning assumptions for other targeted/low income programs.

	The factors influencing free ridership are as follows:
	 The program has recruited, trained, and developed a group of competent home energy auditors and installation contractors The program has streamlined the process for homeowners, coordinating the actual implementation of measures through a seamless delivery process (again, a service that is not readily available in absence of such programs) The program will provide aggressive incentives/loans to induce customers to take action
	The measures for this program will include the following:
Measure Characterization	 Direct Install of low cost measures
	Air sealing of the building envelope including weather stripping and
	 caulking Attic, wall and floor insulation
	 Heating, Ventilation and Air Conditioning (HVAC) equipment upgrades
	Ductwork repair and sealing
	Water heater replacementEnergy-efficient lighting
Marketing Strategy	The marketing efforts will be directed by IHCDA. This effort will consist of a number of different methods including the following:
	 Mass market advertising through television and radio outlets Attendance at community events
	 Engaging local community leaders Using Energy Advocates on the ground to recruit participants
Contractor Coordination	WECC's efforts to promote whole-house energy efficiency improvements will include outreach to contractors working in the targeted areas. WECC defined a contractor qualifications and a recruitment strategy.
	BPI is a national accrediting agency used by many home retrofit type programs across the country. BPI establishes testing procedures and safety guidelines for building performance work, as well as providing built-in risk management via:
	 Providing guidance to the home retrofit contracting process Ensuring contractors commit to providing comprehensive solutions for customers
	Further, those contractors that are selected must attend training on installation best practices and quality control inspections.

Measurement and Verification	To facilitate accurate measurement and verification WECC will collect the following information on each incentive transaction:
	 Customer data (e.g., name, address, telephone, e-mail) Installation data (e.g., address, date, contactor) Measure information (e.g., quantity, model, serial number, efficiency) Transaction data (e.g., invoice, measure cost, purchase date)
	Upon completion of weatherization measures, WECC will coordinate and schedule final home inspections to ensure and verify (1) products were installed correctly and (2) services and products are operating at designated efficiency levels. Any inconsistencies with equipment installation or services provided will be researched, corrected, and the resolution recorded. Agencies or contractors associated with inconsistencies will receive follow-up inspections on projects they are associated with.
Administrative Requirements	WECC will provide the administrative services listed below in support of the program:
	 Delivering customer education, audits and weatherization services. Budget tracking Fulfillment services Contact (call) center services Accounting services Enforcing customer service standards Data tracking systems On-site verification of measures installed Problem resolution Managing and overseeing procurement Supporting evaluation activities
	WECC will provide monthly reporting on program progress to IHCDA, Wisconsin Energy Conservation Corporation (WECC), Citizens Gas and IPL.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

Retrotit Ramp-up PILOT	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Total Incentiv Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
Air Sealing/Insulation Gas Homes w/CAC	55	55%	\$ 1,600.0	\$ 88,00	311.00	17,105	0%	17,105
Air Sealing/Insulation Gas Homes no CAC	45	45%	\$ 1,600.0	\$ 72,00	311.00	13,995	0%	13,995
Direct Install Kits	800		44.24	\$ 35,39	2 75.00	60,000	0%	60,000
Sub Total	900			\$ 195,39	2	91,100		91,100

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case								
				Est. Gross	Est. Net	% Gross			
			%	Savings	Savings	Savings			Net Benefits
	Citizens Program	Program Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	Total
1.70	EcoHouse/Sweeps Pilot (Better Buildings)	\$ 235,392	5%	91,100	91,100	5%	1.6	2.6	\$ 224,451

Program Budget Detail and Overhead Allocation

EcoHouse/Sweeps Pilot (Better Buildings)		
Incentives	\$	195,392
WECC Labor	\$	40,000
WECC Direct Costs	\$	-
Subcontractor(s)	\$	-
Implementation Subtotal	\$	235,392.00
Evaluation Allocation	\$	8,374
WECC Admin Allocation	\$	-
Umbrella Marketing Allocation	\$	-
Allocated Subtotal	\$	8,374
Subtotal	\$	243,766

Program	1.9 Residential Home Retrofit
Objectives	Produce long-term, cost-effective natural gas savings in the residential sector by helping customers analyze their energy use, recommending appropriate weatherization measures, and facilitating installation. Key program design objectives include:
	 Help customers identify opportunities to better manage their energy use Maximize cost-effective savings via effective targeting of customers and measures Minimize lost opportunities by affecting comprehensive improvements Improve health and safety concerns within each customer's home Minimize administrative and delivery costs through efficient processes Maximize customer satisfaction via quality of service and value proposition Leverage and develop local resources for air sealing and insulation services Facilitate continuous improvement through feedback and data collection Facilitate coordination among utilities to minimize costs Understand the energy savings potential for shell measure installation
Program Description	Home energy audit programs have become an increasingly popular method of stimulating the demand for building envelope and related natural gas savings. WECC will attempt to piggyback onto audits provided by the third party administrator to get them to spend the extra time to recommend gas measures and to get information from them to offer customers the home retrofit services. This home retrofit program concept will directly address past barriers to achieve meaningful energy savings with these two specific strategies:
	Bundled measures and incentivesInstallation contractor coordination
	This plan focuses primarily on natural gas energy savings, a program which can address electric and natural gas savings opportunities simultaneously will improve the cost-effectiveness of the program.
	1. Target Market
	Gas heated homes served by Citizens Gas that are eligible for the energy audits through the Statewide TPA will be eligible for follow on insulation and air sealing services through Citizens Gas.

2. Provide Services

This program model proposes to use auditors employed through the Statewide TPA and contracted air sealing and insulation contractors to deliver the services. The audit would result in a comprehensive proposal of shell measures with a 50% contribution from Citizens Gas (up to \$1250 incentive from Citizens Gas) for the customer to purchase cost effective measures. If the customer chooses to purchase the proposed weatherization improvements, the air sealing and insulation contractors will contact the customer to install the measures outlined in the proposal. This model provides a clear, concise offer and quick installation for customers which remove several common barriers preventing customers from investing in shell measures.

WECC will manage the insulation and air sealing contractors for program delivery. If the customer does not sign the proposal after the auditor has explained the offer, WECC will follow up with each customer by phone within two weeks to ensure that the customer understood the proposed value to implement the recommended improvements.

As a condition of participation in the program, customers must agree to allow the Statewide TPA auditor to install at least two energy efficient faucet aerators (usually one kitchen and one bath) and an energy efficient shower head.

3. Installation Contractor Coordination

WECC proposes to manage the contracts with local contractors for air sealing and insulation services. WECC will work with the contractors to ensure they are trained to meet the service standards and achieve the maximum energy savings. In addition to consistent service delivery, rates can be negotiated for financial savings to be passed on to the customer.

- Provide customers with access to -no-hassle," turnkey installation services
- Maximize energy savings through contractor training and quality assurance
- Minimize costs via economies of scale and project cost controls

Cost-effectiveness is generally dependent upon:

- Program implementation costs
- Overall customer participation to install measures
- Which measures get implemented (proposals will only include cost

effective measures)

• The cost and savings of measures that get implemented

In order to complete the cost-effectiveness modeling, several informed assumptions were made regarding key model inputs for the program. Actual results from the previous program implementation were used in projecting program savings. Below is a list of the assumptions used to determine cost-effectiveness: Program implementation costs Measure installation costs and savings • Citizen's avoided natural gas cost **Target Market** WECC will target customers who have had audits completed by the third party Further targeting will need to be developed as WECC administrator. determines what additional information on these customers will be available from the third party administrator. **Program Logic** Below is a list of market barriers and elements to reduce or eliminate the barriers mentioned above: **Market Barrier Program Element** Lack of information about A variety of energy home energy use and analysis tools that which provide prioritized energy saving actions to take first recommendations First cost concerns for combined with contractor customers training Financial incentives and • information on lifecycle savings Time consuming for Secure and list trained, pre-qualified contractors customers find to contractors and arrange meeting pilot standards work **Free Ridership** WECC is committed to documenting and guantifying the program results and using well-established methods to estimate the benefits derived from the pilot effort. As with most energy efficiency programs across the country, common issues arise when estimating program benefits such as free ridership and market effects among others.

Our experience shows that one of the most effective methods of minimizing free ridership is to target specific customer segments and actively market to them.

This program will target customers who are unlikely to be in the market for upgrading the overall performance of their home, such as increasing insulation levels and reducing infiltration. Aggressive outreach to a targeted customer segment within a targeted geography maximizes the likelihood that those customers taking action do so as a direct result of the program outreach and intervention. WECC has assumed 5% free ridership rate for this program consistent with our planning assumptions for the Indiana Existing Homes Retrofit Pilot. The factors influencing free ridership are as follows:

- The program has recruited, trained, and developed a group of competent home energy auditors and installation contractors
- The program has streamlined the process for homeowners, coordinating the actual implementation of measures through a seamless delivery process (again, a service that is not readily available in absence of such programs)
- The program will provide aggressive incentives to induce customers to take action

Because home energy audits and installation of energy efficiency improvements have significant costs, this program will offer aggressive financial incentives, 50% of measure costs, toward the goal of easing the financial burden of adopting targeted improvements.

Incentive

Strategy

In order to control the project budget, customers interested in implementing the measure package will be accepted on a first come, first served basis. The date of acceptance will be based on the date that WECC receives the signed project proposal from the customer indicating that they want to move forward with the project. Customers have 30 days to accept the offer. In addition, the amount of the incentive for implementing cost effective measures will be capped at \$2,500 per customer in order to distribute funds equitably among ratepayers and because this amount generally represents a point of diminishing returns in terms of savings per dollar spent.

The incentive strategy is designed to pay enough of the measure cost to ensure, as best we can, that the customer accepts the offer. Key to this strategy is the recognition that:

• Some of the weatherization-related measures that will be recommended have long useful lives (e.g., 20 to 30 years) and relatively long paybacks

	 making it unlikely that customers would implement all the recommender measures simultaneously without a substantial subsidy The cost of administering this type of program (e.g., outreach an marketing, scheduling/call center, audit, contractor coordination, an other administrative costs) is relatively high and, therefore, we must tak full advantage of all cost-effective savings opportunities 				
	Customers will be directed to infor- terms and conditions of any tax inc program will not provide any spec- liability concerns.	centives and	d how to acce	ess them, though the	
Measure Characterization	WECC selected measures with the greatest potential to dramatically alter the thermal integrity of participating Indiana homes. Specific attention was given to reducing air leakage—through blower door guided air sealing—adding or improving upon existing insulation levels (e.g., attic, sidewall, crawl space), and directly installing energy efficient water measures (e.g., showerheads, kitchen and bathroom aerators). The table below outlines the measures selected for this program, including the expected (average) project cost, incentive (expressed as a percentage of the project cost), incentive amount (expressed in dollars), and annual therm savings. As discussed in the previous paragraph, these measures are included in this program because they are the dominant contributors to the success of other retrofit and weatherization programs. More importantly, the measures included are those that customers rarely take action on, for a multitude of reasons, in absence of a program. The measure incentive costs and savings below are the results of the preliminary analysis of the Home Retrofit in PY 2 for the homes that received the retrofits.				
		Averages	I		
	Measure	Incentive (\$)	First Year Gas Savings (therms)		
	Air Infiltration Reduction				
	Air Infiltration Reduction	\$ 189	53		
	Close Flue	\$ 325	45		

Attic Insulation – sloped	\$ 362	84
CITIZENS GAS DSM Portfol	io Operating F	Plan
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Duct sealing 15% leakage base

Attic Insulation - cavity fill

Attic Insulation - open blown ceiling

Insulation

\$ 276

\$ 665

\$ 267

45

118

35

Band joist Insulation	\$184	24	
Crawlspace wall insulation w/ 2 part			
foam (Pending PY3 recommendations)	\$ 460	42	
Floor Insulation	\$ 157	23	
Sidewall Insulation	\$ 800	145	
Knee wall Insulation	\$ 130	24	
Duct Insulation	\$187	65	
Low-Cost Direct Install			
Low-flow Showerheads 1.5 GPM	\$9	52	
Low-flow Faucet Aerators 1.0 GPM	\$ 3	24 (for 2)	

Measures Selected

Air leakage reduction involves three types of measures: blower door guided air sealing, flue closure, and duct sealing. *Blower door guided air sealing* is geared toward reducing overall air infiltration and must be done before attic insulation is installed. The goal is to ensure that an optimal amount of air sealing is done.

Duct sealing can also reduce air infiltration. Supply and return duct leaks in unconditioned spaces increases energy usage, reduces comfort levels, and increases air infiltration rates.

Increasing *insulation* levels (e.g., attic, sidewall, crawl space, floors, ceilings, and knee walls) is an opportunity that is not easily recognized by customers. Additional insulation levels will be included in the program where cost-effective as determined by the current conditions of the home.

Energy efficient water measures will be installed during the audit. The strategy is to ensure some level of savings is realized for all program participants. Showerheads and faucet aerators have been selected as cost-effective measures for direct installation.

Measures Not Selected

Early replacement of equipment, such as furnaces, boilers, and water heaters are often better addressed at the time of normal (also referred to as -natural") replacement. When done as part of a retrofit program, the customer is effectively being asked to replace a piece of equipment that is still operating, and may plan to continue operating it for several years.

Furnace tune-up savings are questionable. Results from a 2006 Ohio report suggests that savings may only be about 3% for high-use customers. Research in Wisconsin could not document savings from tune-ups.

	Reducing water heater temperature is an iterative task—customers change the
	setting and determine, over time, whether or not additional changes are needed. The pilot will consider this part of the education process and work with customers to make sure they are informed about how to change water heater temperature settings. However, this program will not claim credit for any corresponding adjustments, as these are difficult to measure.
	<i>Window replacements</i> will not be considered in this program due to their high costs and relatively low energy savings. Although most consumers think window replacement is one of their best choices, the payback for replacement windows is typically over 20 years.
	Insulation and air sealing upgrades that are not cost effective. With today's lower natural gas prices, only weatherization measures that create positive net benefits will be selected to maintain program cost effectiveness.
End-User Marketing Strategy	WECC will work with the Statewide TPA and Citizens to develop a packet of materials that will be provided to each customer at the conclusion of the audit. Materials will include:
	 Instructions on how to participate in the home retrofit program Information about available incentives
	Once audits have been completed, WECC will propose to follow up with the customer via telephone within two weeks to attempt to secure an agreement to proceed with improvements. In order to control the project budget, customers will have 30 days from the date of this follow up to accept the project proposal. If customers submit the proposal after the funding has been expended, they will be put on a wait list until additional funding becomes available.
Contractor Coordination	WECC's efforts to promote whole-house energy efficiency improvements (when they are cost effective) will include outreach to insulation and air sealing contractors working in the targeted markets. WECC has defined contractor qualifications and a recruitment strategy.
	 BPI is a national accrediting agency used by many home retrofit type programs across the country. BPI establishes testing procedures and safety guidelines for building performance work, as well as providing built-in risk management via: Providing guidance to the home retrofit contracting process Ensuring contractors commit to providing comprehensive solutions for customers

Further, those contractors that are selected must attend training on installation best practices and quality control inspections.

Measurement The measurement and verification process is an important component of this and Verification program's effort. WECC understands that evaluation activities will be completed by a third-party contractor selected through a competitive bidding process. Given the nature of this program effort, there are a number of important evaluation activities that we believe should be strongly considered. First, and perhaps most importantly, this program's effort will work to develop the local weatherization delivery infrastructure, with particular attention given to developing gualified trained installation contractors. Documenting the level of infrastructure development is an important evaluation outcome, as we believe it will help substantiate a very low level of free ridership. In short, it will help prove that program-related services would not be offered in the absence of this program. Second, we believe that billing analysis is an important input to the level of savings achieved in the average (or typical) participant home. It will be important for the third-party evaluators to request this information from Citizens-for the

for the third-party evaluators to request this information from Citizens—for the 12-month period prior to measure installation—at the time measure installation is completed as well as 12 months after that time in order to capture the 12 month period after measure installation.

We believe that an integrated evaluation approach should be taken, including addressing evaluation at the onset of program design, collecting evaluation data as part of pilot administration, assessing and documenting baseline conditions, establishing tracking metrics, developing and refining deemed savings measure databases, as well as conducting primary and secondary research as part of impact, market, and process evaluations.

The overall goal of the impact evaluation will be to assess the development of the market infrastructure, savings for the program measures, and program costeffectiveness. Primary impact metrics are energy savings per participating home, contractor and related infrastructure development, the net-to-gross ratio, and program cost-effectiveness.

Administrative WECC will provide the administrative services listed below in support of the pilot: Requirements

- Accounting services
- Budget tracking
- Contact (call) center services
- Weatherization contractor scheduling services
- Track measure incidence rates

- Track installation rates
- Track total costs, Citizen's costs, customers final costs
- Track energy savings by measure and by total package
- Coordinate marketing with Citizens and State Wide TPA
- Conduct quality control on the home retrofits
- Problem resolution
- Support evaluation activities
- Report to the Oversight Board

WECC will provide the following implementation services:

- Recruit, train, and manage installation contractors
- Deliver proposals to customers
- Follow up with customers to secure agreement to implement
- Provide quality control of installations contractors
- Conduct final inspections

WECC will require assistance from Citizens on the following activities:

- Development and approval of point of sale materials
- Managing public relations if any (e.g. media coverage)

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

		PY4 Program Year									
	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Tor	tal Incentive Cost	Deemed Savings	Gross Ther	Free ms Rider	Net 7	herms	
Home Retrofit Program	TUTTUDTIDUID	licite			0001	oungo	01000 1101				
Audit costs	1100		25.00	\$	27,500						
Air Sealing and Insulation Proposals Gas Only	375		1250.00	\$	468,750	264	99,	000 5%		94,050	
Sub Total	\$ 375			\$	496,250		\$ 99,)00	\$	94,050	

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case									
					Est. Gross	Est. Net	% Gross			
				%	Savings	Savings	Savings			Net Benefits
	Citizens Program	Prog	ram Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	Total
1.90	Home Retrofit Program	\$	662,320	15%	99,000	94,050	5%	1.1	1.8	\$ 159,064

Program Budget Detail and Overhead Allocation

Home Retrofit Program	
Incentives	\$ 496,250
WECC Labor	\$ 102,762
WECC Direct Costs	\$ 63,308
Subcontractor(s)	\$ -
Implementation Subtotal	\$ 662,319.95
Evaluation Allocation	\$ 23,561
WECC Admin Allocation	\$ -
Umbrella Marketing Allocation	\$ -
Allocated Subtotal	\$ 23,561
Subtotal	\$ 685,881

Program	1.8 Multi-family Efficient Equipment Pilot
Objective	The purpose of this program is to:
	 Affect the installation of high efficiency, natural gas fueled space and water heating equipment in those dwellings units within a multifamily dwelling unit that are individually metered for natural gas. Impact a furnace and water heater market segment that
	traditionally considers the lowest first cost, rather than lifecycle operating costs, when making purchasing decisions.
	• Deliver energy efficiency services to an underserved ratepayer market segment (tenant) that traditionally does not participate in the decision to purchase energy efficient equipment.
	This program will accomplish its objectives by promoting the benefits of energy efficiency and encouraging the selection of energy efficient equipment at the time of construction planning or equipment replacement to:
	 Builders engaged in multifamily new construction
	Owners of multifamily dwelling units
	 Property managers of multifamily dwelling units
	The program will seek to minimize free-ridership and target participants who would not have selected energy efficient appliance replacement in the absence of the program.
Target Market	The program will rely on various channels and segments within the multifamily dwelling unit market to recruit participants into the program:
	• New Construction – WECC will educate existing and new trade allies within the single-family new construction network (i.e., design and build firms) on the benefits of building higher efficiency gas-fueled space and water heating units, and the incentives for doing so.
	• Existing Buildings – WECC will target owners and managers of multi-family dwelling units with individually metered units in which furnaces may be approaching the end of their useful lives (i.e., a particular vintage). WECC will also target owners and managers of multi-family dwelling units that have already participated in and benefited from the highly successful direct install program.

	• Trade Ally Network – WECC will educate trade allies within its existing distribution network on the significance of transforming the multifamily market towards higher efficiency equipment. WECC will also educate trade allies on the benefits of doing so including: (1) reduced natural gas consumption within rental units, and (2) increased marketability of rental units resulting from increased energy efficiency of the units.
Program Logic	Barriers to adopting energy-efficient equipment within the multi-family dwelling market include:
	 Lack of energy-efficiency programs in which property owners and managers may participate and limits on participation Focus on first cost, rather than lifecycle operating costs, when making purchasing and replacement decisions The competition among various home features and packages intended to increase the marketability of homes (e.g., granite counter tops versus efficient equipment packages)
	This program will address participation limits as follows:
	 Residential Prescriptive Program currently limits the number of pieces of equipment to be purchased to prevent oversubscription. This program will lift this restriction and allow for funds to be reserved, allowing for capital planning. New Construction Program currently allows builders to participate up to a 12-unit complex. This program will allow complexes of all sizes to participate. Commercial Custom Program allows for meters that provide general service. This is generally for large common spaces and therefore will not allow for individual unit incentives.
	The program will address the first cost barriers in two ways:
	 Provide financial incentives that reduce first costs. Educate property owners and managers on the long-run benefits of installing energy-efficient appliances including: (1) reduced natural gas consumption within rental units; (2) increased marketability of rental units resulting from increased energy efficiency of the units; (3) increased occupancy rates resulting from increased marketability; and (4) the relationship between increased occupancy rates and payback (breakeven) period.

Program Description

The program seeks to achieve its objectives using an approach that separately targets both new construction and existing multi-family dwelling units with units individually metered for natural gas. WECC believes this program pilot has the potential to both produce large immediate savings through infrastructures channels currently in place as well as establish a foundation for future years and future programs that focus on building shell and common spaces measures. WECC also believes this pilot program is a likely candidate for joint electricgas program administration.

New Construction – WECC will make an intensive effort to recruit and educate builders engaged in multi-family new construction about the benefits of incorporating deep efficiency into building design from the onset. WECC will accomplish this by offering builders of multi-family dwelling units with a number of units greater than three (3) an incentive to install a package of measures that address on a system-wide basis natural gas consumption. Measures within the package include high efficiency equipment for space and water heating, a programmable thermostat to controls the space heating equipment, and energyefficient water fixtures to reduce the load on the water heating equipment. All measures within the packages must be fully installed to maximize savings to the program, and in order for the builder to receive the incentive. WECC will conduct outreach to this network of builders through our current relationship with existing builder firms in the residential market that also build multi-family units. Our market outreach will expand to include property owners, design and build firms, and the builders association.

Existing Buildings – The program will target the existing stock of multi-family dwelling units with four (4) or more units in the building that may contain furnaces nearing the end of their useful life and, specifically, those communities where mass furnace replacements are likely. The program will seek to intercept building owners prior to equipment replacement and provide education on the long-run benefits of installing energy efficient equipment including: (1) reduced natural gas consumption within rental units; (2) increased marketability of rental units resulting from increased energy efficiency of the units;(3) increased occupancy rates resulting from increased marketability; and (4) the relationship between increased occupancy rates and payback

(breakeven).5

	Both approaches will work to utilize relationships with the existing trade ally groups that provide high efficiency heating equipment. The rationale for this outreach is to encourage multiple distributors to negotiate reduced costs for large volume purchases and provide this as a competitive solution to provide the apartment communities to streamline decision-making. By working with the trade allies, WECC will continue to make efforts to transform the market segment that may be more prone to base efficiency equipment purchases, in effect creating high program attribution.
Incentive Strategy	The program will offer a new construction track and an existing building option. The owner/-developer will have the option to receive the incentive as a rebate or elect to have it attributed to the equipment provider as a buy-down. Participants of the program will gain access to cash-back incentives for the equipment installed. In order to control volumes to prevent oversubscription, WECC will implement a process by which funds must be reserved for these -projects" prior to implementation. New Construction – The new construction track includes a \$325 to \$505 incentive for an efficient equipment package. The two options consist of space and water heating equipment, a space conditioning control device (presently programmable thermostats), and end use energy saving water fixtures.
	 Package one is \$325 incentive consisting of: A 92% AFUE (or greater) natural gas forced air furnace or a condensing water heater which provides space heating (combination unit) A .62 EF (or greater) natural gas storage water heater > 30 gallons. or a.82 EF tankless water heaters must be installed - this requirement is consistent with the prescriptive incentive offer Programmable thermostat (residential climate control device per upcoming ENERGY STAR® standards) Energy saving water fixtures including 1.5 gallons per minute (gpm) showerhead, 1.5 gpm kitchen aerator, and 1.0 gpm bath aerator.

⁵WECC will also target owners and managers of multifamily dwelling units that have already participated in and benefited from the highly successful direct install program and believes their previous positive experience will increase the likelihood of their participation.

Package two is a \$505 incentive consisting of:

٠	Tankless Rinnai gas water heater (models RC80HPi, RC98HPi)
	supplying domestic hot water and heat to a hydronic furnace
	(model Rinnai 37AHB)

- Programmable thermostat (residential climate control device per upcoming ENERGY STAR® standards)
- Energy saving water fixtures including 1.5 gallons per minute (gpm) showerhead, 1.5 gpm kitchen aerator, and 1.0 gpm bath aerator.

Existing Buildings - The existing building market will be provided an incentive of \$175 for the replacement of an existing natural gas furnace with a 92% AFUE (or greater) natural gas forced air furnace. It will also provide a \$35 incentive for the installation of energy saving water fixtures including 1.5 gallons per minute (gpm) showerhead, 1.5 gpm kitchen aerator, and 1.0 gpm bath aerator and a \$20 incentive for a programmable thermostat.

For the low flow devices, building owners will be give the following installation options:

- 1. HVAC contractor install the low flow devices
- 2. WECC's subcontractor install the low flow devices
- 3. Property Management maintenance staff.

For options 1 and 3, WECC would field verify installation of the low flow devices. For option 2, WECC's subcontractor will report the installed devices.

Marketing Strategy

The program will be marketed to trade organizations as well as direct business to business contacts. WECC will offer training to Citizens Business Managers in order to educate, identify, and contact apartment owner/managers regarding this program.

Specifically WECC will focus on several channels to reach this multifamily audience.

- New Construction WECC will work with Citizens Gas Business Managers to determine a subset of developers, contractors, and architects with which they have existing working relationships. In addition, WECC will work with TSI to utilize their existing network of new construction contractors that also build multifamily buildings.
- **Existing Buildings** WECC will target existing building property owners/management companies through active

	 associations to inform this market of this incentive program. In addition, the relationship with existing property managers, via Citizens Gas Business Managers, will provide additional communication. Lastly, WECC will utilize the existing database of participants in the previous and upcoming multi-family direct install program. <i>Trade Ally Network</i> – In our existing outreach of the Citizens Gas prescriptive programs, WECC will promote this pilot effort to distributors, mechanical contractors, architectural, and engineering firms.
Measurement and Verification	WECC will collect the following information on each incentive transaction in order to facilitate accurate measurement and verification:
	 Property owner/manager data (i.e., name, address, telephone, e-mail); Builder data (i.e., name, address, telephone, e-mail); Installation data (i.e., address, date completed, equipment installed); Measure information (i.e., quantity, equipment model numbers and efficiency); Transaction data (i.e., invoice, measure cost, installation date) WECC will perform field verification on each applicant. WECC will verify a minimum of 2% of the measures installed for each applicant to ensure product installation and verify equipment model number. Any
	inconsistencies will be researched and resolution recorded.
Administrative Requirements	WECC will provide the administrative services listed below in support of the program:
	 Managing outreach Budget tracking Fulfillment services Program management Accounting services Enforce customer service standards Data tracking systems Onsite verification of incentive claims Managing public relations Problem resolution Supporting evaluation activities Reporting to the Oversight Board

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Metrics	The primary program metrics will include:
	 Annual gross and net therm savings Number of participants Delivery at or below budgeted costs Achieving forecasted benefit/cost results Field verification visits
Leverage Opportunities	WECC will leverage third-party resources to benefit the program by coordinating with trade allies, associations, and Citizens Gas Business Managers to market the program.
	This program will also provide the groundwork for future program development and expansion.
Utility Integration	WECC will coordinate the following activities with Citizens Gas staff:
	 Provide training to utility staff on program content, terms and conditions as needed
	 Assist corporate communications staff with the development of marketing materials and webpage content
	 Coordinate outreach to builders and other trade allies with Citizens Gas Business Managers

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

		PY4 Program Year									
	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Tota	al Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms		
Multi-Family Efficient Equipment Pilot											
New Construction Track											
High Efficiency Equip. Package (Furnace, Water Heater, Programmable Thermostat, Show erhead, Aerators)	175		325.00	\$	56,875	154	26,950	0%	26,950		
Rinnai Hot Water heat with Hydronic boiler	175		505.00	\$	88,375	128	22,400	0%	22,400		
Mass Retrofit				1							
Furnace (Thermostat and DHW)	150		230.00	\$	34,500	116	17,400	0%	17,400		
Sub Total	500			\$	179,750		66,750		66,750		

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case									
					Est. Gross	Est. Net	% Gross			
				%	Savings	Savings	Savings			Net Benefits
	Citizens Program	Prog	gram Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	Total
1.80	Multifamily Efficient Equipment Pilot	\$	201,985	5%	66,750	66,750	3%	1.0	2.4	\$ 8,506

Program Budget Detail and Overhead Allocation

Multifamily Efficient Equipment Pilo	ot	
Incentives	\$	179,750
WECC Labor	\$	12,235
WECC Direct Costs	\$	10,000
Subcontractor(s)	\$	-
Implementation Subtotal	\$	201,985.00
Evaluation Allocation	\$	7,185
WECC Admin Allocation	\$	-
Umbrella Marketing Allocation	\$	-
Allocated Subtotal	\$	7,185
Subtotal	\$	209,170

Program 2.1 General Service Prescriptive Incentive Program

- Objective Affect the installation of high efficiency natural gas fueled space and water heating technologies by general service customers who would not have done so in the absence of the program.
- Target MarketThe General Service Prescriptive Incentive program will broadly target
general service rate customers participating in the retrofit markets for
targeted products.
- Program Description The program will affect the purchase and installation of efficient technologies through a combination of market push and pull strategies that stimulate demand while simultaneously increasing market provider investment in stocking and promoting them. This approach is consistent with that employed in Program Year 3.

The program will stimulate demand by educating general service customers about the energy and money saving benefits associated with efficient products via advertising, website, and equipping trade allies to communicate the benefits to customers. Financial incentives (i.e. cash-back mail-in rebates) to purchase targeted products will address customer objections to paying more for them than standard efficiency products. The program will also include a direct install component with low flow pre-rinse sprayers for commercial kitchens.

The program will stimulate market provider investment in stocking and promoting efficient products through a proactive effort to train and equip them to convey the energy and money saving benefits to targeted customers. Further, the existence of cash-back incentives will elevate efficiency to a competitive issue that will naturally motivate market providers to stock and promote targeted products.

Program Logic The primary barriers to increasing market penetration of high-efficiency, natural gas space and water heating technologies include:

- Higher cost to upgrade from standard to high-efficiency products
- Recent economic factors reducing capital and operating budgets
- Lack of awareness regarding the energy and money saving benefits
- Lack of immediate availability of efficient products

The first cost barrier will be addressed through a combination of financial incentives and educating business customers about the payback they will receive in the form of lower energy bills. Awareness regarding the financial payback and other benefits associated with efficient products will be

	promoted via Citizens Gas' advertising and web site. Market providers will be supplied with collateral materials to help them convey the benefits of efficient products to customers at the point of sale.
	Product availability will be addressed as market providers adjust to meet increased demand generated by incentive offers and consumer education activities. WECC will continue to work with retailers such as Lowe's on their promotion of applicable rebates in store with signage and employee education. In addition, aggressive outreach to market providers via direct mail, telephone contacts, in-person visits, and group presentation meetings will reinforce the availability of incentives and targeted products.
	Strategies for reducing the free-ridership risk include:
	 Incentive claims must be submitted within 90 days of purchase. Efficiency standards are set well above baseline levels. Incentive amounts are sufficiently meaningful to influence purchase decisions.
Marketing Strategy	The program will be marketed to General Service customers via Umbrella Marketing activities, website, and print materials (e.g. incentive claim forms, product fact sheets) distributed through market providers.
	WECC staff will continue to manage and conduct outreach to market providers in cooperation with Citizens Gas staff. Activities will include in- person visits to train and equip market providers to communicate program information to customers. Direct outreach will be conducted at market providers' places of business and through trade associations. Key market providers that will be targeted include:
	 HVAC distributors and retail contractors – for furnaces, boilers, thermostats, water heaters. Water heater distributors and retail contractors (e.g. plumbers, HVAC contractors) – for water heaters. Big box retailers (e.g. Menards, Home Depot) – for water heaters, thermostats, furnaces.
	Outreach activities will include:
	 A mass mailing of program materials and update letter to market providers communicating program changes. Follow-up telephone calls to ensure market providers received information through the mail, answer questions, and offer to provide in person training for sales people.

- Face-to-face visits with trade allies at their place of business to provide training on program terms, conditions, and sales-aids.
- Organizing group training opportunities (e.g. participate in annual product knowledge training hosted by manufacturers).
- Supplying equipment manufacturer and distributor representatives with materials and information that they can pass on to retailers and contractors.

Educational strategies include the addition of an ENERGY STAR video and potentially an interactive tool related to both purchase recommendations and programming instructions. Customers who participate in the rebate program will also be educated on where they can get further information on the proper use of the programmable thermostat on the letter attached to their rebate check.

WECC staff will provide technical support as needed to contractors and customers who need help qualifying or specifying equipment or have technical questions that are beyond the ability of call center staff to answer.

Measure Characterization The proposed natural gas saving measures and corresponding efficiency standards, incentive amounts, and per unit first-year gross or -deemed" therm savings are listed below. All efficiency standards are consistent with Program Year 3 with the exception of the three measures evaluated during the most recent Cadmus evaluation. These included 0 .62 EF Storage Water Heaters, 0.82 EF tankless water heaters and boiler tune ups. WECC is proposing to continue to offering incentives on the existing .62EF water heaters at the lower level introduced in the latter part of the current program year and continue the new 067EF water heaters incentives. We will reevaluate the need for .62EF incentive in the future, but Cadmus' recent evaluation showed that incentives for this measure are still effective in the marketplace.

In February of 2012, Energy Star is also expected to introduce new criteria for Residential Climate Controls systems formerly referred to as a programmable thermostat. The new product requirements advance additional elements for energy savings. WECC will continue to monitor the new specifications and product availability and will advise and solicit input on adoption once product becomes available. Programmable thermostats will continue to be offered with improvements to consumer education regarding their use to maximize energy efficiency potential.

Incentive Strategy	WECC proposes to maintain the most of PY03 product lineup and incentive levels, which equaled 20% to 40% of the incremental cost to purchase energy efficient products.					
	Maintaining the existing incentive levels and efficiency standards will ensure consistency with other Indiana DSM programs and underscore the reliability of the program among market providers. Incentive amounts by technology are listed in the Measure Characterization section below.					
Measurement & Verification	To facilitate accurate measurement and verification WECC will collect the following information on each incentive transaction:					
	 Customer data (e.g. name, address, telephone, e-mail) Installation data (e.g. address, date, contactor) Measure information (e.g. quantity, model, serial number, efficiency) Transaction data (e.g. invoice, measure cost, purchase date) 					
	The information will be available to Citizens Gas via an electronic interface and will be supplied to a third-party evaluator upon request.					
	WECC will verify that each product on which incentives are paid meets the prescribed efficiency standards using third party databases (e.g. ENERGY STAR, GAMA, and AHRI). Products that cannot be verified using a credible third party database will be considered on a case-by-case basis; product performance information will be requested from the contractor, distributor, or manufacturer and efficiency will be verified by a qualified engineer.					
	WECC staff will conduct onsite inspections of 2% of equipment for which customers receive incentives to verify (1) products were installed and (2) model and serial numbers match those provided on the incentive claim. Any inconsistencies will be researched and the resolution recorded. Contractors associated with inconsistencies will receive follow up inspections on projects that they are associated with. This activity is designed to prevent fraud based on the threat that installations will be verified, however, it is important to note that the chances of detecting it are statistically low given the small sample size.					
	As an additional fraud prevention measure, WECC will cross-reference all incentive claims as they are processed to identify duplicate serial numbers and multiple matching model numbers associated with individual customers or installation addresses.					
	To facilitate planning and accurate estimates of free ridership rates, WECC staff will collect sales data on key measures from participating trade allies.					

Key measures include furnaces and water heaters. This information will

	provide WECC and the Oversight Board with an indication of the market share of high efficiency products. Finally, WECC will maintain the online resource for customers to provide feedback on their experience with the program. Customers will be directed to this resource via a note that accompanies their incentive claim check. The survey tool serves to assess the quality of the customer's experience with the program and its influence on their purchase decision.
Administrative	WECC will provide the administrative services listed below in support of the
Requirements	program, as outlined in our contract:
	 Managing subcontractors. Budget tracking Fulfillment services Contact (call) center services Accounting services Enforce customer service standards Data tracking systems Onsite verification of incentive claims Managing public relations Problem resolution Manage and oversee procurement Supporting evaluation activities Supporting Customer Satisfaction Survey (on-line) Reporting to the Oversight Board
	These services are included in the program administration budget.
Program Metrics	The primary program metrics will include:
	 Annual gross and net therm savings Number of participating customers Delivery at or below budgeted costs Achieving forecasted benefit-cost results Proposed secondary program metrics include: 80% customer satisfaction rating based on survey result. In person visits to 75% of trade allies targeted for the initial mailing Identify and execute group training/exhibiting opportunities during the year

Leveraging Opportunities	WECC will pursue the following opportunities to leverage third-party resources to benefit the program:
	 Leverage national marketing messages from ENERGY STAR. Coordinate program delivery with other Indiana utilities to minimize confusion the marketplace and reduce costs through economies.
Utility Collaboration	WECC will coordinate the following activities with Citizens Gas staff:
	 Provide training to utility staff on program content, terms and conditions as needed. Assist Corporate Communications staff with the development of marketing materials and webpage. Coordinate outreach to end-use customers, builders and other trade allies. Coordinate umbrella marketing activities.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Participation, Incentives, Savings

	PY4 Program Year								
	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	т	otal Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
General Service Prescriptive									
92% -94.9% A FUE Furnace	47		\$ 200	\$	9,400	101.00	4,747	50%	2,374
95% + AFUEFurnace	47		\$ 250	\$	11,750	116.00	5,452	50%	2,726
Unit Heater	22		\$ 200	\$	4,400	215.00	4,730	50%	2,365
Programmable T-Stat	180		\$ 20	\$	3,600	43.00	7,740	50%	3,870
.62 EF W ater Heater (9/11 thru 8/12)	9		\$ 50	\$	450	15.71	141	20%	113
.67 EF W ater Heater	9		\$ 150	\$	1,350	37.00	333	5%	316
.82 EF W ater Heater Tankless	20		\$ 150	\$	3,000	64.67	1,293	50%	647
90% AFUE Boiler	30		\$ 5,000	\$	150,000	2560.00	76,800	20%	61,440
Boiler Tune Up	150		\$ 250	\$	37,500	2285.93	342,890	20%	274,312
Boiler Mod Burner Cntrl	6		\$ 2,500	\$	15,000	1152.00	6,912	20%	5,530
Low flow Pre-Rinse Sprayer	10		\$ 25	\$	250	432.00	4,320	20%	3,456
Low flow Pre-Rinse Sprayer-direct install	60		\$ 49	\$	2,940	432.00	25,920	0%	25,920
Steam Trap Buydown	21		\$ 50	\$	1,050	203.00	4,263	20%	3,410
Sub Total	611			\$	240,690		485,541		386,478

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case									
					Est. Gross	Est. Net	% Gross			
				%	Savings	Savings	Savings			Net Benefits
	Citizens Program	Progr	am Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	Total
2.10	General Service Prescriptive	\$	334,983	8%	485,541	386,478	25%	1.7	2.5	\$ 396,151

Program Budget Detail and Overhead Allocation

General Service Prescriptive	
Incentives	\$ 240,690
WECC Labor	\$ 70,793
WECC Direct Costs	\$ 23,500
Subcontractor(s)	\$ -
Implementation Subtotal	\$ 334,983.00
Evaluation Allocation	\$ 11,916
WECC Admin Allocation	\$ 12,912
Umbrella Marketing Allocation	\$ 41,250
Allocated Subtotal	\$ 66,079
Subtotal	\$ 401,062

Appendix A: Program Year 4 Benefit-Cost Forecast

To Be Inserted Upon Program Plan Approval – See Attachment

1.1 Residential - Prescriptive

					In	puts			Sav	ings yr. 1	Net Benefi	ts
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	B/C - TRC
Implementation Costs - Res			0				0%	1	0	0	(\$89,407)	0.00
Prescriptive			0 Admi	<mark>n \$</mark> \$8	9,407.00		0%	1	0	0 Alternative Avoided Costs	(\$89,407)	0.00 0.00
Tankless Water Heater82 EF			62	20	\$800	\$150 19%	37%	127	4,976	0 Alternative Avoided Costs	(\$24,051) (<i>\$16,367)</i>	0.60 0.74
ENERGY STAR Thermostat - Replace Existing	328		37	13	\$50	\$20 40%	22%	1,292	37,761	330,545 Alternative Avoided Costs	\$284,451 <i>\$325,656</i>	6.60 <i>7.46</i>
Evaluation Allocation Costs			0 Admi	n \$\$2	2,731.00		0%	1	0	0 Alternative Avoided Costs	(\$22,731) (\$22,731)	0.00 0.00
92%-94.9% AFUE Furnace			84	15	\$650	\$200 31%	36%	500	26,880	0 Alternative Avoided Costs	(\$26,293) \$6,745	0.90 1.03
.62 or Higher EF Water Heater (9/11 - 8/12)			13	13	\$150	\$50 33%	9%	214	2,573	0 Alternative Avoided Costs	(\$14,614) (<i>\$11,807)</i>	0.50 <i>0.60</i>
90% AFUE Boiler - Existing - Residential			67	20	\$500	\$500 100%	20%	20	1,072	0 Alternative Avoided Costs	\$1,105 <i>\$2,760</i>	1.10 <i>1.35</i>
Admin Allocation Costs			0 Admi	n\$\$4	0,667.00		0%	1	0	0 Alternative Avoided Costs	(\$40,667) (\$40,667)	0.00 <i>0.00</i>



1.1 Residential - Prescriptive

				Ir	nputs			Sav	ings yr. 1	Net Benefit	S
Description	kWh kV	/ Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits B	B/C - TRC
Mktg Allocation Costs		0				0%	1	0	0	(\$96,250)	0.00
		Adm	in\$\$9	96,250.00					Alternative Avoided Costs	(\$96,250)	0.00
95%+ AFUE Furnace	713	94	15	\$650	\$250	36%	1,300	78,208	593,216	\$206,613	1.40
					38%				Alternative Avoided Costs	\$302,737	1.56
95%+ AFUE Furnace w/o		94	15	\$250	\$250	36%	200	12,032		\$49,335	2.50
Electric					100%				Alternative Avoided Costs	\$64,123	3.00
.67 EF Water Heater (9/11 -		37	13	\$300	\$150	5%	60	2,109	0	(\$5,133)	0.70
8/12)					50%				Alternative Avoided Costs	(\$2,832)	0.83



1.1 Residential - Prescriptive

				Inputs					Savings yr. 1		Net Benefits	
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC	

Subtotal - 1.1 Residential - Prescriptive

<u>kWH</u>	<u>kW</u>	Therms
923,761	0	165,610

	Total		
Net Benefits	\$222,358		
	\$421,961	Alternative Avoided Costs	
TRC B/C	1.19		
	1.4	Alternative Avoided Costs	
Utility B/C	1.8		_
	2.0	Alternative Avoided Costs	
Budget	\$798,645		



					In	puts			Savi	ings yr. 1	Net Benefi	its
Description	kWh	kW The	rms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC
CG - Implementation Costs - Res Targeted Wx			0 Admi	.n \$ \$5	56,122.00		0%	1	0	Alternative Avoided Costs	(\$56,122) (<i>\$56,122</i>)	0.00) 0.00
CG - Weatherize Single Family Home Gas Heat	651	2	295	30	\$6,500	\$6,500 100%	0%	62	18,290	40,362 Alternative Avoided Costs	(\$170,223) (\$132,447)	0.60) 0.67
CG - Evaluation Allocation Costs			0 Admi	n \$ \$1	6,332.00		0%	1	0	Alternative Avoided Costs	(\$16,332) (<i>\$16,332</i>)	0.00

1.3 Res - Low Income Weatherization



			Inputs	F (gs yr. 1	Net Ben	efits
scription	kWh kW Th	herms Est. Life	Incr. Incentive Cost \$/%	Est. Est Free Par Rider	kWh	Total Net Benefits	B/C - TRC
Subtotal -	1.3 Res - L	ow Income	Weatheriza	ition			
ŀ	<u>KWH kW</u>	Therms					
	40,362 0	18,290					
	Total						
Net Benefits	(\$242,677)						
	(\$204.001)	Alternative Av	oided Costs				
	(\$204,901)						
TRC B/C	(\$204,901) 0.49						
TRC B/C		Alternative Avo					
TRC B/C	0.49						
	0.49 0.6		oided Costs				



				In	puts			Savin	ngs yr. 1	Net Benefits	5
Description	kWh k	W Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	C - TRC
Evaluation Allocation Costs		0				0%	1	0	0	(\$8,374)	0.00
		Ad	nin \$	\$8,374.00				,	Alternative Avoided Costs	(\$8,374)	0.0
Implementation Costs		0				0%	1	0	0	(\$40,000)	0.0
		Ad	nin \$	\$40,000.00				,	Alternative Avoided Costs	(\$40,000)	0.00
Air Sealing/Insulation Gas	1,076	311	30	\$3,200	\$1,600	0%	55	17,105	59,180	\$54,976	1.30
Homes w/CAC					50%			,	Alternative Avoided Costs	\$90,305	1.5
Direct Install Kits		75	7	\$44	\$44	0%	800	60,000		\$173,343	5.90
					100%				Alternative Avoided Costs	\$211,295	6.9
Air Sealing/Insulation Gas	1.050	311	30	¢2 200	¢1 (00	00/	45	12 005	17.655	\$44,506	1.20
Homes no CAC	1,059	511	50	\$3,200	\$1,600 50%	0%	45	13,995	47,655 Alternative Avoided Costs	\$44,306 \$73,411	1.3 1.5



			Inputs			Saving	s yr. 1	Net Bene	efits
scription	kWh kW T		ncr. Incentive ost \$/%	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRO
Subtotal -	1.7 Reside	ntial - Retrof	it Ramp-u	p Pilo	ot				
<u>k</u>	<u>WH kW</u>	<u>Therms</u>							
1	06,835 0	91,100							
	Total								
Net Benefits	\$224,451								
	\$326,636	Alternative Avoid	ed Costs						
TRC B/C	1.56					_			
			ed Costs						
	1.8	Alternative Avoid							
Utility B/C	1.8 2.6	Alternative Avoid							
		Alternative Avoid	ed Costs						



1.8 Multi-family Equipment Pilot

				In	puts			Savi	ings yr. 1	Net Benefit	s
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	/C - TRC
Water Heater											
Rinnai Hot Water heat with Hydronic boiler	600	128	16	\$1,273	\$505 40%	0%	175	22,400	105,000 Alternative Avoided Costs	(\$22,377) \$6,640	0.90 1.03
Building Shell											
Mass Retrofit (Furnace &		116	15	\$605	\$230	0%	150	17,400	0	\$26,873	1.30
DHW)					38%				Alternative Avoided Costs	\$48,259	1.53
High Eff. Equip. Package		154	15	\$850	\$325	0%	175	26,950	0	\$33,430	1.20
(Furnace, Water Heater, Prog. Thermostat, Showerhead, Aerators)					38%				Alternative Avoided Costs	\$66,554	1.45
Admin											
Evaluation Allocation Costs		0				0%	1	0	0	(\$7,185)	0.00
		Admi	in \$	\$7,185.00					Alternative Avoided Costs	(\$7,185)	0.00
Mktg Allocation Costs		0				0%	1	0	0	\$0	0.00
		Ŭ				070		0	Alternative Avoided Costs	\$0	#Num!
Implementation Costs - Mult.		0				0%	1	0	0	(\$22,235)	0.00
Family DI		Admi	• • •	22,235.00		070	1	0	O Alternative Avoided Costs	(\$22,235)	0.00



				Ir	nputs		Saving	s yr. 1	Net Benefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC
Admin Allocation Costs		0				0%	1	0	0 ernative Avoided Costs	\$	0 0.00 \$0 #Num.



			Inputs	-		Saving	s yr. 1	Net Bene	efits
escription	kWh kW		ncr. Incentive Cost \$/%	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRO
Subtotal ·	1.8 Multi-	family Equip	ment Pilot						
	<u>kWH kW</u>	<u>Therms</u>							
	105,000 0	66,750							
	Total								
Net Benefits	\$8,506								
	\$92,033	Alternative Avoid	ded Costs						
TRC B/C	1.02					_			
	1.2	Alternative Avoid	ed Costs						
Utility B/C	2.4								
	2.8	Alternative Avoid	ed Costs						



1.8 Residential - Home Retrofit

				In	puts			Sav	ings yr. 1	Net Benefit	S
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	9/C - TRC
Admin Allocation Costs		0				0%	1	0	0 Alternative Avoided Costs	\$0 <i>\$0</i>	0.00 #Num!
Audit Costs		0	30	\$25	\$25 100%	0%	1,100	0	Alternative Avoided Costs	(\$27,500) (\$27,500)	0.00 <i>0.00</i>
Air Sealing/Insulation Proposals Gas Only	899	264	30	\$2,500	\$1,250 50%	5%	375	94,050	320,269 Alternative Avoided Costs	\$376,195 <i>\$570,445</i>	1.40 <i>1.64</i>
Mktg Allocation Costs		0				0%	1	0	0 Alternative Avoided Costs	\$0 <i>\$0</i>	0.00 #Num!
Implementation Costs		0 Admi	n\$\$1	66,070.00		0%	1	0	0 Alternative Avoided Costs	(\$166,070) <i>(\$166,070)</i>	0.00 0.00
Evaluation Allocation Costs		0 Admi	n\$\$	23,561.00		0%	1	0	0 Alternative Avoided Costs	(\$23,561) (\$23,561)	0.00 0.00



			Inputs			Saving	s yr. 1	Net Bene	efits
escription	kWh kW T		Incr. Incentive Cost ^{\$ / %}	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC
Subtotal -	1.8 Reside	ntial - Home	e Retrofit						
!	<u>kWH kW</u>	<u>Therms</u>							
3	320,269 0	94,050							
	Total								
Net Benefits	\$159,064								
	\$353,314	Alternative Avo	ded Costs						
						_			
TRC B/C	1.14								
TRC B/C	1.14 1.3	Alternative Avoid	ded Costs						
TRC B/C		Alternative Avoid	ded Costs						
	1.3	Alternative Avoid							



2.1 Commercial - Prescriptive

				Ir	puts			Sav	ings yr. 1	Net Benefits	
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	B/C - TRC
Boiler Tune Up - Commercial		2286	2	\$350	\$250 71%	20%	150	274,312	0 Alternative Avoided Costs	\$248,370 <i>\$301,165</i>	6.90 8.17
.82 EF Water Heater Tankless		65	20	\$700	\$150 21%	50%	20	647	0 Alternative Avoided Costs	(\$1,807) <i>(\$808)</i>	0.70
Implementation Costs - Com Prescriptive		0 Admi	in \$\$9	4,293.00		0%	1	0	0 Alternative Avoided Costs	(\$94,293) <i>(\$94,293)</i>	0.00 <i>0.00</i>
Low Flow Pre Rinse Sprayers - Direct Install		432	5	\$65	\$49 75%	0%	60	25,920	0 Alternative Avoided Costs	\$58,538 <i>\$70,545</i>	16.00 <i>19.09</i>
95%+ AFUE Furnace		116	15	\$650	\$250 38%	50%	47	2,726	0 Alternative Avoided Costs	\$3,153 <i>\$6,503</i>	1.20 <i>1.43</i>
Low Flow Pre Rinse Sprayers		432	5	\$65	\$25 38%	20%	10	3,456	0 Alternative Avoided Costs	\$7,805 <i>\$9,406</i>	16.00 <i>19.09</i>
Steam Trap Buy Down		203	7	\$75	\$50 67%	20%	21	3,410	0 Alternative Avoided Costs	\$10,604 <i>\$12,761</i>	9.40 11.13
Unit Heater		215	7	\$676	\$200 30%	50%	22	2,365	0 Alternative Avoided Costs	\$343 \$1,839	1.00 1.25



2.1 Commercial - Prescriptive

					In	puts			Sav	ings yr. 1	Net Benefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	/C - TRC	
90% AFUE Boiler			2560	20	\$12,800	\$5,000 39%	20%	30	61,440	0 Alternative Avoided Costs	\$214,647 <i>\$309,528</i>	1.70 2.01	
Evaluation Allocation Costs			0 Admi	n\$\$	611,916.00		0%	1	0	0 Alternative Avoided Costs	(\$11,916) <i>(\$11,916)</i>	0.00 <i>0.00</i>	
ENERGY STAR Thermostat - Replace Existing			43	13	\$50	\$20 40%	50%	180	3,870	0 Alternative Avoided Costs	\$18,727 <i>\$22,950</i>	5.20 6.10	
Admin Allocation Costs			0 Admi	n\$\$	612,912.00		0%	1	0	0 Alternative Avoided Costs	(\$12,912) (<i>\$12,912</i>)	0.00 <i>0.00</i>	
Mktg Allocation Costs			0 Admi	n\$\$	641,250.00		0%	1	0	0 Alternative Avoided Costs	(\$41,250) (\$41,250)	0.00 <i>0.00</i>	
.67 EF Water Heater			37	13	\$300	\$150 50%	5%	9	316	0 Alternative Avoided Costs	(\$770) <i>(\$425)</i>	0.70 <i>0.83</i>	
.62 or Higher EF Water Heater (9/11 - 8/12)			16	13	\$150	\$50 33%	20%	9	113	0 Alternative Avoided Costs	(\$438) <i>(\$315)</i>	0.60 <i>0.71</i>	
92% - 94.9 AFUE Furnace			101	15	\$650	\$200 31%	50%	47	2,374	0 Alternative Avoided Costs	\$770 \$ <i>3,687</i>	1.10 <i>1.24</i>	



2.1 Commercial - Prescriptive

			Ir	nputs			Savin	gs yr. 1	Net Benefit	S
Description	kWh kW Thern	s Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits E	8/C - TRC
Boiler Modulating Burner Control	1152	15	\$8,500	\$2,500 29%	20%	6	5,530 A	0 Alternative Avoided Costs	(\$3,420) <i>\$3,376</i>	0.90 1.08



2.1 Commercial - Prescriptive

			Inputs			Savings	s yr. 1	Net Bene	efits
Description	kWh kW Therms	Est. Life	Incr. Incentive Cost ^{\$ / %}	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC

Subtotal - 2.1 Commercial - Prescriptive

<u>kWH</u>		<u>kW</u>	Therms
	0	0	386,478

	Total		
Net Benefits	\$396,151		
	\$579,843	Alternative Avoided Costs	
TRC B/C	1.65		
	2.0	Alternative Avoided Costs	
Utility B/C	2.5		_
	3.0	Alternative Avoided Costs	
Budget	\$401,061		



3 Program Administration

				lr	nputs			Saving	s yr. 1	Net Bene	fits
Description	kWh kW	Therms	Est. Life	Incr. Cost	¢ / 0/	Est. Free Rider	Est. # ⁻ Partic.	Therms	kWh	Total Net Benefits	B/C - TRC
Support Costs - Administration		0				0%	1	0	0	(\$326,953	3) 0.00
(unallocated)		Admi	in \$\$32	6,953.00		0,0	-		ernative Avoided Costs	(\$326,95	,



3 Program Administration Inputs Savings yr. 1 **Net Benefits** Est. Incr. Incentive Est. # **Total Net** Est. Free Description kWh kW Therms Partic. \$/% Therms kWh **Benefits** B/C - TRC Life Cost Rider **Subtotal - 3 Program Administration** kWH kW Therms 0 0 0 Total **Net Benefits** (\$326,953) (\$326,953) Alternative Avoided Costs TRC B/C 0.00 0.0 **Alternative Avoided Costs** 0.0 Utility B/C 0.0 **Alternative Avoided Costs** Budget \$326,953



4 Marketing/Cu	istomer E	ducatio	on	Ir	puts			Saving	s vr. 1	Net Benef	its
Description	kWh kW	Therms	Est. Life	Incr. Cost	¢ / 0/	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net	B/C - TRC
Support Costs - Marketing (unallocated)		0 Adm	in \$\$6	8,750.00		0%	1	0 Alt	0 ernative Avoided Costs	(\$68,750) (\$68,750	



	. <u></u>		Inputs			Saving	s yr. 1	Net Ben	efits
Description	kWh kW T	Est. herms Life	Incr. Incentive Cost \$/%	Est. Free Rider	Est. # Partic.	Therms	kWh	Total Net Benefits	B/C - TRC
Subtotal -	4 Marketin	g/Custome	r Educatior	n					
<u>ŀ</u>	<u>KWH KW</u>	Therms							
	0 0	0							
	Total								
Net Benefits	(\$68,750)								
	(\$68,750)	Alternative A	voided Costs						
TRC B/C	0.00					_			
	0.0	Alternative Av	oided Costs						
	0.0								
Utility B/C									
Utility B/C	0.0	Alternative Av	oided Costs						



Total All Measures

	<u>kWH</u>	<u>kW</u>	Therms
1	,496,227	0	822,278
		Total	
Net Benefits		\$372,15	0
	\$	1,173,183	Alternative Avoided Costs
TRC B/C		1.08	
		1.3	Alternative Avoided Costs
Utility B/C		1.6	
		1.8	Alternative Avoided Costs
Budget		\$3,209,680)



Citizens Gas (PY 4) & Indianapolis Power & Light Company (PY2)

Joint DSM Program (Natural Gas/Electric) Operating Plan



Prepared by:

Wisconsin Energy Conservation Corporation Submitted: August 26, 2011 Revised: January 24, 2012



Citizens Gas / IPL Joint Demand Side Management Operating Plan Table of Contents Prepared by: Wisconsin Energy Conservation Corporation January 25, 2012

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Citizens Gas / IPL Joint Demand Side Management Operating Plan Prepared by: Wisconsin Energy Conservation Corporation January 25, 2012

Introduction

WECC is pleased to present the Oversight Board the second proposed Joint Demand Side Management Operating Plan for the period September 1, 2011 through August 31, 2012. The Joint Operating Plan supplements individual utility Operating Plans and provides a format that allows a better assessment of jointly delivered programs. The Joint Operating plan spans programs encompassing Citizens Gas Program Year 4 Natural Gas DSM Programs and IPL's Program Year 2 Electric DSM Programs. The Joint Operating Plan contains both an Executive Summary of the proposed portfolio as well as detailed Program Operating Plans. Last year WECC provided the TRC's and net benefits of the combined programs. This year we have provided the TRC's and net benefits by company. In the August 26th version, WECC provided separate TRC and TRC results by company to demonstrate the effect of the extremely low cost of natural gas based upon the agreed upon EIA reference case

Below is a summary the inputs that have changed from the August 26th Operating Plan.

Original Plan

The original plan used the \$4.30 per Mcf 2011 NYMEX commodity price of natural gas along with a yearly gas price inflation rate equal to a CPI inflation of 2.1%. The cost of gas transportation was \$.50 per Mcf and a winter adder of \$.60 per Mcf was based on NYMEX futures winter prices above summer prices. This yields a year round savings value of \$4.80 per Mcf (\$.48 per therm) and a winter only savings value of \$5.40 per Mcf (\$.54 per therm). A 7.66% discount rate was used based on previous year planning values. The results of the original plan are shown in column 1 of the Table A below.

Original Plan With EIA Prices

The original plan (deemed savings values, budgets, participation, etc.) was used but with a \$4.70 per Mcf 2012 commodity price of natural gas from EIA's AEO 2011. While price inflation varies by year in the EIA, the average year price inflation is ~3.8% which is above a CPI inflation of 2.1%. The winter adder of \$.30 per Mcf based on Citizens storage cost was used instead of the \$.60 based on NYMEX futures winter prices above summer prices. This yields a year round savings value of \$5.20 per Mcf (\$.52 per therm) and a winter only savings value of \$5.50 per Mcf (\$.55 per therm). A 6.4% discount rate was used to reflect Citizens current discount rate. The results are shown on column 2 of the Table A below.

Proposed Enhanced Plan With EIA Prices

The BC results from proposed enhancements to the plan are shown in Column 3 of Table A below. The gas price and discount rate assumptions from Column 2 continue to be used in Column 3. For clarity purposes, both the changes to both the Citizens Gas only programs and the Citizens Gas/IPL joint programs are summarized below. Results of all programs Citizens Gas only and Joint Programs are displayed in Table A.

Citizens Gas Only Programs

- Prescriptive program. 92% AFUE furnaces are phased out of this program with 50% lower participation compared to the original filed planned to reflect the discontinuation of this technology because of cost-effectiveness concerns and recognizing the market for furnaces has evolved. The kWh saved from the higher efficiency furnaces from using more efficient fans (ECM) and multi-stage heating are included consistent with the direction to include gas, electric and water benefits in the Total Resource Cost test. However, these savings are only included when they are not associated with a high efficiency ac unit, because these savings will be counted in a proposed IPL program.
- 2. Low-income weatherization. Insulation, air sealing, insulation, and efficient furnaces save electricity as well as gas in gas heated homes. These kWh savings are from the furnace fan not running as long because less heating energy is needed, air conditioning savings from lower heat gains, and the efficient ECM fan motors in efficient furnaces also save electric energy. Both gas and electricity are resources that are counted in a Total Resource Cost BC.
- 3. Home Retrofit. The home retrofit program uses software that calculates cost effectiveness of each measure. Insulation and air sealing proposals will only include measures that are cost effective. The \$3,000 incremental cost per house is a historical value from a program delivered when a significantly higher gas prices (~\$7.50 per Mcf)/savings existed. Using the EIA AEO 2011 gas price forecast as a guide for cost-effectiveness, the amount of conservation costs proposed to the customer will be lower than initially planned. The lowering of the incremental costs from \$3,000 to \$2,500 will reduce the 50% share of incentives paid to \$1,250. While additional program management attention to this issue will likely be necessary, no change to the program administrative budget has been made.
- 4. Retrofit Ramp-up. No changes in the program savings or costs have been made. The life of direct install water low-flow kits has been reduced to 7 years because a 30 year life was inadvertently used for the original plan.

Joint Citizens Gas/IPL Programs

5. New Construction. WECC's budget for labor and marketing is reduced \$21,791. The plan was subsequently revised to reflect a phase out of the Citizen's New construction program effective May 31, 2012.

The TRC results for each CG only program and for the joint CG/IPL programs are displayed in Table A the following page. Following Table A is a graph showing the natural gas fuel price for each of the price scenarios considered in Table A. For comparison purposes, we have also graphed natural gas prices under two other EIA forecast scenarios.

Table - A

Program Name

Home retrofit

Retrofit ramp-up

Multifamily pilot

Residential prescriptive

Low-income weatherization

0.8

0.3

0.6

2.3

0.8

2) August 2011 Citizens Aug. 2011 Ops Plan -Citizens Proposed Ops Plan Gas Operating Plan, Discount Rate 6.4% & Discount Rate 6.4% & Fuel Price Discount rate 7.66% Use EIA Ref. case (~ 3.8% (EIA Ref. Case ~ 3.8% Gas (Escalation 2.1% CPI, 6 Gas Escalation, 3 cents Escalation, 3 cents winter gas cents winter adder) winter gas adder) adder) Comments

0.94

0.43

0.87

2.71

1.04

1.19

0.49

1.20

1.56

1.02

Phase out 92% AFUE Furn. (-50%) + kWh for ECM

Count kWh savings

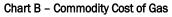
Cost \$3,000 to \$2500

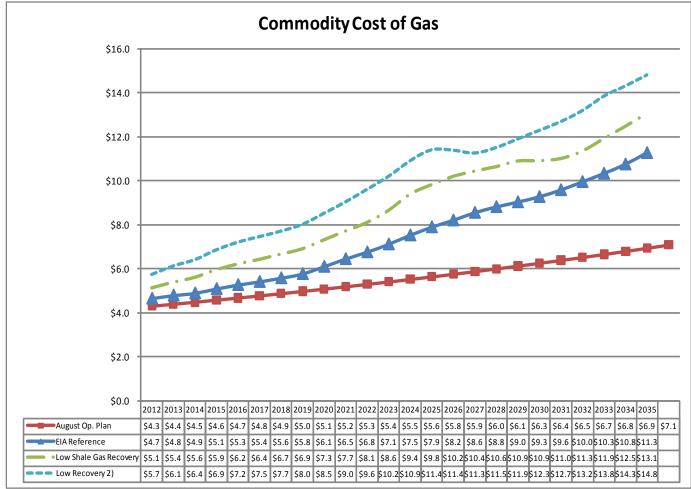
Reduce life of D.I. 30 to 7

Comparison of TRC Results

Joint Programs Comparison of TRC Results							
All Citizen only programs	0.8	1.04	1.08				
Commercial Prescriptive	1.5	1.64	1.64				

	1)	2)	3)	
	Aug. 2011 Citizens Gas	Aug. 2011 Ops Plan -	Citizens Proposed Ops Plan	
	Operating Plan,	Discount Rate 6.4% &	Discount Rate 6.4% & Fuel Price	1
	Discount rate 7.66%	Use EIA Ref. case (~ 3.89	6 (EIA Ref. Case ~ 3.8% Gas	
	(Escalation 2.1% CPI, 6	Gas Escalation, 3 cents	Escalation, 3 cents winter gas	
Program Name	cents winter adder)	winter gas adder)	adder)	Comments
New Construction	0.7	0.9	1.0 Total (.8 Gas, 1.1 El.)	Reduce WECC Budget
Online Assessment	5.4	6.1	6.1 Total (5.5 Gas, 6.4 El.)	
Multi Family Direct Install	4.4	5.0	5.0 Total (6.3 Gas, 4.4 El.)	
Commercial Custom	1.4	1.8	1.8 Total (1.1 Gas, 2.3 El.)	
All shared programs	2.0	2.4	2.4 Total (2.0 Gas, 2.7 El.)	
			Portfolio Total TRC BC: 1.75	1/24/2012





Note: All commodity prices shown above represent pricing at Henry Hub, which is representative of a utility's avoided cost.

The Executive Summary provides for each program:

- Measures and inputs
- Changes and events occurring since Citizen's Program Year 3 and IPL's Program Year 1 expected to impact programs going forward and driving Citizens Year 4 and IPL Year 2 program modifications
- Benefit-cost analyses

The Detailed Operating Plans provide for each program:

- Program objectives and target markets
- Program logic, description, and measure characterizations
- Savings (energy and financial), and benefit cost results
- Marketing strategies

- Measurement and verification plans and program metrics
- Administration requirements and plans for utility coordination; and, where applicable
- Leverage opportunities, including ways to leverage third-party resources to benefit the program

Executive Summary

Portfolio Objectives

WECC's proposed portfolio continues to strive to: (1) align joint programs with those of other Indiana utilities; (2) the joint programs are designed to lower overall delivery cost of programs to the utilities and their customers; (3) sustain the coordinated effort with trade allies on the successful market based programs; (4) address changes to federal, state and industry energy standards and trends; (5) continuously improve program results to achieve greater cost effectiveness; and (6) provide equity among ratepayers as directed by the Oversight Board.

Program Coordination

WECC's proposed joint program portfolio seeks to capture cost savings by jointly delivering programs that have the potential to achieve more cost-effective natural gas and electric savings than if WECC delivered the programs separately. The proposed plan jointly delivers four programs under WECC administration that have consistent administration, implementation, subcontractors, and trade allies. These programs are: (1) Residential New Construction, (2) Multi-family Direct Install, (3) Online Energy Assessment with kit, and (4) General Service Custom.¹ The table below provides for the coordinated programs the cost allocation method previously discussed with the Oversight Board during last year's Executive Summary review of these programs.

¹Citizens Gas and IPL also jointly deliver an Energy Education Program (not administered by WECC).

Cost Allocation Method (ONLY CUSTOMERS WITH NATURAL GAS)

Program	WECC Labor	Implement Costs	Incentives Split	Incentives CG (100%)	Incentives IPL (100%)	
Residential New Construction	50% - CG 50% - IPL	50% - CG 50% - IPL (while joint) 100% IPL (remaining time)	Energy Star Home Rating (HERS) 95% - CG 5% - IPL	Furnaces, Water Heater	ECM Motor, High Efficiency AC or Heat Pump, Heat Pump Water Heater	
Rationale	Incentives are split for the building shell measures that produce both electric and gas benefits for the Energy Star rating. These costs have been split based on the Net Present Value of benefits produced by the measure to achieve an Energy Star home rating.					
Multi-family Direct Install	50% - CG 50% - IPL	None	None	Low Flow Gas Water Heat	CFL's, Low Flow Electric Water Heat Only	
Rationale	Direct Install is derived around the water heating fuel source. All units will receive CFL's which are being funded by IPL. Incentives are fuel specific.					
Online Energy Assessment w/kit	50% - CG 50% - IPL	50% - CG 50% - IPL	89% - CG 11% - IPL	None	None	
Rationale	 Customer participation can occur via either the IPL online assessment tool or Citizens online option and the kit contains the same co-branded materials. Targeting fuel specific does not allow for the low flow measures to be appropriately allocated and therefore the kit cost of the measures is based on the Net Present Value of the benefits produced by the kit. 					
General Service Custom	50% - CG 50% - IPL	Project Dependent	None	Gas Benefits	Electric Benefits	
Rationale	Implementation costs are specific to each project. Incentives are completely tied to value of energy saved.					

The allocation method entirely allocates to a utility fuel specific and program costs uniquely attributable to the utility.

Cost Effectiveness

Looking at the cost-effectiveness jointly delivered programs together allows a true picture of all associated costs, many of which are shared, and all energy savings; and provides a format that allows a better assessment of jointly delivered programs. The benefit cost model outlines the details of each of the utility's contribution for each measure and the associated overhead costs. The avoided costs used for natural gas are based on the EIA reference case and are shown for each year on page 7. The avoided costs used for electric measures are \$.0271/kWh residential, \$.0331/kWh commercial; and \$121/kW year (all customers). All joint programs outlined produce positive benefits and remain a good choice for joint delivery.

The Detailed Program Operating Plans (below) provide complete benefit-cost analysis for all jointly delivered programs. Consideration has been given to cost-effectiveness at the level of the: (1) measure, (2) program, and (3) joint portfolio, using the Total Resource Cost (TRC) and the Utility Cost tests. Net benefits calculated in dollars are also provided. Note that the benefit-cost report has been set up to accommodate programs funded jointly by gas and electric utilities in anticipation of future collaborative efforts.

Market Impacts

When considering market impacts of the programs outlined, only two are truly market driven. The Residential New Construction Program and the Commercial Custom Program requires focused outreach and education to the market and ultimately to the end use customer. The Custom gas program is beginning to gain some momentum as anticipated. With the joint Citizen's and IPL partnership, customers are being provided the education, third party unbiased feedback, and the incentives to implement all opportunities for energy savings solutions for either fuel. Great success was established with the electric projects, and we are optimistic about continued market acceptance.

The Residential New Construction Program has been impacted substantially by market factors and has had additional changes to contend with in 2011 with ENERGY STAR actively rolling out new changes that impacted the New Construction Program requirements and anticipated changes to Indiana's building codes which are still pending with an undefined implementation date. The result of these changes and the extremely low avoided gas costs is that Citizens will discontinue their program effective May 31, 2012 and as a result the joint offering will end at this time. IPL will continue to offer the program for the final four months of the program year on a stand alone basis.

Proposed Changes

1. Residential New Construction/ENERGY STAR Homes Program - ENERGY STAR Homes Program - The proposed program retains a joint approach through the end of May for both IPL and Citizens and then an IPL only program through the balance of the program year 2011-2012 (and at a minimum until statewide building codes have been determined) a tiered incentive structure for energy efficient homes as well as an ENERGY STAR Home package. ENERGY STAR has changed its requirements to meet the ENERGY STAR certification due to most states approving the 2009 International Energy Conservation Code (IECC 2009). As a result Citizens and IPL will offer builders two additional options to the new Version 2.5/3.0 ENERGY STAR Standards until the end of May with IPL continuing to offer the electrically heated home options on their own until the end of the program year. These programs are called the Citizens and IPL Silver Star and the Citizens and IPL Gold Star program. These two programs are identical to the Version 2.0 ENERGY STAR Standards including a \$500 incentive for achieving a HERS Score ≤85 and a \$750 incentive for achieving a HERS Score ≤70. The program

design has performed well in Program Years 3 and 1, respectively moving experienced energy efficiency builders to a higher overall home efficiency. We will continue to promote the program changes that encourage first time energy efficient home builders or partners, allowing new builders to claim incentives on up to 30 homes at a HERS Score of ≤ 85 whereas incentive payments to builders who participated in the incentive program in the prior year will be limited to 12 homes at a HERS Score ≤85. All builders will be allowed to claim incentives on an unlimited number of homes with a HERS Score ≤70 in order to encourage builders to strive for the higher efficiency standard, resulting in nearly twice the first year natural gas savings. These quantity restrictions appear to successfully influence better building practice among the participating builders while allowing new participating builders to learn new techniques and building practices. The overall objective is to increase the percent of homes built to high efficiency or ENERGY STAR specifications in Indiana and to improve (lower) the average HERS rating per home. The new Construction Program will coordinate with the Citizens and IPL Electric New Construction to also include homes heated by electric as well as gas customers served by Citizens and IPL electric for the saving for reducing kwh for cooling due to higher equipment standards and more stringent shell standards. As discussed earlier cost sharing of 50/50 between electric and gas has been included in this plan for customers that are both Citizens and IPL gas and electric customers through the end of Citizen's involvement in the program.

Changes to the ENERGY STAR Standards beginning 2011 require transition to Version 3.0 and derive energy savings relative to the building code IECC2009 that is expected to be adopted by the state of Indiana. Version 3.0 increases documentation checklists and, consequently, administrative costs, raising some concern the build of higher efficiency homes will decrease. WECC will plan to educate and support the new standard in the marketplace; however, WECC is currently researching other best practices and additional options that may include energy performance packages to offer builders.

WECC continues to recommend that IPL deliver the Gold/Silver/Energy Star Homes Program, expanding builder's options and increasing the number of newly constructed homes that perform with higher efficiency. After May 31 IPL will bear all implementation costs and costs of incentive payments required for the home to achieve an ENERGY STAR (HERS rating) qualification. Previously, the gas programs have allowed builders to take advantage of prescriptive measures with the home. IPL will continue to provide "bonus" incentives on high efficiency electrical mechanical equipment because IPL currently does not offer a Residential Prescriptive Program for these measures (although one is being developed.) IPL will limit these incentives to newly constructed homes. WECC will estimate the cost-effectiveness of this program by including both Citizen's and IPL's costs and benefits in cost-benefit analyses based upon it being a joint program for the first eight months and an IPL program for the final four months which will include the required furnaces and water heaters in gas homes. However, these gas measures (furnaces and water heater) will remain in the total prescriptive program budget for savings and budget tracking. Homes with dual fuel systems for home heating will not be eligible for a furnace rebate

With the October 25th 2011 Operating Plan revision, WECC's budget for labor and marketing is reduced \$21,791.

- 2. Multifamily Direct Install Program WECC proposes continuing the multifamily direct install program to serve this demographic group within the joint Citizens Gas/IPL service territory. This program produces highly cost-effective results through the direct installation of a showerhead and faucet aerators (which provides for either natural gas or electric energy savings depending on the fuel source for water heating). This program will be jointly delivered and includes CFL's to enhance program funding and address electric savings. The plan as designed will serve 5,439 gas water heated units and 5,850 electric water heated units. A direct install program of this type requires no investment by the customer, and therefore is immune to decreases in discretionary spending. Further, it can be scaled to increase or decrease volume depending on the performance of other programs.² No changes were made to this program with the October 25, 2011 Operating Plan.
- 3. Residential Online Energy Assessment w/kit WECC proposes that Citizens Gas and IPL continue to jointly deliver Online Energy Assessment/Information with kits. WECC proposes to market the online tool/kits using a combination of marketing materials, including promoting the online tool/kits on the utility website. The Energy Assessment Program and online tool/information will educate consumers on: (1) how a customer's energy consumption, and (3) how a customer's energy bill is calculated. Armed with this information, consumers are better equipped to make informed decisions in managing their consumption and energy costs. Customers that complete the assessment/steps will be provided an energy efficiency kit that includes energy saving water fixtures and CFL's for self-install. No changes have been made to this program with the October 25, 2011 Operating Plan.
- 4. Commercial & Industrial Custom WECC recommends maintaining the existing program design and offering \$0.75 per therm for projects that generate less than 7,500 therms of natural gas savings annually and \$1.00 per therm for those that produce annually 7,500 therms or greater. These incentives will continue to motivate customers to act as natural gas prices remain low. Coordinating these efforts with IPL reduces management and outreach costs, and has allowed customers to consider a whole systems approach that may include both natural gas and electrical energy efficiency solutions. IPL's Plan for the Custom Program is to continue to offer \$.05/kWh and

²Nevertheless, the supply of multifamily units is limited and will become more difficult to attain over time. Accordingly, WECC will need to shift emphasis to other programs as the market potential is exhausted and economic conditions improve.

\$200/kW for all projects. Each utility will continue to offer up to \$25,000 per project for a maximum of \$50,000 for a single customer project. This cap is structured so as to provide enough money to encourage customers to act, but also to provide equity among ratepayers by preventing a few projects or few customers from using up all the available funds. This program supports the customer/project initiatives for applications where retrofit solutions, new equipment specifications or new construction are being completed and higher efficiency is being installed relative to standard equipment specifications or building code requirements. No changes have been made to this program with the October 25, 2011 Operating Plan.

5. **Program Funding –** The Detailed Program Operating Plans contained within this joint Operating Plan (below) includes all the costs, and savings for to each program and utility.

Evaluation and Planning

As noted in the individual utility Operating Plans, WECC believes our planning assumptions related to energy savings and free ridership are conservative. WECC used for Citizen's Gas the same assumptions as Program Year 4 (In the Citizen's Only plan WECC used the results from the Cadmus evaluation to update the savings values for the measures evaluated). In the case of IPL, WECC used the information approved by the IURC in Cause No. 43623. As evaluation results become available, WECC will assess changes in assumptions, model cost-effectiveness using the revised assumptions, and recommend changes to the portfolio that reflect the new information.

Detailed Program Operating Plans

WECC's proposed joint program portfolio seeks to capture cost savings by jointly delivering programs that have the potential to achieve more cost-effectively natural gas and electric savings than if WECC delivered the programs separately. The proposed plan jointly delivers four programs under WECC administration that have consistent administration, implementation, subcontractors, and trade allies. The detailed program operating plans below provide for each program:

- Program objectives and target markets
- Program logic, description, and measure characterizations
- Marketing strategies
- Measurement and verification plans and program metrics
- Administration requirements and plans for utility coordination; and, where applicable
- Leverage opportunities, including ways to leverage third-party resources to benefit the program

Detailed program plans for individually delivered programs are included in a separate attachment (where applicable) that will serve as a utility specific Operating Plan. All program plans include a summary of projected participation, energy savings, budget requirements, and measures of program cost-effectiveness.

Citizens Gas / IPL Joint Demand Side Management Operating Plan Prepared by: Wisconsin Energy Conservation Corporation October 25, 2011

Program 1.2 Residential New Construction Program

- Objective The purpose of this program is to affect energy efficient construction of new single family homes and multifamily dwellings of up to twelve (12) attached units. These residential homes must meet either the ENERGY STAR National Performance Path or similar energy efficiency standards to deliver to builders/residential customers who would not have done so in the absence of the program. The intent is also to increase the market share of new homes being built beyond the standard building code. This program will deliver a comprehensive building incentive to builders to achieve natural gas energy savings.
- **Target Market** The program will work on the supply side to recruit and train builders to 1) meet the new (Version 2.5 and 3.0) ENERGY STAR standards as well as alternative building energy efficiency packages similar to ENERGY STAR described later 2) sell their customers on investing in energy efficiency. To minimize free ridership, the program will work with builders to increase the overall higher average HERS rating for the homes they currently build or to build to the new Version 2.5 and 3.0 ENERGY STAR criteria. Until the state of Indiana defines the new building code, the emphasis will continue to be to promote builders to achieve higher efficiency HERS rated homes. The program will focus on outreach to ensure that builders fully understand Citizens and IPL program offerings with the intent to raise the percentage of their homes built to a higher efficiency.

Since the new construction industry has been so negatively affected by the economic recession, and the construction of attached condominiums and town houses maybe more common, WECC offers the program on a limited basis to duplexes and multifamily dwelling with up to twelve (12) attached units that meet a HERS Rating of 85 or less. However, builders of single family homes will remain the primary focus of the marketing efforts.

In order to transform the market to a greater percentage of homes built to a minimum efficiency of HERS 85 and ultimately move the average energy efficiency to a lower HERS rating, the incentive strategy will emphasize production to the HERS 70 or lower.

Program Description

On April 1, 2011 Version 2.5 ENERGY STAR standards became effective and on January 1, 2012 Version 3.0 ENERGY STAR standards will become effective. These new standards will significantly increase the costs to obtain the ENERGY STAR Certification due to a number of additional inspection requirements by the HVAC Contractors and the Rater. WECC will continue to promote and educate builders on ENERGY STAR. However, due to the significant increase in costs to meet the Version 2.5 and Version 3.0 ENERGY STAR Certification, WECC has learned that many builders are reluctant to continue to participate in the ENERGY STAR Certification.

In addition, Indiana is in the process of defining new energy building codes that are expected to be similar to the IECC2009 code. In order for Indiana to receive ARRA funding, it has agreed to accept the IECC 2009 or equivalent in 2011. This IECC2009 standard is also the baseline comparison ENERGY STAR uses to assess savings potential. Until the new code is defined and the transition timeline is determined, which is still unknown, the program will continue to use the existing baseline

With the Indiana building code unchanged and the emphasis to promote energy savings to new construction; the existing builder packages will remain as options for builders along with the additional incentive for those builders who continue to implement the Version 2.5/3.0 ENERGY STAR Certification. The former specification of ENERGY STAR designation for the two tiers (HERS 85 and HERS 70) does not apply effective April 1, 2011 due to the transition to the new version. The plan is to rebrand the existing HERS 85 requirement to Citizens and IPL Silver Star and the HERS 70 requirement to the Citizens and IPL Gold Star. All three packages offered to builders exceed the equipment requirements for furnace and water heater efficiency.

The program objective will be accomplished through an intensive effort to recruit and educate builders and their trades on the benefits associated with higher energy efficient standard homes and building practices designed to improve upon baseline efficiency. Further, builders will be provided with financial incentives to meet high energy efficiency standards and similar energy efficient build packages proposed by WECC due to market response of the upcoming ENERGY STAR Version 2.5/3.0.

According to the latest information reported by ENERGY STAR, the ENERGY STAR new construction home market was 17 percent as of 2009 in the state of Indiana. One of the objectives of the New Construction program will be to influence builders to increase the inventory of higher energy efficient homes. Likewise, ENERGY STAR partners can build to varying levels of efficiency and a second objective will be to improve the average efficiency HERS rating of the homes built by program participants.

	2009 ENERGY	2009 One-	2009 ENERGY
State	STAR	Unit	STAR
Sidle	Qualified New	Housing	Market
	Homes ¹	Permits ²	Penetration
Indiana	1,661	9,561	17%

Citizens and IPL Gold Star homes are defined as those homes built in the United States that are 30% more efficient than the current code or a HERS rating of \leq 70. The rating is based on a Performance Based System implemented by the builder. Citizens and IPL Silver Star homes are defined as those homes built that are 15% more efficient than the current building code or a HERS rating of \leq 85. The builder has the option to choose which Performance Base Standard he/she chooses in order to meet the \leq 70 HERS Index Rating.

To meet the requirements of a Gold Star home, the builder has the option to choose between installing more efficient HVAC equipment, increasing insulation levels, reducing the infiltration rates (i.e. Air Changes per Hour – ACH) from .35ACH to about .25ACH, installing windows with a lower U-Value and a lower Shading Coefficient, fluorescent lighting or a combination of all the measures. The Gold Star standard also requires an exhaust ventilation strategy such as a continuously operating bathroom exhaust fan or an Energy Recovery Ventilator.

At the time of this writing, the EPA is requiring a transition of ENERGY STAR to Version 3.0 that will increase the qualification requirements for ENERGY STAR Certification in New Home Construction estimated up to 20% beyond the code. The Energy Star Qualified Homes Guidelines are in comparison to a baseline building requirement of IECC2009 which Indiana is expected to adopt sometime in 2011. The new requirements for energy efficiency began with April 1, 2011 permitting. The EPA is allowing for a transitional phase for homes completed within the first year, as illustrated in the table below.

ENERGY STAR New Homes Version 2.5 and 3.0 Implementation Schedule

	Date of Final Inspection ¹									
Permit Date ²	1/1/2011 4/1/2011 7/1/2	2011 1/1	/1/2012							
Before	V2 Single Family Homes ^{3, 5}	V2.5	V3							
4/1/2011 6	^{V2} Condos and Apts in Multi-Far	nily Buildings ^{4, 5}	VE							
Between 4/1/2011 and 12/31/2011	V2.5 All H	Homes	N2 .							
On or After 1/1/2012 7		1215	V ³ All Homes							

- 1. Single-family homes include detached homes, town homes, duplexes, and triplexes.
- Only condos and apartments in multi-family buildings may use this extended implementation schedule. Further, all multi-family homes financed through low-income housing agencies and permitted prior to January 1, 2012 many earn the ENERGY STAR under the last iteration of the guidelines, Version 2.0, until January 1, 2013.

This graphic illustrates the details of the implementation timeline for the ENERGY STAR New Homes Version 2.5 guidelines, which generally began 4/1/2011. New ENERGY STAR requirements are based on permit date and building completion date as indicated above. Version 2.5 requires energy efficiency design of Version 3, without enforcement of the full checklist requirements of Version 3.

Once implemented these new guidelines may require changes in this New Construction Program. In summary, ENERGY STAR Version 2.5 and 3.0 places more emphasis on the use of several new qualification checklists, and upgrades including: new mandatory requirements for the quality of installation of insulation and air sealing techniques as well as whole house ventilation requirements to reduce possible moisture issues that may result in a tightly sealed or insulated home. In addition, there are more stringent requirements and checklists for the quality of the HVAC and duct installation as well as reduced allowable duct leakage. New requirements over the 2009 IECC baseline increases the efficiency rating of installed equipment and products which in turn represent more overall energy savings for the homeowner, as much as 20% over the 2009 IECC standards which is expected to be adopted soon by the State of Indiana.

The Citizens and IPL New Construction Program is expected to infuse new potential as the program also prepares for changes to meet the needs of the builder market. Thermo-Scan Inspections Inc. (TSI), the program implementation subcontractor, will coordinate with WECC to deliver the program initiative and new program features. TSI will work collaboratively with the utility Business Managers to keep the messaging unified and maximize outreach to identify key builders who 1) build higher volumes of homes, 2) do not build to HERS ≤85 or ENERGY STAR standards, or 3) energy efficient builders that build to a minimum efficiency level to qualify for incentives. Working with Citizens and IPL, TSI will work to increase participating builders through the Indiana Builders Association. TSI will conduct face-to-face visits with interested builders to attempt to recruit their participation. In addition, TSI will develop opportunities to deliver presentations to groups of builders in conjunction with association meetings and other venues.

Builders who choose to participate in the program will gain access to cashback incentives designed to cover approximately 20% of the cost to upgrade and certify each home. Through the Builders Association, TSI will work to conduct large training sessions on 1) marketing ENERGY STAR and/or energy efficiency build packages, Citizens and IPL Silver and Gold levels to customers, 2) the ENERGY STAR and/or energy efficiency building standards, and 3) building practices designed to meet them.

Participating builder training efforts will continue to support ENERGY STAR Version 2.5/3 and alternative solutions associated with energy efficient building practices from the buyer's perspective including: improved efficiency, comfort, safety, and durability. Sales training will equip each builder with methods to "up sell" their customers on investing in energy efficient building standards. Builders will also be educated regarding the opportunity to improve their business by differentiating themselves with higher performance energy efficient homes or using the nationally recognized ENERGY STAR brand as well as home energy efficiency impact over the life of the home. WECC and TSI believe it is critical to the success of the program that builders "buy-in" to the idea that ENERGY STAR and/or energy efficiency building packages will improve their sales and that they are equipped to promote its benefits to their customers.

The second phase of the training process will focus on the ENERGY STAR and/or energy efficiency building packages and the building practices designed to meet those standards. Key topics will address the home as a system and include techniques for improving the building shell to minimize thermal loss, air infiltration, identifying high efficiency equipment and the principals of proper installation.

Once the initial training is completed, the program will provide technical

assistance, market recognition and financial incentives to participating builders and their trade partners on an ongoing basis. Options are being considered for improvements to the program implementation to improve builder participation based on feedback from the implementation subcontractor.

Due to the downturn in the housing market, the Implementation Team will allow builders to participate in both the Residential Prescriptive and the New Construction programs. To be clear, the builder can and should apply for the Silver, Gold and Version 2.5/3.0 ENERGY STAR rebates as well and furnace and water heater rebates provided by Citizens and IPL. It is our intention that the programs provide maximum financial benefit to gain momentum during the early years of operation and especially to meet higher efficiency building requirements with the transition to new IECC2009 building codes. As the program matures and economic conditions improve, the "double-dipping" will be evaluated on the cost-effectiveness and impact to influence participation. TSI and WECC are also looking at improvements to the implementation process that are expected to remove some redundancies which create potential barriers and as a result are expected to improve participation.

As a result of the soft economic conditions and the uncertainty of the tax credits, and the changes to Version 2.5/3.0, it remains a priority to keep builders producing energy efficient homes above building code via the ENERGY STAR track or similar alternative such as the Citizens and IPL Silver & Gold energy efficiency packages currently being proposed. All this is necessary in order to minimize lost opportunities on these homes where benefits last in excess of 30 years.

Program Logic The primary barriers to increasing market penetration of energy efficient or ENERGY STAR homes include:

- Higher initial cost to meet the Silver, Gold or Version 2.5/3.0 ENERGY STAR standards
- Federal tax credit to builder expired Dec. 31, 2009 and was reinstalled in December 2010 through 2011
- Lack of confidence among consumers that the higher initial investment will be recouped in the form of lower energy costs
- Lack of awareness among homeowners regarding both the energy and non energy benefits (e.g. comfort, durability) associated with energy efficiency or ENERGY STAR
- Confusion and complications associated with the new 2011 ENERGY STAR Version 2.5/3.0 guidelines
- Lack of awareness among homeowners regarding the technology/building practices that result in a more efficient home
- Lack of awareness among builders regarding the technology/building

practices that result in a more efficient home

• Competition for limited funding with other desirable home features (e.g. granite countertops) may shift the focus away from energy efficiency

The first cost barrier will be addressed through a combination of financial incentives and educating builders and prospective buyers about the "payback" they will receive in the form of lower energy bills. Builder education will be accomplished through training events provided several times a year in various regions provided by the program. Consumer education will occur as trained builders deliver the energy efficiency message to their customers.

Awareness among prospective buyers regarding the financial payback, other non-energy benefits, and technical/building practices that result in improved energy efficiency will be promoted via the utility web sites and by training builders to communicate them to their customers.

The lack of awareness among builders regarding energy efficient building practices and associated benefits will be remedied through direct, intensive training sessions.

The lack of confidence among consumers regarding the return on investment for an energy efficient building when paying more will naturally be addressed by the fact that each home must be certified using the HERS rating system, a credible third-party certification that is required by the U. S government to receive tax incentives and/or rebates. Additional benefits to be promoted to the customer should include lower ownership costs over the life of the home, increased comfort and performance of the home, investment in home for future resale value, and the reduction of environmental impacts.

Due to perceived complications with the ENERGY STAR Version 2.5/3.0, in particular the increase in the costs associated with checklists and non-energy related building requirements, WECC is evaluating other options to prevent complete withdrawal of some builders due to higher costs to the homeowner that are more difficult to recuperate via energy savings. Offering the Silver HERS 85 and Gold HERS 70 options allow for higher than building code efficiency standards without the additional expense necessary to achieve the new ENERGY STAR Version 2.5/3.0 certification.

To minimize free ridership, the program will target builders who do not currently meet the Silver, Gold or ENERGY STAR standards with emphasis on the higher production builder. Ultimately the goal will be to increase the market share of energy efficient (i.e. Silver, Gold or ENERGY STAR) built homes. Secondary targets will include builders who are currently ENERGY STAR partners and meet the ENERGY STAR standards, but only on a minority of homes or where their building practices produce minimal requirements for ENERGY STAR qualification. Keeping these builders engaged in the energy efficiency building practices will be crucial as program design evolves. It is important to note that builders who already meet the ENERGY STAR standard on a majority of their homes will still be eligible to receive the incentives under this proposed scope of work. Until Version 2.5/3.0 is fully adopted and WECC has had an opportunity to propose alternative options we will continue to promote the current program design. Simply put, builders currently not participating will be targeted for outreach and education to incorporate higher efficiency in their current building practice. Those builders with experience will be encouraged to build more of their homes to higher tier efficiency as represented by the incentive structure. Through the efforts of moving seasoned builders to a higher energy standard and tracking their HERS average to drive the efficiency up over time WECC is addressing the free ridership of existing builders and placing a corresponding effort on new recruitment.

There will be efforts to require technologies offered under the current prescriptive plan to further limit free-ridership. Builders of natural gas water and space heated homes must install both a high-efficiency water heater and furnace in each home to qualify for the new construction incentive for the Citizens and IPL Program. Further, the Implementation Team will focus builder training efforts on upgraded measures with limited market penetration (e.g. air tight construction, sealed ductwork in unconditioned spaces). These options provide various solutions to meet the energy savings goals. Until further direction provided by the Oversight Board on the acceptable methodology for cost splits the costs will be shared 50/50 between Citizens Gas and IPL based on previous discussions.

As needed, the program team will revisit its baseline assumptions about local building practices in Citizens and IPL service territory relative to the prevailing building code and provide this information to the evaluation contractor and Oversight Board. We will also make recommendations to the Oversight Board regarding enhancements to the program's standards to keep it in step with evolving practices and market trends.

IncentiveThe program will expand upon the existing tiered incentive structure for SilverStrategyHERS 85 homes that maintains the existing \$500 incentive for achieving a
HERS Rating Score ≤ 85 and the incentive for a Gold HERS 70 at \$750 if a
HERS Score ≤70 is achieved under current requirements. This program will
also provide the same \$750 incentives for those builders who choose to
implement the Version 2.5/3.0 ENERGY STAR Certification. At this point,
WECC cannot determine additional savings of a Version 2.5 ENERGY STAR
compared to a Gold rated home. Most of the additional cost for the new
Version 2.5/3.0 requires more inspection and HVAC performance testing

which is expected to yield greater savings. In addition, Builders may opt to certify their homes as ENERGY STAR Version 2.5, with the same rebate options as the Gold HERS 70 standard homes.

The effort to achieve a higher penetration of Silver, Gold and Version 2.5 ENERGY STAR homes in the Citizens and IPL market is to provide a greater opportunity for new participating home builders. The goal is to make it worth the builders' investment to learn new building sciences and change building practices in order to become more cost-effective at the extra requirements during energy efficient building to achieve the Silver, Gold and Version 2.5/3.0 ENERGY STAR status. Over time the desire is to move the builder from an entry level Silver HERS \leq 85 home to one that performs at the level of Gold HERS \leq 70 or ENERGY STAR.

This effort to increase overall home efficiency is coupled with the intent to also increase the percentage of homes that meet higher efficiency standards and to eventually increase the average HERS rating of each home being built by encouraging builders to strive for the higher standard (i.e. lower score), which results in nearly twice the first year savings. Limiting the number of rebates of homes built to HERS \leq 85 per builder will allow the low volume builder to still participate while capping high volume builders and pushing them to a higher standard of building stock. Participation as an ENERGY STAR Partner on the ENERGY STAR website during the 2010-2011 reporting period will dictate the amount of HERS <85 homes that can utilize incentives. This list has been provided in the Appendix for reference. A new builder not currently on the list or an ENERGY STAR partner that did not build last year will be eligible to build 30 homes at the HERS < 85 Silver level before being capped. Currently participating ENERGY STAR builders will be limited to 12 homes. All builders will have unlimited access to incentives at the HERS ≤70, Gold level or ENERGY STAR certified as funding remains available. Builders must meet all requirements of the Silver HERS 85 and Gold HERS 70 energy efficiency or Version 2.5/3.0 ENERGY STAR standard.

Builder Status	Limit of Ince	ntives
	HERS ≤85	HERS ≤70
New Participant	30	Unlimited
(not an ENERGY STAR partner or no home		
built per ES Partner list Jan 11- Dec 11)		
ENERGY STAR Partner	12	Unlimited
(home built in Jan 11- Dec 11 per Energy		
Star Partner list)		

Builders may also apply for incentives offered under the Citizens and IPL Residential Prescriptive Incentive Program. To be clear, double dipping from

both the New Construction and Residential Prescriptive incentive offers will be allowed for natural gas heated homes. The Implementation Team feels providing this additional value is critical to gaining builder participation, given the current state of the Indiana housing market. Tax credits for new homes have been recently re-instated by the federal government through 2011.

WECC proposes to roll these changes out to builders once the plan has been approved and targeted for September 2011 via a direct mailing to all builders in the Citizens and IPL service territory.

Changes to the incentive structure with transition to ENERGY STAR Version 2.5/3.0 will be finalized going into the next full building season. At this time, the intention is to offer \$750 for the ENERGY STAR Version 2.5/3.0 track, and an alternative package for homes that achieve energy efficiency requirements without the designated ENERGY STAR labeling and associated costs savings for the Gold HERS 70 and ENERGY STAR Version 2.5/3.0 will be claimed the same but the Energy Star performance verification may produce more savings that are unverified at this time.

Measure Characterization Following are the efficiency standards for the New Construction Incentive for Silver and Gold HERS Index, which are consistent with the ENERGY STAR National Performance Path as of December 31, 2010. Any changes to the ENERGY STAR made by the EPA will be reflected in updates as required by the EPA. The following is the current requirements for new homes to meet the Silver, Gold and Version 2.5/3.0 ENERGY STAR Certifications and Citizens and IPL rebates.

- Silver Star Homes must have a HERS rating of 85 or less verified and field-tested in accordance with the RESNET Standards by a RESNET-accredited Provider, and meet all applicable codes.
- The Thermal Bypass Inspection Checklist must be completed the checklist requires visual inspection of framing areas where air barriers are commonly missed and inspection of insulation to ensure proper alignment with air barriers, thus serving as an extra check that the air and thermal barriers are continuous and complete. Envelope leakage must be determined by a RESNET-certified rater using a RESNETapproved testing protocol.
- Leakage ≤ 6 cfm to outdoors / 100 sq. ft. Ducts must be sealed and tested to be ≤ 6 cfm to outdoors / 100 sq. ft. of conditioned floor area(≤ 4 cfm to outdoors / 100 sq. ft. for ENERGY STAR Version 2.5), as determined and documented by a RESNET-certified rater using a RESNET-approved testing protocol. If total duct leakage is < 6 cfm to outdoors / 100 sq. ft. of conditioned floor area, then leakage to outdoors does not need to be tested. Duct leakage testing can be waived if all ducts and air handling equipment are located in conditioned space (i.e.,

within the home's air and thermal barriers) AND the envelope leakage has been tested to be \leq 3 ACH50 OR \leq 0.25 CFM 50 per sq. ft. of the building envelope. Note that mechanical ventilation will be required in this situation.

- A 92% AFUE (or greater) natural gas forced air furnace or a 90% AFUE Boiler must be installed – this requirement is consistent with the prescriptive incentive offer.
- A .62 EF (or greater) natural gas storage water heater > 30 gallons or a.82 EF tankless water heaters must be installed this requirement is consistent with the prescriptive incentive offer.
- Gold Homes must have a HERS Score of 70 or less and must meet all the additional Performance Based requirements for air leakage measurements and an approved exhaust strategy as well as all of the above standards.
- Beginning April 1, 2011 the ENERGY STAR Standards will increase significantly. These standards will require the HVAC contractors to perform and verify that they have completed the Manual J, D, and S. These contractors will also be required to perform air balancing, refrigerant charge and combustion analysis of the HVAC equipment. In addition, the HVAC Contractor and raters will be required to inspect and verify these performance tests have been successfully completed.
- Once Indiana passes the 2009 IECC, the Silver Star Program will be eliminated as the new energy code is more stringent than the Silver Star Program. The rebate for the Citizens and IPL Gold Star Program will more likely be reduced since the energy savings compared to the current energy code will be less.

Marketing Strategy The program will be marketed to builders primarily through the Indiana Builders Association as well as direct business to business contacts. WECC and TSI will then work with Citizens and IPL Business Managers to identify key builders (see Target Market above) and conduct in person meetings to recruit the builders' participation in more intensive training. Further, TSI staff will develop opportunities to present the program at builder and other trade association meetings, and to place information in association newsletters.

Participating builders will be supplied with collateral materials to aid them in communicating the benefits of Silver, Gold and Version 2.5/3.0 ENERGY STAR Certification homes to their customers. Understanding WECC is proposing to modify the incentive structure; we propose to revise collateral materials and mail them to builders in September of 2011, understanding that the start of the building season is well underway. New federal legislation may alter this schedule if the legislation makes major changes to the tax credits for new homes. Alterations to these materials will be made once the new EPA Quality Homes Guidelines for 2011 become active.

	WECC recommends Citizens and IPL consider promoting the Silver, Gold and Version 2.5/3.0 ENERGY STAR homes as part of its paid media campaign. The objective would be to promote awareness of ENERGY STAR associated benefits. This may be done in conjunction with Home Shows, Parade of Homes, or other home building focused events.
Measurement and Verification	To facilitate accurate measurement and verification WECC will collect the following information on each incentive transaction:
	 Customer data (e.g. name, address, telephone, e-mail) Builder data (e.g. name, address, telephone, e-mail) Installation data (e.g. address, date completed, appliances installed) Measure information (e.g. HERS score, equipment model numbers, other ENERGY STAR requirements)
	The data collection requirements listed above is consistent with those specified by Glacier Consulting in conjunction with the initial planning process of the New Construction Program. The information will be available to Citizens and IPL in real-time via an electronic interface and will be supplied to a third-party evaluator upon request. WECC will transfer the data to Citizens and IPL in a text delimited data file at the conclusion of the project.
	WECC will verify that each home meets the Silver and the Gold and Version 2.5/3.0 ENERGY STAR standards by requiring builders to submit the corresponding HERS certificate (see end of program plan) with the model numbers of the HVAC equipment in order to document that the installed equipment meets Citizens and IPL minimum standards. Since all Silver and Gold and Version 2.5/3.0 ENERGY STAR Certified homes require third party verification, it will not be necessary for the builder to provide the invoices related to the equipment installed as long as the model numbers of said equipment are identified on the HERS Certificate.
Administrative Requirements	WECC will provide the administrative services listed below in support of the program:
	 Managing subcontractors Budget tracking Fulfillment services Contact (call) center services Accounting services Enforce customer service standards Data tracking systems Onsite verification of incentive claims Managing public relations

	 Problem resolution Supporting evaluation activities Reporting to the Oversight Board
	These services are included in the program administration budget, not the program implementation specific budget. WECC tracks administration expenses separately from other program delivery expenses to be consistent with other Indiana DSM efforts for which it serves as Administrator.
Metrics	The primary program metrics will include:
	 Annual gross and net therm savings Number of participating builders Delivery at or below budgeted costs Achieving forecasted benefit/cost results
	Proposed secondary program metrics include:
	In person visits to key buildersDevelop group training opportunities during the year
Leverage Opportunities	WECC will pursue the following opportunities to leverage third-party resources to benefit the program:
	 Leverage national marketing messages from ENERGY STAR Coordinate program delivery with other Indiana gas utilities to minimize confusion in the marketplace and reduce costs through economies of scale Leverage the support of accredited raters in recruiting and training builders
114:04	
Utility Integration	 WECC will coordinate the following activities with Citizens and IPL staff: Provide training to utility staff on program content, terms and conditions as needed Assist Corporate Communications staff with the development of marketing materials and webpage content especially the new rebate application form Coordinate outreach to builders and other trade allies with Citizens and IPL Business Managers Assist Citizens and IPL Business Managers with the transformation to the new Indiana building code as it become available and the new Citizens and IPL Silver and Gold Star and ENERGY STAR Standards.

Citizens Gas Portion

Participation, Incentives, Savings

		PY4 Program Year									
	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Total Incenti Cost	e Deemed Savings	Gross Therms	Free Rider	Net Therms			
Citizens Gas Portion Joint Delivery w/IPL)											
New Construction (Jointly delivered with IPL)						_					
Citizens Gas/IPL Silver Star Program < 85	3		\$ 475.0	\$ 1,4	25 207.00	621	25%	466			
Citizens Gas/IPL Gold Star Program <70	17		\$ 712.5	\$ 12,1	13 350.00	5,950	20%	4,760			
ES Ver 3.0 (baseline IECC 2009) gas heat	7		\$ 712.5	\$ 4,9	309.00	2,163	5%	2,055			
Sub Total	27			\$ 18,52	5	8,734		7,281			

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-BA Reference Case														
1					Est. Gross	Est. Net	% Gross					Gas Net	Overall Net		
				%	Savings	Savings	Savings	Gas	Gas	Overall	Overall	Benefits	Benefits		
		Citizens Program	Program Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	TRC	UCT	Total	Total		
	1.20	Residential New Construction *	\$ 31,647	1%	8,734	7,281	0.4%	0.7	1.4	1.0	2.4	\$ (31,176)	\$ (4,729)		

Residential New Construction *	
Incentives	\$ 18,525
WECC Labor	\$ 5,166
WECC Direct Costs	\$ 1,557
Subcontractor(s)	\$ 6,400
Implementation Subtotal	\$ 31,647.27
Evaluation Allocation	\$ 1,124
WECC Admin Allocation	\$ 284
Umbrella Marketing Allocation	\$ 27,500
Allocated Subtotal	\$ 28,908
Sub Total	\$ 60,555

IPL Portion

Participation, Incentives, Savings

	PY2 Participation Forecast	Incentive / Unit	PY2 Total Incentive Cost	Inciden ce	Install Rate	Qty Installed	Deemed Savings kWh	Deemed Savings kW	PY2 Gross kWh	PY2 Gross kW	Free Riders	PY2 Net kWh	PY2 Net kW
IPL Electric COREPLUS Joint Delivery Programs													
Residential New Construction Energy Star IPL Program											1		
Citizens Gas/IPL Silver Star at 85 gas heat	3	25.0	\$ 75				152.5	0.05	458	0.15	0%	458	0
IPL Silver Star Program at < 85 electric heat	20	500.0	\$ 10,000				4,155.0	0.30	83,100	6.00		83,100	6
Citizens Gas/IPL Gold Star Program < 70 gas heat	17	37.5	\$ 638				310.0	0.10	5,270	1.70	0%	5,270	2
IPL Gold Star Program <70 electric heat	20	750.0	\$ 15,000				7,337.5	0.50	146,750	10.00	0%	146,750	10
ES Ver 3.0 (baseline IECC 2009) gas heat	7	37.5	\$ 263				191.0		1,337	0.00	0%	1,337	-
ES Ver 3.0 (baseline IECC 2009) electric heat	10	750.0	\$ 7,500				4,809.0	0.50	48,090	5.00	0%	48,090	5
SEER AC from 13 to 15 min Bonus (all gas NC homes)	5	200.0	\$ 1,000				294.0	0.20	1,470	1.00	0%	1,470	1
SEER HP from 13 to 15 min.Bonus (all electric NC homes)	5	200.0	\$ 1,000				1,082.0	0.20	5,410	1.00	0%	5,410	1
Heat Pump Water Heater	2	500.0	\$ 1,000				2,873.0	0.33	5,746	0.65	0%	5,746	1
ECM Motor on HVAC	5	100.0	\$ 500				1,072.0		5,360	0.00	0%	5,360	-
Sub Total	94		\$ 36,975						302,991	25.50		302,991	26

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 2												
						Est.			%	%			
				%	Est. Gross	Gross	Est. Net	Est. Net	Gross	Gross			
		Pro	gram	Total	Savings	Savings	Savings	Savings	Savings	Savings			
#	Program	Bu	dget	Budget	(kWh)	(kW)	(kWh)	(kW)	kWh	kW	TRC	UCT	Net Benefits
	Core Plus Programs (Sept 2011 - Aug. 2012)												
1.40	Residential New Construction Energy Star	\$	63,220	4%	302,991	26	302,991	26	1%	1%	1.1	3.3	\$ 26,446

Residential New Construction Energy Star	
Incentives	\$ 36,975.00
WECC Labor	\$ 10,331.20
WECC Direct Costs	\$ 3,113.33
Subcontractor(s)	\$ 12,800.00
Implementation Subtotal	\$ 63,220
Evaluation Allocation	\$ 3,160.98
WECC Admin Allocation	
Marketing/Consumer Education Allocation	\$ -
Allocated Subtotal	\$ 3,161
Sub Total	\$ 66,381

Program	
	1.5 Multifamily Direct Install Program

Objective The Multifamily Direct Install program is designed to affect the installation of energy-efficient, high-performance, water fixtures (i.e., showerheads and faucet aerators) and compact fluorescent lamps (CFL's) in rental units to substantially reduce the consumption of hot water. The program will educate tenants about the energy benefits of these installed measures and behavior changes that will have a lasting impact on their energy and water consumption.

As market opportunity for this renter population becomes exhausted, WECC recommends serving other similar customer demographics that are concentrated within a "complex" such as mobile homes and condominiums that are not all electric being served by the Residential Onsite Audit Program. WECC has successfully implemented to the mobile home audience as this is a customer demographic that could be well served by this program and is less likely to act upon other utility programs.

Target Market The program will target multifamily complexes with units that are both individually metered (Residential ratepayers) and master metered (General Service ratepayers). Citizens Gas and IPL will be partnering (pending approval by the IPL Oversight Board) to maximize impact in delivery. The two utilities will jointly deliver and share costs for this program for units that have a natural gas-fueled storage water heater. Recruitment efforts will first target property-management companies as well as property owners in an effort to secure agreements to treat multiple properties through a single point of contact before targeting owners and managers of individual properties. IPL will also plan to serve a portion of customers with electric water heat and cover the full cost of these customers.

Program Description The Multifamily Direct Install program is designed to affect the installation of energy efficient high-performance, low-flow water fixtures (i.e., showerheads and faucet aerators) and CFL's in rental units, condominiums, and mobile homes to substantially reduce the consumption of hot water and thus natural gas in addition to CFL's for up to the five most frequently used lighting fixtures. Further, the program will work to educate tenants and property managers through materials and handouts provided by Citizens Gas / IPL about the water and energy savings benefits of installing these low-cost measures and behaviors that will have a lasting impact on their energy consumption.

The contractor will be responsible for 1) recruiting property management firms and owners to participate, 2) installing of low-cost measures, and 3) measurement and verification activities.

There are several benefits to customers and the program from implementing this program as defined below.

	 May be used to compensate for underperformance by other programs Immune to risk of economic conditions and lower discretionary spending No customer investment required Delivers cost-effective savings Reduces costs to all economic classes with the tendency toward low-income Reduced consumption of water High customer satisfaction Low marketing costs High-volume impact potential with minimal contacts In addition to the install of low flow water fixtures Citizens Gas General Service customers will be offered enhanced incentives to perform boiler tune ups and repair leaking steam straps.
Marketing	The program will be marketed via apartment associations and face-to-face meetings with property-management firms and owners. As needed, apartment associations will be identified and targeted for presentations. Development of coordinated print material, additional print materials or revisions to existing print materials will be coordinated with Citizens Gas / IPL to include both utility's branding. Participants will be accepted on a first-come, first-served basis to prevent oversubscription.
Program Logic	 The program will work to overcome four key barriers, which otherwise prevent the installation of energy efficient products and corresponding reduction of natural gas consumption in water heating applications and electric reduction in lighting applications: Lack of awareness of the cost vs. benefit of upgrading to high efficiency water fixtures by renters and landlords. Replacement costs associated with early retirement of working equipment. Misperception of product quality and performance. Lack of education regarding the behavioral changes that can substantially decrease energy consumption. The program will work to first educate property managers and owners about the benefits associated with high-performance, energy-efficient fixtures, both in terms of energy and water savings and electricity savings through the replacement of incandescent lamps with CFL's. Promoting the water-saving benefits is essential to the success of the program given property managers and owners are typically responsible for water costs even if they are not liable for energy bills. Product quality and warranty information will also be made available to property managers to ensure they are comfortable with the installed equipment.

	money, and environmental benefits of using less water.
	 Strategies for minimizing free-ridership include: Limit direct installation per residence to once in a 12-month period to restrict apartment communities from requesting product replacement for "inventory" in the event of tenant removal identified after vacancy. If low-flow fixtures exist, then additional measures would not be installed. Direct installation that ensures installation of equipment.
Measure Characterization	Citizens Gas / IPL will provide measures that reduce electrical and natural gas consumption as part of the direct install component. High efficiency showerhead and aerators will produce savings regardless of fuel source for water heating. Following are the measures that will be installed in <u>each</u> dwelling:
	 1.5 GPM showerhead 1.0 GPM bathroom faucet aerator 1.5 GPM kitchen faucet aerator CFL's
	Additional measures will be recommended for buildings that have large boilers or steam traps for space heating and referred to the General Service Prescriptive Program.
Measurement and Verification	During the installation of the above mentioned products, the implementation contractor will be tasked with recording the following information:
	 Property address, units treated, property-management company, owner, and signature to verify installation. The model number or efficiency level and size of the water heater in approximately 5% of units treated. Water flow rates by fixture before and after installation on approximately 5% of unit installations. Wattage of Incandescent lamps replaced. Identify presence of a programmable thermostat on approximately 5% of unit installations (secondary data).
	Information regarding the water heater, lamps, programmable thermostats and changes in flow by fixture may be combined with secondary research on consumer behavior to verify savings ³ at the conclusion of the program.

³ IPL electric savings defined for low flow showerhead are per the IPL Market Potential Study submitted to the IURC which considers a 2.0 gallon per minute (gpm) showerhead vs. the 1.5 gpm unit included in the program. WECC has achieved higher proportion savings (therms) for the showerhead measure within other Indiana gas utility program implementation and verified by third party evaluation. If program evaluation is not performed on

Administrative Services	WECC will provide the administrative services listed below in support of the program, as outlined in our contract:
	 Managing subcontractors Budget tracking Fulfillment services Contact (call) center services (program verification) Accounting services Enforcing customer service standards Data tracking systems On-site verification of 2% of installations Managing public relations Problem resolution Managing and overseeing procurement Supporting evaluation activities Reporting to the Oversight Board Customer satisfaction survey
Program Metrics	The primary program metrics will include:
	 Annual gross and net therm, kWh and kW savings Number of participating units Delivery at or below budgeted costs Achieving forecasted benefit-cost results Secondary results will include collection of flow rates pre-and post installation and the presence of programmable thermostats.

this program future program design may consider introducing this evidence to capture savings per WECC field results.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Citizens Gas Portion

Participation, Incentives, Savings

Multifamily (Jointly delivered with IPL)	PY3 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Tot	tal Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
Kit-Installation Cost Only (joint w/IPL)	5439		\$ 26.00	\$	141,414	0.00	-	0%	-
Residential Kit (Low Flow)	2720		\$ 8	\$	21,756	75.00	203,963	0%	203,963
General Service Kit (Low Flow)	2720		\$ 8	\$	21,756	75.00	203,963	0%	203,963
Sub Total	10878			\$	184,926		407,925		407,925

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case											
				Est. Gross	Est. Net	% Gross					Gas Net	Overall Net
			%	Savings	Savings	Savings	Gas	Gas	Overall	Overall	Benefits	Benefits
	Citizens Program	Program Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	TRC	UCT	Total	Total
1.4	D Multi Family Direct Install	\$ 198,585	5%	407,925	407,925	21%	6.3	6.3	5.0	5.0	\$ 1,129,204	\$2,716,487

Multi Family Direct Install	
Incentives	\$ 184,926
WECC Labor	\$ 11,909
WECC Direct Costs	\$ 1,750
Subcontractor(s)	\$ -
Implementation Subtotal	\$ 198,585.20
Evaluation Allocation	\$ 7,064
WECC Admin Allocation	\$ -
Umbrella Marketing Allocation	\$ 6,875
Allocated Subtotal	\$ 13,939
Subtotal	\$ 212,525

IPL Portion

Participation, Incentives, Savings

Multifamily	PY2 Participation Forecast	Incentiv Unit	e /	PY2 Total Incentive Cost	Inciden ce	Install Rate	Qty Installed	Deemed Savings kWh	Deemed Savings kW	PY2 Gross kWh	PY 2 Gross kW	Free Riders	PY2 Net k Wh	PY2 Net kW
CFL - Installation Cost Only (IPL only and joint w/Citizens Gas	11,289	\$ 10.0	00	\$ 112,890						-	0.00	0%	-	-
Kit - Installation Cost Only (IPL Only)	5,850	\$ 26.0	00	\$ 152,100						-	0.00	0%	-	-
Kit - CFL's (5)	11,289	\$ 10.0	00	\$ 112,890				255.0	0.05	2,878,695	564.45	0%	2,878,695	564
Kit - Low Flow - (Electric Water Heat Only)	5,850	\$ 8.0	00	\$ 46,800				919.0	0.08	5,376,150	450.45	0%	5,376,150	450
Sub Total			5	\$ 424,680						8,254,845	1014.90		8,254,845	1,015

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 2												
						Est.			%	%			
				%	Est. Gross	Gross	Est. Net	Est. Net		Gross			
		Р	rogram	Total	Savings	Savings	Savings	Savings	Savings	Savings			
#	Program	I	Budget	Budget	(kWh)	(kW)	(kWh)	(kW)	kWh	kW	TRC	UCT	Net Benefits
	Core Plus Programs (Sept 2011 - Aug. 2012)												
1.50	Multifamily	\$	438,339	26%	8,254,845	1,015	8,254,845	1,015	34%	23%	4.4	4.4	\$ 1,587,314

Multifamily	
Incentives	\$ 424,680.00
W ECC Labor	\$ 11,909.20
W ECC Direct Costs	\$ 1,750.00
Subcontractor(s)	\$ -
Implementation Subtotal	\$ 438,339
Evaluation A llocation	\$ 21,916.96
W ECC Admin Allocation	
Marketing/Consumer Education Allocation	\$ -
Allocated Subtotal	\$ 21,917
S ub Total	\$ 460,256

Program	1.5 Residential Online Energy Assessment w/kit
Objective	The Residential Energy Assessment program is an incentive offered as a result of using an online self service assessment tool or other online information designed to assist and educate consumers on their home energy use and identify potential areas where they can take action to reduce their energy consumption. Consumers who visit these areas on the companies' websites may be sent a kit that includes low-cost measures that will reduce their energy and water consumption. Both utilities information collected during the assessment could further enhance a future Retrofit Audit (Citizens Gas and/or IPL). Under the current proposed plan (IPL only) if a consumer qualifies for the Walk-through Assessment program but is not interested in participating, they can opt out and receive a kit of low cost measures.
Target Market	The IPL program's online home assessment is open to all single family residential (excluding multi-family) customers and the Citizens' information will be also targeted to the same target market.
Program Description	The IPL online assessment tool is currently offered as separate online energy assessment and operates independently through a contract between the utility's selected provider. This online assessment tool and the information presented by Citizens will provide education on how a how a customer's energy costs compare to other homes in the area and to educate consumers on their home energy use and identify potential areas where they can take action to reduce their energy consumption. Armed with this information, consumers are better equipped to make informed decisions in managing their consumption and consequent energy costs.
	In addition to the education component, the program will seek to generate direct energy savings by mailing co-branded energy efficiency measure kits (i.e. showerhead, faucet aerators and compact fluorescent lamps (CFLs) to customers who create an online account and complete a comprehensive assessment or take other designated steps. It is anticipated that those who are motivated to take time to complete these steps are likely to install the kit measures. The savings associated with this program are based on the assumption that 80% of recipients that receive a kit will install the showerhead and aerators and 100% of recipients will utilize the CFLs in the kit. If a customer is referred to the Walk-through Assessment program they will not be sent a kit of measures (unless the customer declines this offer) as those measures will be installed during the assessment.
	To prevent free ridership and program integrity, WECC will implement verification of customer participation with either utility that resulted in a mailed energy efficiency kit or Walk-thru Assessment that included the direct install to

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	prevent duplication of mailing kits or product that would not be installed.							
Marketing	The service and kit incentive will be promoted using various marketing initiatives, bill inserts, web promotions or Utility Contact Center representatives. For Citizens customers noted as visiting the utility web site, an email campaign will invite those customers to do complete the steps necessary to receive a kit							
Program Logic	 Key barriers to consumers implementing energy saving improvements include: Lack of awareness regarding the need to reduce consumption Knowledge of actions to take Understanding the benefits of implementing energy efficiency measures Misperception of product quality and performance 							
	Providing customers with customized analysis or other information of how their consumption compares to others and what applications offer the greatest savings works well to address these issues. Providing an online option for attaining information regarding energy use and opportunities to improve efficiency is a low cost alternative to in-home assessments. By using consumption data and other key demographic information identifying prospective candidates for on-site assessments and the installation of shell measures or replacement of in-efficient equipment is a cost-effective approach for future targeted marketing for a Home Audit with Retrofit Incentives Program.							
	Awareness regarding the availability of the online assessment service or other utility provided infromation will be addressed by promoting its availability through website and bill inserts.							
Measure Characterization	Following are the energy-savings measures that will be included in each kit. Measure (2) 1.5 GPM showerhead (2) 1.0 GPM bathroom faucet aerator (1) 1.0 GPM kitchen faucet aerator (4) CFLS							

Measurement and Verification	The selected vendor for the IPL online energy assessment will be required to provide weekly files detailing the number of residential customers receiving an online assessment. Citizens will provide that information for customers requesting information after completing the required steps on their website. WECC will work with the utilities to provide content for collateral materials in the kit promoting an online survey that will allow consumers to provide feedback on the program. This feedback will be considered to improve consumer satisfaction or future program design. This survey of Citizens customers will track the number of customers who receive a kit, and what measures from the kit were installed. WECC will track the energy savings associated with the kits and report it on a monthly basis.
Administrative Services	 WECC will provide the services listed below in support of the program, as outlined in our contract: Selecting vendor for kit fulfillment Managing subcontractor Coordinated program delivery between utilities Fulfillment services Enforcing customer service standards Data tracking systems Problem resolution Managing and overseeing procurement Supporting evaluation activities
Program Metrics	 The primary program metrics will include: Annual gross therms, kWh⁴ and kW savings Number of participating customers for online assessment Delivery at or below budgeted costs Achieving forecasted benefit-cost results

⁴ IPL electric savings defined for low flow showerhead are per the IPL Market Potential Study submitted to the IURC which considers a 2.0 gallon per minute (gpm) showerhead vs. the 1.5 gpm unit included in the program. WECC has achieved higher proportion savings (therms) for the showerhead measure within other Indiana gas utility program implementation and verified by third party evaluation. If program evaluation is not performed on this program future program design may consider introducing this evidence to capture savings per WECC field results.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Citizens Gas Portion

Participation, Incentives, Savings

Citizons Cos Stand Alone Programs	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Total Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
Citizens Gas Stand Alone Programs Online Energy Assessment (Jointly delivered with IF	PL)							
Energy Kits Showerhead (2) + Aerators (3)	4000	50%	\$ 22.3	\$ 89,000	108.0	216,000	20%	172,800
Sub Total	4000			\$ 89,000		216,000		172,800

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 4-EIA Reference Case											
				Est. Gross	Est. Net	% Gross					Gas Net	Overall Net
			%	Savings	Savings	Savings	Gas	Gas	Overall	Overall	Benefits	Benefits
	Citizens Program	Program Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	TRC	UCT	Total	Total
1.50	Residential Online Assessment w/Kit	\$ 104,509	2%	216,000	172,800	11%	5.5	4.7	6.1	5.1	\$ 464,190	\$1,919,532

Residential Online Assessment w/Kit				
Incentives	\$	89,000		
WECC Labor	\$	10,640		
WECC Direct Costs	\$	4,869		
Subcontractor(s)	\$	-		
Implementation Subtotal	\$	104,508.85		
Evaluation Allocation	\$	3,718		
WECC Admin Allocation	\$	-		
Umbrella Marketing Allocation	\$	13,750		
Allocated Subtotal	\$	17,468		
Subtotal	\$	121,977		

IPL Portion

Participation, Incentives, Savings

	PY2 Participation Forecast	Incentive / Unit	PY2 Total Incentive Cost	Inciden ce	Install Rate	Qty Installed	Deemed Savings kWh	Deemed Savings kW	PY2 Gross kWh	PY 2 Gross kW		PY2 Net kWh	PY2 Net kW
IPL Electric COREPLUS Joint Delivery Programs													
Residential Online Energy Assessment w/kit													
Energy Kits Costs Only (Joint w/ CG)	4,000	\$ 2.8	\$ 11,000										
Energy Kits Costs Only (IPL ONLY)	11,490	\$ 25.0	\$ 287,250										
CFL's (Kit Includes 4)	15,490			100%	100%	4.00	51.0	0.010	3,159,960	619.60	20%	2,527,968	496
Showerhead (Kit includes 2)	11,490			100%	50%	1.00	500.0	0.058	2,872,500	333.21	20%	2,298,000	267
Kitchen Aerator (Kit Includes 1)	11,490			100%	50%	1.00	154.5	0.019	887,603	109.16	20%	710,082	87
Bath Aerator (Kit Includes 2)	11,490			100%	50%	1.00	264.5	0.019	1,519,553	109.16	20%	1,215,642	87
Hot Water Thermometer	15,490			100%	100%	1.00	-	-	-	-	20%	-	-
Refrigerator Thermometer	15,490			100%	100%	1.00	-	-	-	-	20%	-	-
Sub Total			\$ 298,250						8,439,615	1171.12		6,751,692	937

Program Budget, Savings, Cost Effectiveness

	Portfolio Summary Program Year 2											
			%	Est. Gross	Est. Gross	Est. Net	Est. Net	% Gross	% Gross			
		Program	Total	Savings	Savings				Savings			
#	Program	Budget	Budget	(kWh)	(kW)	(kWh)	(kW)	kWh	kW	TRC	UCT	Net Benefits
	Core Plus Programs (Sept 2011 - Aug. 2012)											
1.20	Residential Online Energy Assessment w/kit	\$ 312,260	19%	8,439,615	1,171	6,751,692	937	35%	27%	6.4	5.2	\$ 1,455,432

Residential Online Energy Assessment w/kit	
Incentives	\$ 298,250
WECC Labor	\$ 10,010
WECC Direct Costs	\$ 4,000
Subcontractor(s)	\$ -
Implementation Subtotal	\$ 312,260
Evaluation Allocation	\$ 15,612.99
WECC Admin Allocation	
Marketing/Consumer Education Allocation	\$ -
Allocated Subtotal	\$ 15,613
Sub Total	\$ 327,873

Program

2.1 Commercial & Industrial Custom Program

- Objective Affect the installation of high efficiency equipment to Citizens Gas and IPL general service customers for natural gas and electric fueled technologies and systems (that do not fit the parameters of the prescriptive incentive offers) or implementation of energy saving process improvements that would not have been done in the absence of this program.
- **Target Market** IPL's Custom Program for business customers (currently PL, PH and HL rate customers are not eligible) will be collaboratively delivered with Citizens Gas' current program allowing customers and market providers to assess projects in a more comprehensive fashion. The savings that can be achieved from approaching solutions from a systems perspective can result in greater savings that may deliver energy saving for fuels, natural gas and electricity. Offering solutions for either fuel expands the options for trade allies and customers to engage in the program vs. previous limitations of a gas only program. Capitalizing on this activity, the program will serve all customer and trade ally requests, and WECC will work with Citizens Gas / IPL to identify the top energy consumers as well as continue outreach with the providers that are familiar with the program and have access to projects that remain stalled or will not move to action without third party verification, education, and financial motivation. The established commercial market providers include mechanical contractors, commercial equipment distributors, and energy services companies, the architects, and engineer community. This approach is expected to delivery program projects while operating within the budget parameters. This program will support the customer/project initiatives for applications where retrofit solutions, new equipment specifications or new construction is being completed and higher efficiency is being installed relative to standard equipment specifications or code building practices

Direct customer outreach will target decision makers within the customers' organization including: energy managers, facility managers, financial and operations managers, chief engineer and facility/property managers, maintenance supervisors, and building operators.

Program The Business Custom program will affect the purchase and installation of efficient technologies or implementation of process improvements by working directly with (1) key end-use customers and (2) market providers to identify potential energy savings projects, analyze the economics of each project, and complete an incentive application.

WECC will work in cooperation with Citizens Gas / IPL Sales Consultants to

generate awareness of the Custom <u>and</u> Prescriptive Incentive offerings through direct contacts with key customers and market providers (e.g. mechanical contractors and ESCOs). Outreach will take the form of inperson visits to customers and market providers, developing opportunities to present to groups at trade association meetings (e.g. ASHRAE, school administrators, and hospitality), placing information in association newsletters and other targeted media, and networking. The objective of outreach activities is to identify and develop Custom Incentive projects for further analysis. By uniformly delivering a consistent message to customers about the benefits of third party verification of project energy savings, incentives to advance the timeline of customer decisions or transition them to solutions that deliver more energy savings. Emphasis will be placed on generating market provider referrals in order to improve participation and reduce costs. The outreach to these market players includes replacement equipment providers to new building construction design and build.

Once prospective energy saving projects have been identified, WECC will work with the customer and/or market provider to complete custom engineering calculations that assess the energy savings potential, payback horizon, project eligibility (see Measure Characterization below), and incentive amount. If the project is deemed eligible, WECC will assist the customer or market provider in completing a Business Custom Incentive application and will manage the allocation of funds. WECC will review the applications and a qualified engineer will verify engineering calculations are correct prior to payment.

- Program Logic The primary barriers to increasing market penetration of high efficiency technologies and process improvements among commercial customers include:
 - Higher out-of-pocket cost to upgrade to efficient products.
 - Lack of funding to cover comprehensive projects that require capital investment for both natural gas and electric powered equipment
 - Lack of awareness regarding the energy and money saving benefits.
 - Lack of recognition in corporate purchasing policies of the payback associated with energy efficiency (i.e. policies emphasize low first cost).

The first-cost barriers will be addressed through a combination of financial incentives and educating consumers about the "payback" or "dividend' they will receive in the form of lower energy bills. Rounding out the Custom incentive offer to include electric incentives from IPL may influence projects once delayed because of gas only incentives.

Awareness regarding the financial payback and other benefits associated with efficient products will be promoted via advertising, website, and the distribution of collateral materials through market providers. In addition, Citizens Gas / IPL Business Managers will be supplied with training and collateral materials to equip them to convey the benefits of efficient products to their clients.

Corporate purchasing policies will be influenced by education efforts. Further, WECC will work with Citizens Gas / IPL Sales Consultants and Trade Allies to deliver the message to key business customers.

In order to minimize free ridership, the Custom Incentive program terms and conditions are designed to motivate trade allies and customers to (1) pursue projects that they would otherwise not have implemented, 2) pursue these projects sooner than they otherwise would have, or 3) implement equipment/measures at a higher efficiency level than they otherwise would have. Specific terms and conditions aimed at minimizing free ridership include:

- Custom incentives are limited to the lesser of 30% of a project's total cost or 50% of the project's incremental cost.
- The incentive is intended to reduce the customer's simple payback to no less than 1.5 years. No incentive will be available for projects falling under that payback limit. Program staff will use the customer's most recent 12-month utility fuel usage average in completing this calculation.
- All custom projects require input from WECC/engineering firm prior to final planning, purchase, or installation. Any project judged by WECC/the engineering firm to be in process (e.g. evidence by a P.O. in place, or in the judgment of program staff that the project is "proceeding without the incentive") are not applicable. WECC and the engineering firm(s) will work proactively with these customers to determine other gas saving projects for which we can provide assistance.
- WECC will maintain records including the Business Custom Application, Project Summary and any engineering review documents for all custom projects.
- Eligibility for Custom incentives on LED lighting is limited to products that appear on one of the following qualified product lists (QPLs): Energy Star qualified LED light bulbs, Energy Star qualified LED Commercial Lighting, or Design Lights Consortium (DLC) Solid State Lighting QPL.

Incentive Strategy The Business Custom program offers incentives to commercial customers to install high efficiency equipment that is not available through the Commercial Prescriptive program or to implement natural gas saving process improvements. Since each customer's needs are unique, each project will be screened for eligibility and incentive amount on a case-bycase basis. The following criteria will be used to determine the incentive for Commercial Custom Incentives:

Maximum project incentive:	\$25,000
Maximum incremental cost:	50%
Maximum project cost:	30%
Minimum project payback:	1.5 years

The following incentive structure will be used to promote the implementation of larger, more cost-effective projects.

Natural Gas Incentives

Project Savings – first year (therms)	Custom Incentive Levels
≥7,500	\$1.00/therm
< 7,500	\$0.75/therm

Electric Incentives

Project Savings – first year	Custom Incentive Levels
kW	\$200/kW
kWh	\$0.05/kWh

The maximum incentive a customer may receive is the lesser of the \$25,000t listed above, or 50% of the incremental cost, or 30% of the total project cost, or the amount necessary to bring the payback down to a 1.5 year payback. This cap is structured so as to provide enough money to encourage customers to act, but also to provide equity among ratepayers by preventing a few projects or few customers from using up all the available funds. WECC will work closely with prospective customers to determine if the project qualifies for financial incentives and to assist them in completing an incentive grant application.

Measure Characterization Characterization The Custom Incentive program is needed to address measures that are not covered by the General Service Prescriptive program. The application of custom measures tends to be unique for each customer and situation and typically requires lengthy lead time, so specific characterization is completed when the project is specified. The markets served can include any customer that falls within the rate class which could serve schools, hospitals, restaurants, food processing, warehousing, small industrial, commercial buildings, agriculture, water/wastewater treatment, manufacturing, etc. These applications can range from complex "prescriptive" type projects that may be involved in HVAC, lighting or process.

Marketing Strategy The program will affect the purchase and installation of efficient technologies or implementation of process improvements by working directly with (1) key end-use customers and (2) market providers to identify potential energy savings projects, analyze the economics of each project, and complete an incentive application. This strategy for prospecting for projects is highly dependent upon referrals and networking with trade allies and utility staff to identify projects.

Trade allies will receive reminder packets in the mail and follow-up telephone calls regarding the Custom program improvements to include electric benefits. WECC staff will then conduct in person visits to key market providers at their place of business to recruit their support in providing referrals of custom incentive projects.

Measurement &
VerificationTo facilitate accurate measurement and verification WECC will collect the
following information on each incentive transaction:

- Application and screening correspondence
- Business customer data (e.g. name, address, telephone, e-mail)
- Installation data (e.g. address, date, contactor)
- Measure information (e.g. quantity, model, serial number, efficiency and payback calculations)
- Letter of Intent and Engineering Review (where applicable)
- Transaction data (e.g. invoice, measure cost, purchase date)

Fulfillment information, will be available to Citizens Gas / IPL in real-time via an electronic interface and will be supplied to a third-party evaluator upon request. Project details will be provided as requested

WECC (and engineering support) will review custom calculations on each project to determine the energy savings potential, payback horizon, and incentive amount. WECC engineers will review applicant's calculations for accuracy and provide feedback as needed.

Onsite inspections of 20% of each small project and 100% of each large project for which customers receive incentives will be conducted to verify (1) products/process were indeed installed/implemented as planned and (2) model and serial numbers match those provided on the incentive claim form. Any inconsistencies will be researched and the resolution recorded.

Administration	WECC will provide the administrative services listed below in support of the program, as outlined in our contract:
Program Metrics	 Managing subcontractors Budget tracking Fulfillment services Contact (call) center services standards Data tracking systems Onsite verification of incentive claims Managing public relations Problem resolution Manage and oversee procurement Supporting evaluation activities Reporting to the Oversight Board These services are included in the program administration budget. The primary program metrics will include: Annual gross and net therm, kWh, KW savings Number of participating customers Delivery at or below budgeted costs Achieving forecasted benefit-cost results Proposed secondary program metrics include: Line up Custom Incentive projects for current year and establish a pipeline for the upcoming program. Conduct Joint Trade Ally/Utility Rep meetings with direct customers 80% customer satisfaction rating based on survey results. In conjunction with the Commercial Prescriptive Program, identify and execute group training/exhibit opportunities. Deliver and mail marketing materials to trade allies involved with promoting the prescriptive programs.

Leverage Opportunities	 WECC will pursue the following opportunities to leverage third-party resources to benefit the program: Coordinate program delivery with other Indiana utilities to minimize confusion in the marketplace and reduce costs through economies. Work through trade associations to promote the availability of the program to their constituents.
Utility Coordination	 WECC will coordinate the following activities with Citizens Gas / IPL staff: Provide training to utility staff on program content, terms and conditions as needed. Assist Corporate Communications staff with the development of marketing materials and webpage. Coordinate outreach to trade allies and targeted end-use with Citizens Gas / IPL Business Managers. Conduct Joint Trade Ally/Utility Rep meetings with direct customers.

Projected Program Participation, Savings, Budget and Cost Effectiveness Information

Citizens Gas Portion

Participation, Incentives, Savings

	PY4 Participation Forecast Annual	Incidence	PY4 Incentive/Unit	Total Incentive Cost	Deemed Savings	Gross Therms	Free Rider	Net Therms
General Service Custom (Jointly delivered with IPL)								
>7,500 therms	30		\$ 13,383	\$ 401,490	10037.00	301,110	25%	225,833
<7,500 therms	7		\$ 911	\$ 6,377	911.00	6,377	25%	4,783
Sub Total	37			\$ 407,867		307,487		230,615

Program Budget, Savings, Cost Effectiveness

		Portfolio	Summary	Program Yea	ar 4-EIA Refer	ence Case						
				Est. Gross	Est. Net	% Gross					Gas Net	Overall Net
			%	Savings	Savings	Savings	Gas	Gas	Overall	Overall	Benefits	Benefits
	Citizens Program	Program Budget	Budget	(Therms)	(Therms)	Therms	TRC	UCT	TRC	UCT	Total	Total
2.2	0 General Service Custom	\$ 509,758	12%	307,487	230,615	16%	1.1	2.8	1.8	4.9	\$ 189,538	\$2,301,801

Program Budget Detail and Overhead Allocation

General Service Custom	
Incentives	\$ 407,867
WECC Labor	\$ 65,601
WECC Direct Costs	\$ 7,800
Subcontractor(s)	\$ 28,490
Implementation Subtotal	\$ 509,757.75
Evaluation Allocation	\$ 18,134
WECC Admin Allocation	\$ 5,155
Umbrella Marketing Allocation	\$ 20,625
Allocated Subtotal	\$ 43,914
Subtotal	\$ 553,672

IPL Portion

Participation, Incentives, Savings

	PY2 Participation Forecast	Incentive / Unit	PY2 Total Incentive Cost	Inciden ce	Install Rate	Qty Installed	Deemed Savings kWh	Deemed Savings kW	PY2 Gross kWh	PY 2 Gross kW	Free Riders	PY2 Net kWh	PY2 Net kW
IPL Electric CORE PLUS Joint Delivery Programs													
C&IBusiness Solutions - Custom													
Small Project - \$1-5K	14	\$ 2,570	\$ 35,980				33,284.0	5.00	465,976	70.00	20%	372,781	56
Medium Project \$5K-25K	22	\$ 14,369	\$ 316,118				294,504.0	97.00	6,479,088	2134.00	20%	5,183,270	1,707
Sub Total	36		\$ 352,098						6,945,064	2204.00		5,556,051	1,763

Program Budget, Savings, Cost Effectiveness

		Po	rtfolio S	ummary Pro	ogram Y	ear 2						
					Est.			%	%			
		-	%	Est. Gross	Gross	Est. Net	Est. Net		Gross			
	-	Program	Total	Savings	Savings	0	Savings	0	0	-		
#	Program	Budget	Budget	(kWh)	(kW)	(kWh)	(kW)	kWh	kW	TRC	UCT	Net Benefits
	Core Plus Programs (Sept 2011 - Aug. 2012)											
2.20	C&I Business Solutions - Custom	\$ 481,478	29%	6,945,064	2,204	5,556,051	1,763	29%	50%	2.3	7.2	\$ 2,112,263

Program Budget Detail and Overhead Allocation

C&IBusiness Solutions - Custom	
Incentives	\$ 352,098.00
W ECC Labor	\$ 84,620.40
W ECC Direct Costs	\$ 7,800.00
Subcontractor(s)	\$ 36,960.00
Implementation Subtotal	\$ 481,478
Evaluation Allocation	\$ 24,073.92
W ECC Admin Allocation	
Marketing/Consumer Education Allocation	\$ -
Allocated Subtotal	\$ 24,074
S ub Total	\$ 505,552

Appendix A: Energy Star Builder Information

Builders in Indiana : ENERGY STAR

ENERGYSTA

Builders in Indiana

Bickle Date View

Program indicators in indiana

- 184 ENERGY STAR Builder Partners

21,579 ENERGY STA R qualified homes built to date
 9 ENERGY STAR qualified homes built 2010 to date
 LABI ENERGY STAR qualified homes built in 2010

ENERGY STAR qualified homes built in 2009 are the equivalent of:

- * Eliminating emission: from 824 vehicles
- · Saving 4.982,484 lbs of coal
- * Hanling 1.362 actes of trees

* Saving the environment 9771,653 pounds of CO2

Garet mouthing a sugar

Filter this list by the type of homes built:

цų.	Sie-Bolt	Munita tered	Multi	Family Afford	itike 💶			
Ca	mini field to	100% ENERGY	STAR H	inmes Builders				
Nam	é	-		Bulider Type	Pariner Since B	Homes Gualfied In IN during Jan 2008 - Dec 2009	Homes Qualitied in IN Total:	Homes Qualified Grand Total
317-1	lomes of India 255.9900 napolis Carmai		1005	Sta-Bulk Homes	1927	163	57	697
317-3	Homes of Ind 17 5-2350 happils-Carmai		1005	Sta-Bult Homes	2000	291	4,377	4,07
574	Willer Consen 264-0544 zis-Goshen	ration	1005	Sta-Bult Homes	2006		21	21
765	pase Homas 743-0300 vette		1005	Eto-Bult Homes	2006	121	457	487
Be da	oek Builders 77 0-3900 napolis-Carmai		1005	Sta-Bult Homes	2957	7	5	a
317-8	inager Homes 945 5686 happilis-Carmei		1005	Sta-Sult Homes	2007	1	5	6
5740	ion Homes by 277-3500 h Band-Mishaw		\$7100S	Site-Bull Homes, Developer	2007	36	łGł	108
BIDO	LLC 94 1 9857 Wile Jefferson	Caunty	1005	Sta-Bull Homes	2008	2	25	26
574-5	iai for Humani Ny 533-6100 Li-Goshan	iy of Elkhan	(cleans	Attordable, Site Built Homes	2008	7	15	15
210.0	ering Homes 021-1300 ago Naperville-	Jokar	11005	Sto-Bull Homes	2005	2		
2104	andala Bulidar 267-4331 ago-Napervilia-		(THEN	Sto-Bull Homes	2959			
B120	SMIII Davelope 256-5952 Wile-Jaffarson		(files	Sta-Sult Homes	2000	13	13	15
800-	to Builders 748-8120 ago-Naperville-	30fet	ines.	Sta-Sult Homes	2000	20	2)	20
No or 317-6	Development 531-8094 napolis Carmal	Co, Inc	() ines	Sta-Bull Homes	2000	7	7	7
The I	Re Dotwicpero 281-0506 napolis Carmal	n Group	1005	Afterstable, Site- Built Homes	2000	10	12	12

http://www.energystar.gov/index.cfm?fuseaction=new_homes_partners.showAreaResults... 3/10/2010

Page 1 of 8

tiumo.		Builder Type	Parimer Sinte H	Homes Cualified In 1R during Jan 2009 - Dec 2009*	Homes Qualitied	Homos Qualities Grand Texat
Cardingion Homas Inc. 317 235-8002 Infrances-Carna		Bile-Built Homas	1992	3	*	102
Hark I Consumentary		Ste-Built Homes	1997	2	190	155
CNcage-NaperVille-Jokst		(Carlos				
Southlake Development, Inc. 210-547-5713 Chicago-Alabert Illo-Joliet		Sta-Butt Homas	1007	1	302	129
Vajanji Construction, Inc. 219-759-8855 Chicago-Napolylio-Joliet		Sile-Bult Homes	1997	19	941	164
Wigner Homes, No. 219-465-1995 Cricage-Vaperville-Joket		Sta-Bolt Homee	1907	4	, 4 8	42
HI-Tach Housing, Inc. 57 - 346-5593 Other Anasi In Indana; Chicago-Vassavilla- Joset, Davar Waran-Lwona, Eknasi- Gortan; Indanapoja-Carmer, Kankake- Bradey		Modular Homa Pipiti, Manufacturiad Homas	1993	ø	1.324	1,246
AJD Custom Homos 219-864-1131 Cristico Hapen IIIo-Joliat		Bis Bull Homes	2006		164	175
All American Homeo 219-724-9171 Char Anazz in Indiana	og.	Bite-Butt Hambs	2005	ý.	÷	1
Chaiman Communities Inc. 210-454-5055 Christo Viacent Ilo-Intel		Ste-Bill Homes	2000	-13	10+	
Eineli Communication 810-473-4433 Eventvilla		Site-Built Homes	2091	er	161	183
German Homas, Inc. 317-838-8085 Indianapolis-Carnial		Ste-Bull Homes	2001	3	15	15
Hones by Kun Schmädele 317-575-2479 Indiangoolis Carmid		Gite-Eultr Homes	2001	1	8	1
Kandalayon Bulkians 817-467-1123 Instanzoolis-Carmal		Ste-Bull Homes	2001		té	.10
Premisir Homes of Southern Indiana 813,044,5361 Louisville-Jefferson County		Bla-Buit Hamas	2002	55	102	162
John Eigens Comraeling, Inc. 812-402-8000 Evanaville		Bie-Bull Homet	2003	15	3	27
Town II Country Construction Contractors, Inc. 819 522-5300 Cithar Areas in Indiana		Bite-Bullt Homes	2003			14
Beater Homes - Indianapolis 317-843-0514 Indianapolis-Carmal		Sila Bult Homas	2004	5		206
Millionry Hollies Inc. 812-875-2044 Biomington		Sta-Bull Harnas	2004	x		1
Vogel Builders 815.522-764 Other Areas in Indiana		Ste-Bull Homes	2004		1	5
Brookgione Hones LLC 317-272-2779 Intianapole-Carmal		Sile-Bull Hempe	2008	é		8
Centradore Honos 574-535-7100 Other Anazi In Indiana; Akroni Albary- Bananuclady-Troy, Aliantown Bathleham- Baston-Cambros-Towkort, Bindhankort, Baston-Cambroga-Osinay, Buntab Niegara Falis, Burlington-South Burlington; Cambroton, Davidano Egras Ventor; Cambroton, Dovar; Elittari Gostani; Elimita Ginto Falis; Hantstorg Cathlak, Ihaca; Ningston, Lancaster; Lemitlon-Adourc		Manufacturad Homas	2005		7	1.817

Jansey-Long Island: Philadebrie-Camdon- Wilningten, Tritteburgh: Pontiand-South Pontiand: Biddeford; Poughkaopsie- Naeturgh-Middletzen; Providonce-New Badron-Fail forum, Reachester; Boranen-Wilker-Bang, State Celego; Synacuse; Unka-Roma; Vinsiand-MiMila- Bridgetor; Warton-Steutown Re, Williamsport, Minchester; York-Hanova; Youngsteven- Warten-Boutoman					
GM Homes 574-575-5605 Bikhari-Goshan	Bie-Bult Homes	2005	¥.	9	
Gray sona Country Homes 513-469-7200 Chanas-Middleiwen	Sta-Built Homes	2005	3	15	15
Home Builders Plus, LLC 812-256-07 18 Journ Bo-Jafferson County	Ste-Bult Homes	2005	t.	+	
R.W. Kidd Consinuolion 574-529-0520 Other Anaza in Indiana	Ste-Bull Homes	2005	<i>t</i>	7	3
RLS Building Corp. 317-718-7574 Indianapole-Carmal	Sta-Built Homes	2005	ţ	.11	
Walas Homes 574-594-7973 FortWayne; South Bend-Mishpiwaka	Ste Built Homas	2005	74	495	625
Bob Buescher Homes 260–400-3355 FortWayne	Bte-Built Homes	2006	÷	38	50
Brtan Chrissopher Bulkders 219-545-27 54 Chicage Naper IIs Jolist	Bis-Bull Homes	2005	0	3	3
Choke Homes by Shawn Bernman, Inc. 574-831-3675 Binter-Josetan	Bis-Bull Homas	2006	3	6	
Cock Builders 219.322.3503 Chicago-Napewille-Jolist	Sta-Bull Homas	2006	5	32	32
Copien Consumption, Inc. 574–359-1673 Char Areas in Indiana	Ste-Built Homes	2006	0	13	13
Fose r Custon Hones Inc 574-574-2325 Other Areas in Indiana	Bie-Bult Homes	2006	3	и.	34
Frieman & Haner Cusiom Homes. Inc. 574-265-3272 Other Anazs in Indiana	Sta-Built Homes	2006	0	7	7
G&G Guarem Homae, Inc. 917-418-7665 Indianapolis-Gamat	Bis-Bull Homes	2006	2	8	8
Genry Construction 812.332.7400 Biomington	Stie-Built Homes	2006	16	114	114
Granile Ridge Builders by Tony Relacie 260-460-1417 ForlWayns	Ste-Built Homes	2005	163	650	554
Hansen & Hem Group, Inc. 217-349-5135 Inclanapolis-Carmal	Sta Bult Homes	2006		167	157
Ideal Suburban Homes, Inc. 260-254-24131 Other Areas in Indiana	Bia-Bull Homes, Developer	2006	12	20	279
URF Development, LLC aka LikeScape Propenies 317-816-0807 Instanapolis Carmal Instanapolis Carmal	Developer	2006	7	24	24
K8B Construction Company, LLC 912-332-7400 Boomington	Ste-Built Homes	2006	- 1	Ť	1
LA. Praser Bullders, Inc. 260.740-9277 FortWayns	Bis-Built Homes	2006	×.	5	5
Lanola Homes 100-480-4433 FortWayne	Sta-Built Homes	2006	+	220	220
Lynn DeLaGrange, Inc. 260.749-9635	Sta-Bulti Homas	2006		24	34

FortW ayne	-					_
Progressiva Custom Homas 812-573-1271 Branav He	1	Bito-Bullt Homas	2006	0	0	10
R.A. Fulion Construction Inc. 317-386-3230 Indianapolis-Carmal		Sta-Eult Homas	2006	4	6	8
Rick Media Censulation 219-552-17 17 Chicago Napawike-Jokat		Site Built Homas	2006	1	18	ta
Schuler Homes, Inc. 812-048-0408 Louisville-Jefferton County		Site-Built Homes	2006	•	2	22
Accent Homes, Inc. 219-756-2580 Chicago-Napew Re-Joliet		Site-Bullt Homas	2007	2	66	74
B A Homes, Inc 812-335-5609 Bicomingtan		Sta-Bult Homas	2007	0	1	1
Barklay Biulidans, Inc. 260-522-7974 FortWayne		Bita-Bult Homas	2007	1	11	н
Barlow Cussom Builders, Inc. 574-366-1797 Bishart-Gothen		Sta-Eult Homas	2007	Ð	6	6
Bucher Construction Ltd. 219-309-0054 Chicago-Nisperville-Johat		Sta-Bull Homas	2007	10.	24	24
Casalla Homes 317-706-6773 Indianapolis Carmal		Sta-Eult Homas	2007	3	5	5
Coronado Developmene Homes Corp. 317-557-4522 Indianapolis-Carmel		Sta-Built Homas	2007	1		11
Crano Bulidors 317-481-1470 Columbus, Indianapolis-Carmel		Sta-Built Homas	2007	1	6	ş.
DD Signature Homes, Inc 250-471-3000 FortWayne		Site-Bull Homas	2007	0	6	Ŧ
Dave Hoggle Builders 812-055-0240 Indianapolis-Carma		Ste Built Homas	2007	8	0	x.
Dennis Spidel Cusiom Homes 260-865-1509 Other Arees in Indiana		Sta-Bult Homas	2007	6	8	•
DiegenBrugger Industries inc 260.463-2875 Other Areas in Industa		Sta-Built Homas	2007	.8	1	1
Dishman Emorprise, Inc. 812-325-7781 Beomington		Sta-Built Homes, Owner/Builder	2007	3		
Die es Homas 317-347-7300 Indianapolis Cannal		Sta-Built Homas	2007	73	24	274
C 8 5 Homos 812-335-3615 Boomingtan		Sta-Built Homas	2007	1	1	4.
Giner Homes, LLC 210-045-5555 Chicago-Naperville-Joket		Sita-Bull Homas	2007	4	7	7
inglenook LLC 574-265-1327 Other Areas in Indiana		Sta Built Homas	2007	0	6	5
Increase us Development 574-068-4424 South Bend-Michae aka		Ste-Built Homas	2007	2	2	2
Lee Cusion Hones of Hamilion County. Inc. 317-867-3331 Indianapolis-Carmal		Site-Built Homas	2007	0	- t - 1	1.
Lizzof Homas II, Inc. 219-945-1978 Chicago-Naperville-Jolist		Sta-Built Homas	2007	Ħ	10	19
Willer Brochers Builders 574-533-8602 Bishari-Gothen		Sta-Butt Homas	2007	1	3	3

W/IVision Homas 219.405-2143 Chicago-Napawilo-Joliat	Bita Bulli Homas	2007	29	,151	161
O'Donnell Homes, Lid 219-365-2245 Chicego-Napavillo-Joliat	Site-Bulti Homes	2007		2)	21
Place Builders 574-259-4558 South Band-Michae ska	Site-Built Homes	2007	20	79	79
Providence Real Emails Development, LLC 219-865-7685 Chicago-Napavillo-Johal	Bie-Bull Homas	2017	HE	21	23
R & R Construction and Exclarating, Inc. 812,526-3765 Columbus	Ste-Eulti Homas	2007	0	3	3
Robinson Construction Management, Inc. 812.332.4776 Boomington	Site Eult Homes, Developer, Denar Eultoer	2007	3	5	6
Risbicon Cusiom Homes 812-327-2115 Boomington	Ste-Built Homes	1907	0	3	3
Selective Homes by Ched & Ded (Van Zilos Energelses, LLC) 812-460-2142 Paraville	Ste-Bult Homas	2997	.e	-11	"
Site kerwood 812-335-2001 Boomington	Sta-Bull Homes Devision	1007	1	6	16
Sb ma Homes 210-806-4897 Chicago-Napawillo-Joket	Sta-Bult Homos	2007	2	18	† 4
Suminit Homobuliders 219-464-3670 Chicego-Napav Ro-Johat	Site Eult Homes	2007	0	3	3
T.A. Patier Homes, inc. 812-824-3500 Boomington	Stie Built Homes	2007	8	9	1
Thioneman Homas, Inc. 219-651-0554 Chicago-Napaw Bo-Jokat	Ste Built Homas	2007	8	15	15
Artsiocrai Builders, Inc. 812-352-47 04 Louisville-Jaffarson Coursy	Bite Built Homas	3005	1	2	
Ailas Coninsoing 219-405-9543 Chicago-Nispawillo-Joliet	Site-Built Homes	2008	0	4	1
Badger Construction, Inc. 812-853-52895 Byznarilla	Site-Bull Homes	2009	1	•	4
Blueprin: Construction, LLC 374-204-2583 Other Areas in Indana	Site-Eult Homes	2005	1	12	1
Beller Cusiom Homes, Inc. 317-441-2630 Indianapolis-Carmal	Sita-Bulti Homes	2008	New Partner	Nos Partner	New Parinar
Custon Gually Henris, Inc. 260-710-0615 FortWayne	Site Bull Homas	2008	¢	7	7
<u>PCL Hories Inc.</u> 812-322-4755 Boomington	Stip Sult Homas	2008	0	4	1
Day to Land and Homes, LLC 210-712-5725 Chicago-Napawillo-Joket	Site Bullt Homes	2008	•	Ŧ	7
Denall Group 812-295-7722 Tarte Haute	Bite Bulli Homes	1958	Nave Palithat	New Partner	Non Partiel
Dennis Bube B12-267-5501 Louisville-Jaffanson County	Owner Builder	2008		1	1
Hundingion County Habitat for Humanity 260-366-7425 Difter Areas in Indiana	Site-Built Homas	2008	0	0.	4
KBB Construction, LLC 312.337-7516 Boomington	Site Built Homes	2008	9		4

No Farland Homes 210-054-0535 Chicago Piape villo Joliet	Ste-Built Homes	2008	5	7	7
Nichael Kowy, Builder 317-545-5792 Indianapolis-Carma	Ste-Bult Homes	2008	Now Pastner	Naw Partner	Now Parines
Piessol Enverprises, inc. 219-362-5665 Michigan City-La Perte	Sta-Bull Homas	2008	4	6	6
Propeny Group Cne 317-714-1690 Indianapolis-Carmal	Sta-Bull Homas	2005	2	2	2
Sayler Construction, Inc. 219-865-2228 Chicago Hapetylle-Jollet	Ste-Butt Homes	2008	2	12	12
Scoll Homas LLC 317-422-0151 hdiatapolis-Cormal	Ste Butt Homas	2008	3	12	12
Signature Homes by Eric Maple, Inc. 219-066-2761 Chitago-Naper/Ite-Joliet	Site Bull Homes	2008	Now Parmar	Now Pariner	Now Partner
Sielner Homes, Lid 219-464-8093 Chicago Napewille Jolist	Ste-Bull Homas	2005	1	, t	1-
Sionebridge Dovelopment of Wast Lakyesie 765-420-0272 Lafayste	Bite Bull Homes	2008	"	3	3
Summin Builders, Inc. 765-245-2001 Indianapolis-Carmai	Site-Built Homes	2008	New Partner	Naw Partner	New Partner
Tin Libzie, Inc. 219-896-5421 Chicago-Naperville-Joliet	Manufactured Homes, Sita- Built Homes	2008	.8		1
Toby Sullivan Construction 812/325-7585 Boomington	Sta Bull Homes	2008	Q	1	4
Villas at Valo Park, LLC 219-464-7387 Chicago-Napeville-Jokat	Ste Bull Homes	2005	2	12	12
Wagner Homes, LLC 219-835-0533 Chicago-Piapew Re-Joliat	Bite-Built Homas Owner/Builder	2008	Now Partner	Nav Patha	Now Parinas
1-2-1 Designs, Inc. 574-825-1579 Bikhari-Goshen	Ste Bult Homes	2009	Now Parmer	New Partner	New Parmer
AJ Jugi Homes 812 554-8150 Cinamas-Middletown	Ste-Bult Homes	2005	Now Partner	New Partner	Now Parmar
AdVanced Custon Homes & Bernodeling, LLC 574-217-4141 South Bend Mithae aka	Bite-Bull Hamas	2000	1	.,	1
Adams Construction Services Inc. 812-252-3463 Louisville-Jetionson County	Site Built Homee	2009	Now Paring	Non Partner	Non Partner
Bakar Hernas 812-327-5924 Beomington	Site-Built Homes	2005	1	1	.1
Bay man and Rusk Builders, Inc. 574-272-0670 South Bent-Mishawaka	Bite Bull Homes	2009	ŧ -	6	
Bulk by You 812 339-3399 Boomington	Sta Bult Homes	2002	Now Patinof	Nae Pattor	Now Partner
CT Cusiom Home Builders (CT Consultants, LLC) 574-259-5151 Cthar Areas in Indiana	Ste-Built Homes	2009	Now Partner	Noe Partner	Non Partner
Chese r Companies, LLC 219-778-2223 Michigan Diy-La Perle	Ste-Bult Homes	2009	New Parma	Now Partner	Now Parmer
Classic Home Construction and Foundations 165-647-5002 Endmail-Middleicwin	Sile Buft Homes	2000	Now Pathot	Naw Pattor	Non Partner
Davion Clusion Homes 974-971-0686	Stis-Bult Homeo	2000	10 m	4	

South Bond, Wohawaka		august .	Anna Product	Mars. Francis	ALLEY BURNESS
Domain Residential, LLC 317-502-3120 Indianapolis-Carmal	Site Bulli Homes	2009	New Partner	Naw Parmar	Now Partner
Fail Creek Homes Inc. 260-483-6731 FortWayne	Site-Built Homes	2000	. 4	t.	1
Remington Construction, LLC 210-876-7117 Michigan City-La Porte	Sile-Bull Homes	2005	1	1	Ĩ.
Forest River Housing 574-852-4461 Bishari-Gothen	Modular Home Flant, Manufactured Homes	2002	New Pattner	Nas Patrar	Non Partnar
HHI Consuction, Inc. 574-250-2685 Bishari-Sochen	Sita Bull Homas	2009	Now Pariner	New Partner	New Parster
Hables for Humaniky of Lalayène, Inc. 765-423-4590 Lafayete	Altordable, Site Built Homas	2009	3	53	15
Hennessey Development, Inc. 219-603-2060 Chicago-Napeville-Joliet	Sta-Bult Homat	2009	New Partner	Nav Patter	Now Farmar
Homecrafi Builders of Indiana Inc. 317-710-5223 Indianapolis-Carmal	Ste Built Homes	2005	Now Partner	Nak Partner	Now Farmer
Homos by Jim Ingledue Consenución, Inc. 260-565-9284 Other Areas in Indiana	Sile-Built Homes	2000	1	x	1
Homes by Kanon 317-191-5143 Muncia	Sta-Bult Homas	2009			1
Vy Guad Developmen, LLC 574-507-4271 South Bens-Monawaka	Bite-Bull Homas	2000	7	7	7
J Kie mke Construction Energetises, LLC 219-309-0990 Chicago-Napewille-Joliet	Attortable, Sta- Built Homes	2009	New Parmer	Naw Pattner	Now Partnar
Jise Graber Jr. Construction, LLC 812-257-4411 Other Areas in Indiana	Ste-Built Homas	2005	4	4	,
Kascada Designar Homas, LLC 513-319-57-36 Cincinezi-Middlekwen	Site Bult Homes	2009	1	1	۲
Kaliy Consumetion, Inc. 219-663-6030 Chicago-Napavilla-Joliai	Stie Built Homes	2009	3	3	3
Komark, Lid. 219.405-1034 Chicago-Napawillo-Jollet	Sta-Bult Homas	2009	New Partner	Now Partner	Now Parinar
N. No mon Franklin, inc. 317-3824603 Indianapolis-Carmal	Sta-Built Homes	2009		1	1
Marquae Homas 317-358-5083 Indianapolis-Carmal	Site-Built Homas	2009	New Partner	Naw Partner	Now Parshar
Hicholas Cussom Homa, Inc. 574-574-5827 Bihari-Gother; South Band-Mishaeska,	Site-Bull Homes	2000	3	2	2
Pure Comfort, LLC 502-209-5545 Louisville-Jeffarson County	Site-Bult Homas	2000	ġ	3	э
RJ Fernich Homes, LLC 317-714-1520 Indianapolis-Carma	Site Bullt Homac	2000	1	1	1
Reliable Projects by Manin, Inc. 574-540-07 15 Bistart-Goshen	Sita Bulit Homas	2000	New Parmer	Naw Parmer	Non Partner
Resonant Homes of South Band, Isc. 574-571-1210 Michigan City-La Porte, Nilas Benton Harbor; South Bond-Michae sta	Stia-Bult Homas	2009	ì	1	1
Scholblor Decign-Build 812-7 (7-2066 Other Areas in Indiana	Sta-Butt Homas	2000	Now Pattner	New Partner	Now Partnar
Schneider Builders, Inc. 219-477-3665	Site-Bult Homes	2009	- A1	2	2

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or Homao, Inc. 365-0993	Homas	2099	1	- t-	- 1
ISO NODEN ED JOIST	Site-Bullt Homas	2009	New Pattner	New Partner	New Parts
niberger Partners 545-4875 napolis-Carmal	Site-Bult Homes	2009	New Pather	Now Partner	Now Parts
Homes by Delagrange 8 Filchhan, Inc. 755-5003 Nayne	Ste-Bult Homas	2092	4	- 44	14
e Thioneman Builders, LLC 203-8047 Wile-Jatarson County	Site Bullt Homes	2005			
hine Homes, Inc. 355.5400 1go-Napawillo-Jolist	Site-Built Homes	2000	-1	3	3
Taiben Hones, LLC 105-5655 IV/Ne	Bite-Built Homas	2005	,		. *
lerAa & Sons Construction, Inc. 574-5731 130-Napswille-Joliet	Site-Bullt Homes	2009	. 1 .	. 7	1
ad Homes 65-2003 app-Mapawilla-Jolist	Bis-Built Homes	2016	Now Pather	Non Partner	Non Parts
Construction, LLC 146-3792 Wile-Jatistion County	Alfordable, Site- Built Homes	2010	Now Partner	Non Partner	Now Parin
is Breijhers Construction 300-0040 • Areas in Indiana; Columbus; Louisville- rson County.	Sta-Built Homas	2010	0		2
Wilding and Design Corporation. 775-0510 app-Napewille-Jotel	Site-Bult Homes	2016	Now Paring	Nos Partnar	Now Parts
iai for Humaniky of Whitiky County 244-4479 Nayna	Attorgabilo, Site Bull, Homes	2016	New Pariner	Naw Partner	Now Parts
na Proporty 8 Development Group 443-5602 Haute	Attordabilo, Site Bulk Homes	2016	New Partner	Now Partner	Non Parts
Inney Renovators & Builders, LLC 374-7504 napolis-Carmat	Attortable, Site Built Homes	2010	New Pathor	Noe Partnar	New Parts
chain Consinución, LLC 176-5933 rtington	Sita-Bulti Homes	2010	New Pather	New Partner	Now Parts
-Ryan Homus-ND 351-5707 Hapolis-Carmal	Site-Bult Homes	2010	New Pather	Naw Partner	New Parts
ision Property Management Co., Inc. 965-7527 Wile-Jetierson County	Site-Bullt Homas	2010	Now Pariner	Now Partner	Non Parts
zak Construction Services, Inc. 944-9578 napolis-Carmat	Sile-Bult Homes	2010	Now Pathor	Naw Partner	Now Parts
iomes, Inc. 577–8538 120-Napew Ro-Joket	She-Built Homes	2016	New Pattner	Naw Partner	New Parts
576-5933 mington SSI-5707 mapole-Carmal bion Discorry Management Co., Inc. 246-7527 Wite-Jetherson County 2020 Construction Services, Inc. 244-2673 mapole-Carmal tomes, Inc. 377-8933	Homes Site-Bult Homes Site-Bult Homes Site-Bult Homes Site-Bult Homes Site-Bult Homes	2018 2018 2018 2016 2016	New Parner New Parner New Parner New Parner	New Patter New Patter New Patter New Patter	PÂ

1.2 Residential - New Construction

				In	puts			Saving	js yr. 1	Net Be	enefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Admin													
PL -Mktg/Consumer Ed -		0				0%	1	0		\$0	\$0	\$0	0.00
Allocation							Alternativ	ve Avoided C	costs	\$0	\$0	\$0) #Num!
							В	udget		\$0	\$0.00	\$0)
CG - Mktg Allocation Costs		0				0%	1	0		(\$27,500)	\$0	(\$27,500)	0.00
		Admi	in\$\$2	27,500.00			Alternativ	ve Avoided C	costs	(\$27,500)	\$0	(\$27,500	0.00
							В	udget	\$	27,500	\$0.00	\$27,500)
PL - Implementation Costs -		0				0%	1	0		\$0	(\$26,245)	(\$26,245)	0.00
les New Construction		Admi	i n \$ \$2	26,245.00			Alternativ	ve Avoided C	costs	\$0	(\$26,245)	(\$26,245	5) 0.00
							В	udget		\$0	\$26,245.00	\$26,245	i
CG - Implementation Costs -		0				0%	1	0		(\$13,123)	\$0	(\$13,123)	0.00
Res New Construction		Admi	i n \$ \$	13,123.00			Alternativ	ve Avoided C	costs	(\$13,123)	\$0	(\$13,123	3) 0.00
							В	udget	\$	13,123	\$0.00	\$13,123	;
CG - Admin Allocation Costs		0				0%	1	0		(\$284)	\$0	(\$284)	0.00
		Admi	in \$	\$284.00			Alternativ	/e Avoided C	costs	(\$284)	\$0	(\$284	4) 0.00
							В	udget		\$284	\$0.00	\$284	Ļ



1.2 Residential - New Construction

					In	puts			Saving	s vr. 1	Net Be	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits E	3/C - TRC
CG - Evaluation Allocation			0				0%	1	0		(\$984)	\$0	(\$984)	0.00
Costs			Admi	n \$	\$984.00			Alternativ	/e Avoided C	osts	(\$984)	\$0	(\$984)	0.00
								В	Budget		\$984	\$0.00	\$984	
IPL -Evaluation - Allocation			0				0%	1	0		\$0	(\$4,971)	(\$4,971)	0.00
			Admi	n \$	\$4,971.40			Alternativ	/e Avoided C	osts	\$0	(\$4,971)	(\$4,971)	0.00
								В	Budget		\$0	\$4,971.40	\$4,971	
CG - ES Ver. 3.0 (IECC 2009 baseline) gas heat			309	30	\$3,500	\$713	5%	7	2,055		\$67	\$0	\$67	1.00
, 0						20%		Alternativ	/e Avoided C	osts	\$4,311	\$0	\$4,311	1.19
								В	ludget		\$4,988	\$0.00	\$4,988	
CG - CG/IPL Gold Star			350	30	\$3,325	\$713	20%	17	4,760		\$8,852	\$0	\$8,852	1.20
Program <70						21%		Alternativ	/e Avoided C	osts	\$18,683	\$0	\$18,683	1.41
								В	Budget	5	\$12,113	\$0.00	\$12,113	
IPL -SEER HP from 13 to	1,082 ().2	0	20	\$1,000	\$200	0%	5	0	5,410	\$0	(\$1,332)	(\$1,332)	0.70
15min. Bonus (all electric NC homes)						20%		Alternativ	/e Avoided C	osts	\$0	(\$1,332)	(\$1,332)	0.73
								В	ludget		\$0	\$1,000.00	\$1,000	



1.2 Residential - New Construction

					Ir	nputs			Savino	js yr. 1	Net B	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost		Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
IPL -ES Ver 3.0 (baseline	191	0.0	0	30	\$180	\$38	0%	10	0	1,910	\$0	\$160	\$160	1.10
IECC 2009) gas heat						21%		Alternati	ve Avoided C	Costs	\$0	\$160	\$160	1.09
								E	Budget		\$0	\$375.00	\$375	
IPL -ES Ver 3.0 (baseline	4,809	0.5	0	30	\$5,090	\$750	0%	10	0	48,090	\$0	(\$13,337)	(\$13,337)	0.70
IECC 2009) electric heat						15%		Alternati	ve Avoided C	Costs	\$0	(\$13,337)	(\$13,337) 0.74
								E	Budget		\$0	\$7,500.00	\$7,500	
IPL -ECM Motor on HVAC	1,072	0.0	0	20	\$400	\$100	0%	5	0	5,360	\$0	\$774	\$774	1.40
						25%		Alternati	ve Avoided C	Costs	\$0	\$774	\$774	1.39
								E	Budget		\$0	\$500.00	\$500	
CG - CG/IPL Silver Star			207	30	\$1,425	\$475	25%	3	466		\$1,796	\$0	\$1,796	1.60
Program <85						33%		Alternati	ve Avoided C	Costs	\$2,758	\$0	\$2,758	1.86
								E	Budget	5	\$1,425	\$0.00	\$1,425	
IPL -Heat Pump Water Heater	2,873	0.3	0	15	\$700	\$500	0%	2	0	5,746	\$0	\$1,273	\$1,273	1.90
						71%		Alternati	ve Avoided C	Costs	\$0	\$1,273	\$1,273	1.91
								E	Budget		\$0	\$1,000.00	\$1,000	



1.2 Residential - New Construction

					In	puts			Saving	gs yr. 1	Net B	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
IPL - CG/IPL Gold Star Program <70 gas heat	310	0.0		30	\$175	\$38	0%	25		7,750	\$0	\$2,369	\$2,369	1.50
1 logram 0 gas heat</td <td></td> <td></td> <td></td> <td></td> <td></td> <td>21%</td> <td></td> <td>Alternativ</td> <td>/e Avoided C</td> <td>Costs</td> <td>\$0</td> <td>\$2,369</td> <td>\$2,369</td> <td>1.54</td>						21%		Alternativ	/e Avoided C	Costs	\$0	\$2,369	\$2,369	1.54
								B	ludget		\$0	\$937.50	\$938	
IPL Silver Star Program at <85	4,155	0.3	0	30	\$1,500	\$500	0%	20	0	83,100	\$0	\$30,809	\$30,809	2.00
lectric heat						33%		Alternativ	/e Avoided C	Costs	\$0	\$30,809	\$30,809	2.03
								B	Budget		\$0	\$10,000.00	\$10,000	
IPL Gold Star Program <70	7,338	0.5	0	30	\$3,500	\$750	0%	20	0	146,750	\$0	\$36,461	\$36,461	1.50
electric heat						21%		Alternativ	/e Avoided C	Costs	\$0	\$36,461	\$36,461	1.52
								B	Budget		\$0	\$15,000.00	\$15,000	
IPL - CG/IPL Silver Star at 85	153	0.0		30	\$75	\$25	0%	5		763	\$0	\$486	\$486	2.30
gas heat						33%		Alternativ	/e Avoided C	Costs	\$0	\$486	\$486	2.30
								B	Budget		\$0	\$125.00	\$125	



				In	puts			Saving	gs yr. 1	Net B	enefits		
Description	kWh k\	V Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Subtotal -	1.2 Resi	dential	- Ne	w Con	structio	on							
	<u>kWH kW</u>	Therm	<u>15</u>										
	304,879 24.9	7,2	81										
	Tot		as hare	Electric Share									
Net Benefits	(\$4,7	29) (\$31	,176)	\$26,446									
	\$10,3	08 (\$16	5,138)	\$26,446	Alterna	ative Avc	ided Costs	5					
TRC B/C	1.	0	0.7	1.1									
	1.	0	0.9	1.1	Alterna	ative Avc	ided Costs	5					
Utility B/C	2.	4	1.4	3.3									
	2.	5	1.6	3.3	Alternat	tive Avo	ded Costs						
								_					



					In	puts			Savino	js yr. 1	Net Be	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	3/C - TRC
Admin														
CG - Mktg/Consumer Ed -			0				0%	1	0		(\$13,750)	\$0	(\$13,750)	0.00
Allocation			Admi	n \$	\$13,750.00			Alternativ	/e Avoided C	Costs	(\$13,750)	\$0	(\$13,750)	0.00
								В	Budget		\$13,750	\$0.00	\$13,750	
IPL - Implementation Costs -			0				0%	1	0		\$0	(\$14,010)	(\$14,010)	0.00
Res Energy Assessment			Admi	n \$	\$14,009.85			Alternativ	/e Avoided C	Costs	\$0	(\$14,010)	(\$14,010)	0.00
								B	Budget		\$0	\$14,009.85	\$14,010	
CG - Implementation Costs -			0				0%	1	0		(\$15,508)	\$0	(\$15,508)	0.00
Res Energy Assessment			Admi	n \$	\$15,508.00			Alternativ	/e Avoided C	Costs	(\$15,508)	\$0	(\$15,508)	0.00
								В	Budget		\$15,508	\$0.00	\$15,508	
IPL - Evaluation - Allocation			0				0%	1	0		\$0	(\$16,475)	(\$16,475)	0.00
			Admi	n \$	\$16,474.99			Alternativ	/e Avoided C	Costs	\$0	(\$16,475)	(\$16,475)	0.00
								B	Budget		\$0	\$16,474.99	\$16,475	
CG - Evaluation - Allocation			0				0%	1	0		(\$3,718)	\$0	(\$3,718)	0.00
			Admi	n \$	\$3,718.00			Alternativ	/e Avoided C	Costs	(\$3,718)	\$0	(\$3,718)	0.00
								В	Budget		\$3,718	\$0.00	\$3,718	



					In	puts			Savin	gs yr. 1	Net B	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
IPL - IPL ONLY Energy Kits - Low Flow Savings Only (elec WH)	919	0.1	0	7			20%	5,731 Alternativ	0 ve Avoided (4,213,652 Costs	\$0 \$0	\$1,008,947 \$1,008,947	\$1,008,947 <i>\$1,008,947</i>	0.00 #Div/0!
								В	udget		\$0	\$0.00	\$0	
IPL - Energy Kits - (4 CFL) Savings Only	204	0.0	0	7			20%	15,490 Alternativ	0 /e Avoided (2,527,968 Costs	\$0 <i>\$0</i>	\$715,480 <i>\$715,480</i>	\$715,480 <i>\$715,480</i>	0.00 #Div/0!
								B	udget		\$0	\$0.00		
IPL - Energy Kits - Cost Only (Joint w/CG)			0	7	\$3	\$3 100%	20%	4,000 Alternativ	0 ve Avoided (0 Costs	\$0 <i>\$0</i>	(\$8,800) <i>(\$8,800)</i>	(\$8,800) <i>(\$8,800)</i>	0.00
								B	udget		\$0	\$11,000.00	\$11,000	
CG - Energy Kits - Cost Only			0	7	\$22	\$22 100%	20%	4,000 Alternativ	0 /e Avoided (0 Costs	(\$71,200) (\$71,200)	\$0 <i>\$0</i>	(\$71,200) (<i>\$71,200</i>)	0.00
								В	udget	\$8	39,000	\$0.00	\$89,000	
CG - Energy Kits - Low Flow Savings Only (gas WH)			108	7			20%	2,000 Alternativ	172,800 /e Avoided (\$568,366 \$677,667	\$0 \$0	\$568,366 <i>\$677,667</i>	0.00 #Div/0!
								B	udget		\$0	\$0.00	\$0	





1.3 Residential C	Online E	nergy A	Asses	smen	t w/kit								
				Ir	puts			Saving	s yr. 1	Net B	enefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	¢ / 0/	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
IPL - IPL ONLY Energy Kits - Cost Only		0	7	\$25	\$25 100%	20%	11,490 Alternativ	0 ve Avoided C	0 osts	\$0 <i>\$0</i>	(\$229,800) (\$229,800)	(\$229,800)) 0.00
							В	Budget		\$0	\$287,250.00	\$287,250	1



			In	puts			Saving	js yr. 1	Net B	enefits		
ription	kWh kW	Therms Es Lif			Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Subtotal -	1.3 Resid	ential On	line Ene	ergy As	sessm	ent w/	kit					
<u>k</u>	<u>WH kW</u>	<u>Therms</u>										
6,7	41,620 936	172,800										
	Total	Gas Share	Electric Share									
Net Benefits	\$1,919,532	\$464,190	\$1,455,342									
	\$2,028,833	\$573,491	\$1,455,342	Alterna	ative Avoi	ded Cost	S					
TRC B/C	6.1	5.5	6.4									
	6.4	6.5	6.4	Alterna	ative Avoi	ded Cost	5					
Utility B/C	5.1	4.7	5.2									
-	5.3	5.6	5.2	Alternat	tive Avoid	ed Costs						
	5.5	2.0										



1.4. Multi Family Direct Install

				In	puts			Savino	js yr. 1	Net Be	enefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Admin													
CG - Admin Allocation Costs		0				0%	1	0		\$0	\$0	\$0	0.00
							Alternativ	ve Avoided C	Costs	\$0	\$0	\$	0 #Num!
							В	udget		\$0	\$0.00	\$0)
CG - Implementation Costs -		0				0%	1	0		(\$13,659)	\$0	(\$13,659) 0.00
Mult. Family DI		Admi	n\$\$	13,659.00			Alternativ	ve Avoided C	Costs	(\$13,659)	\$0	(\$13,65	9) 0.00
							В	udget	\$	513,659	\$0.00	\$13,659)
IPL - Implementation Costs -		0				0%	1	0		\$0	(\$13,659)	(\$13,659) 0.00
Multi Family Direct Install		Admi	n\$\$	13,659.20			Alternativ	ve Avoided C	Costs	\$0	(\$13,659)	(\$13,65	9) 0.00
							В	udget		\$0	\$13,659.20	\$13,659	9
IPL -Evaluation - Allocation		0				0%	1	0		\$0	(\$23,526)	(\$23,526) 0.00
		Admi	n\$\$	23,525.96			Alternativ	ve Avoided C	Costs	\$0	(\$23,526)	(\$23,52	6) 0.00
							В	udget		\$0	\$23,525.96	\$23,520	6
CG - Mktg Allocation Costs		0				0%	1	0		(\$6,875)	\$0	(\$6,875) 0.00
		Admi	n \$	\$6,875.00			Alternativ	ve Avoided C	Costs	(\$6,875)	\$0	(\$6,87	5) 0.00
							В	udget		\$6,875	\$0.00	\$6,875	5



1.4. Multi Family Direct Install

				In	puts			Saving	s vr. 1	Net B	enefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
CG - Evaluation Allocation		0				0%	1	0		(\$7,064)	\$0	(\$7,064)	0.00
Costs		Admi	in \$	\$7,064.00			Alternativ	ve Avoided C	osts	(\$7,064)	\$0	(\$7,064)	0.00
							В	udget		\$7,064	\$0.00	\$7,064	
CG - Multi Family DHW		75	7	\$8	\$8	0%	2,720	204,000		\$649,227	\$0	\$649,227	30.80
Direct Install - Com					100%			ve Avoided C	osts	\$778,263	\$0	\$778,263	36.77
							В	udget		\$21,760	\$0.00	\$21,760	
CG - Multi Family DHW		75	7	\$8	\$8	0%	2,719	203,925		\$648,988	\$0	\$648,988	30.80
Direct Install - Res					100%		Alternativ	ve Avoided C	osts	\$777,977	\$0	\$777,977	36.77
							В	udget		\$21,752	\$0.00	\$21,752	
IPL -Kit - Installation (IPL		0		\$26	\$26	0%	5,850	0		\$0	(\$152,100)	(\$152,100)	0.00
Only)					100%		Alternativ	ve Avoided C	osts	\$0	(\$152,100)	(\$152,100)	0.00
							В	udget		\$0	\$152,100.00	\$152,100	
IPL -Kit - CFL's (5)	255 0.0	0	7	\$10	\$10	0%	11,289	0	2,878,695	\$0	\$701,855	\$701,855	7.20
					100%		Alternativ	ve Avoided C	osts	\$0	\$701,855	\$701,855	7.22
							В	udget		\$0	\$112,890.00	\$112,890	



1.4. Multi Family Direct Install

				Ir	puts			Saving	gs yr. 1	Net B	enefits		
Description	kWh kW	Therms	Est. Life	Incr. Cost	A 10/	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
IPL -Kit - Installation (joint w/Citizens Gas)		0		\$10	\$10	0%	11,289	0		\$0	(\$112,890)	(\$112,890)	0.00
w/entizens Gas)					100%		Alternati	ve Avoided C	Costs	\$0	(\$112,890)	(\$112,890)	0.00
							E	Budget		\$0	\$112,890.00	\$112,890	
CG -Kit - Installation Cost		0		\$26	\$26	0%	5,439	0		\$141,414)	\$0	(\$141,414)	0.00
only (joint w/IPL)					100%		Alternati	ve Avoided C	Costs	(\$141,414)	\$0	(\$141,414)	0.00
							E	Budget	:	\$141,414	\$0.00	\$141,414	
IPL -Kit - Low Flow -	919 0.0	0	7	\$8	\$8	0%	5,850	0	5,376,15	0 \$0	1,187,634	\$1,187,634	26.40
(Electric Water Heat Only)					100%		Alternati	ve Avoided C	Costs	\$0	\$1,187,634	\$1,187,634	26.38
							E	Budget		\$0	\$46,800.00	\$46,800	



			In	puts			Savino	js yr. 1	Net B	enefits		
scription	kWh kW	Therms Es Lif		Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Subtotal -	1.4. Multi	Family 1	Direct Ir	nstall								
	<u>WH kW</u>	Therms										
8,2	54,845 1010	407,925	-									
	Total	Gas Share	Electric Share									
Net Benefits	\$2,716,517	\$1,129,204	\$1,587,314									
	\$2,974,542	\$1,387,228	\$1,587,314	Alterna	tive Avoi	ded Cost	S					
TRC B/C	5.0	6.3	4.4									
	5.4	7.5	4.4	Alterna	tive Avoi	ded Cost	S					
		6.3	4.4									
Utility B/C	5.0	0.5										
Utility B/C	5.0 5.4	0.3 7.5	4.4	Alternat	tive Avoid	ed Costs						



2.2 Commercial - Custom

		Ir	puts			Saving	js yr. 1	Net B	enefits		
Description		Est. Incr. Life Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits B	B/C - TRC
Admin											
CG - Admin Allocation Costs	0			0%	1	0		(\$5,155)	\$0	(\$5,155)	0.00
	Admin	\$ \$5,155.00			Alternativ	ve Avoided C	costs	(\$5,155)	\$0	(\$5,155) 0.00
					В	udget		\$5,155	\$0.00	\$5,155	
CG - Mktg Allocation Costs	0			0%	1	0		(\$20,625)	\$0	(\$20,625)	0.00
	Admin	\$ \$20,625.00			Alternativ	ve Avoided C	costs	(\$20,625)	\$0	(\$20,625) 0.00
					В	udget		\$20,625	\$0.00	\$20,625	
IPL - Implementation Costs -	0			0%	1	0		\$0	(\$129,380)	(\$129,380)	0.00
C&I Custom	Admin	\$ \$129,380.40			Alternativ	ve Avoided C	costs	\$0	(\$129,380)	(\$129,380) 0.00
					В	udget		\$0	\$129,380.40	\$129,380	
IPL -Evaluation - Allocation	0			0%	1	0		\$0	(\$28,279)	(\$28,279)	0.00
	Admin	\$ \$28,278.92			Alternativ	ve Avoided C	costs	\$0	(\$28,279)	(\$28,279) 0.00
					В	udget		\$0	\$28,278.92	\$28,279	
CG - Implementation Costs -	0			0%	1	0		\$101,890)	\$0	(\$101,890)	0.00
Com Custom	Admin	\$ \$101,890.00			Alternativ	ve Avoided C	osts	(\$101,890)	\$0	(\$101,890) 0.00
					В	udget	\$	101,890	\$0.00	\$101,890	



2.2 Commercial - Custom

					Ir	puts			Saving	ıs vr. 1	Net B	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
CG - Evaluation Allocation			0				0%	1	0		(\$18,134)	\$0	(\$18,134)	0.00
Costs			Admi	n\$\$	\$18,134.00			Alternativ	ve Avoided C	costs	(\$18,134)	\$0	(\$18,134)	0.00
								В	udget		\$18,134	\$0.00	\$18,134	
CG - >7500 therms			10037	15	\$53,532	\$13,383	25%	30	225,833		\$322,142	\$0	\$322,142	1.30
					. ,	25%			ve Avoided C	osts	\$599,708	\$0	\$599,708	1.50
								В	udget	S	\$401,490	\$0.00	\$401,490	
CG - <7500 therms			911	15	\$3,644	\$911	25%	7	4,783		\$13,200	\$0	\$13,200	1.70
						25%		Alternativ	ve Avoided C	costs	\$19,078	\$0	\$19,078	2.00
								В	udget		\$6,377	\$0.00	\$6,377	
IPL -Medium Project \$5K-25K	294,504	97	0	15	\$71,845	\$14,369	20%	22	0	5,183,27	0 \$0	2,224,630	\$2,224,630	2.80
						20%		Alternativ	ve Avoided C	costs	\$0	\$2,224,630	\$2,224,630	2.76
								В	udget		\$0	\$316,118.00	\$316,118	
IPL -Small Project - \$1-5K	33,284	5	0	15	\$12,850	\$2,570	20%	14	0	372,78	1 \$0	\$45,292	\$45,292	1.30
						20%		Alternativ	ve Avoided C	osts	\$0	\$45,292	\$45,292	1.31
								В	udget		\$0	\$35,980.00	\$35,980	



2.2 Commercial - Custom

			Ir	nputs			Saving	ıs yr. 1	Net B	enefits		
escription	kWh kW		st. Incr. ife Cost	Incentive \$ / %	Est. Est. Free Parti Rider	-	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Subtotal -	2.2 Comm	nercial -	Custom									
	<u>kWH kW</u>	<u>Therms</u>										
5,	556,051 1760	230,615										
	Total	Gas Share	Electric Share									
Net Benefits	\$2,301,801	\$189,53	8 \$2,112,263									
	\$2,585,245	\$472,982	2 \$2,112,263	Alterna	ative Avoided Co	osts						
TRC B/C	1.8	1.1	2.3									
	1.9	1.3	2.3	Alterna	ative Avoided C	osts						
Utility B/C	4.9	2.8	7.2									
-	5.2	3.3	7.2	Alterna	tive Avoided Co	osts						
Budget	\$1,063,428	\$553,671	\$509,757				=					



3 Program Administration

					Ir	puts			Saving	js yr. 1	Net B	enefits		
Description	kWh	kW	Therms	Est. Life	Incr. Cost	Incentive \$ / %	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC
Admin														
IPL Support Costs - Administration (unallocated)			0				0%	1	0	0	\$0	(\$225,000)		0.00
			Admi	n \$\$22	5,000.00				e Avoided C	Costs	<i>\$0</i> \$0	(\$225,000) \$225,000.00	\$225 000) 0.00
								D	udget		·			
IPL Marketing & Consumer Education			0				0%	1	0	0	\$0	(\$100,000)	(\$100,000)	0.00
Education			Admi	n \$\$10	0,000.00			Alternativ	re Avoided C	Costs	\$0	(\$100,000)	(\$100,000)	0.00
								В	udget		\$0	\$100,000.00	\$100,000	



3 Program Administration

			Inputs			Saving	ıs yr. 1	Net B	enefits		
Description	kWh kW Therms	Est. Life	Incr. Incentive Cost ^{\$ / %}	Est. Free Rider	Est. # Partic.	Therms	kWh	Gas Share	Electric Share	Total Net Benefits	B/C - TRC

Subtotal - 3 Program Administration

\$325,000

	<u>kWH</u>	<u>kW</u>	<u>Therms</u>		
	0	0	0		
		Total	Gas Share	Electric Share	
Net Benefits	(5	\$325,000)	\$0	(\$325,000)	
	(5	\$325,000)	\$0	(\$325,000)	Alternative Avoided Costs
TRC B/C		0.0		0.0	
		0.0		0.0	Alternative Avoided Costs
Utility B/C		0.0		0.0	
		0.0		0.0	Alternative Avoided Costs

\$0

\$325,000



Budget

Total All Measures

	<u>kWH</u> <u>kW</u>	Therms	_	
20	,857,394 3740	818,621		
	Total	Gas Share	Electric Share	
Net Benefits	\$6,608,121	\$1,751,756	\$4,856,365	
	\$7,273,928	\$2,417,563	\$4,856,365	Alternative Avoided Costs
TRC B/C	2.4	2.0	2.7	
	2.6	2.3	2.7	Alternative Avoided Costs
Utility B/C	4.3	3.7	4.5	
_	4.5	4.4	4.5	Alternative Avoided Costs
Budget	\$2,641,598	\$948,587	\$1,693,011	

