

Entergy Services, Inc.

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December 29, 2014

BY. CWR

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Via Hand Delivery

Ms. Lora W. Johnson, CMC Clerk of Council Room 1E09, City Hall 1300 Perdido Street New Orleans, LA 70112

> Re: Resolution Regarding Proposed Rulemaking to Establish Integrated Resource Planning Components and Reporting Requirements for Entergy New Orleans, Inc. (Docket No. UD-08-02)

Dear Ms. Johnson:

Enclosed please find an original and three copies of the Application of Entergy New Orleans, Inc. ("ENO") and Entergy Louisiana, LLC ("ELL") (the "Companies") for Approval of Supplemental Implementation and Cost Recovery Filing Pursuant to Council Resolution R-14-509, which Application attaches and incorporates: (1) the Companies Supplemental Implementation and Cost Recovery Filing, including Appendix A, Shareholder Incentive Mechanism and Appendix B, Behavioral Pilot; and (2) the 2015-2016 Energy Smart DSM Plan. Please file an original and two copies into the record in the above-referenced matter, and return a date-stamped copy to our courier.

Thank you for your assistance with this matter.

Sincerely,

Timothy S. Cragin

Enclosure

ce: Official Service List UD-08-02 (via electronic mail)

#### BEFORE THE

# COUNCIL OF THE CITY OF NEW ORLEANS

PROPOSED RULEMAKING TO ESTABLISH INTEGRATED RESOURCE PLANNING COMPONENTS AND REPORTING REQUIREMENTS FOR	) ) ) )	DOCKET NO. UD-08-02
REQUIREMENTS FOR ENTERGY NEW ORLEANS, INC.	) )	

## APPLICATION OF ENTERGY NEW ORLEANS, INC. AND ENTERGY LOUISIANA, LLC FOR APPROVAL OF THE SUPPLEMENTAL IMPLEMENTATION AND COST RECOVERY PLAN FOR THE CONTINUATION OF THE ENERGY SMART PLAN

Entergy New Orleans, Inc. ("Entergy New Orleans" or "ENO") and Entergy Louisiana, LLC ("ELL")(collectively, "the Companies"), pursuant to Council Resolution R-14-509, respectfully submit this Application for Approval of the Supplemental Implementation and Cost Recovery Plan for the Continuation of the Energy Smart Plan (the "Application"), and in support of this Application, the Companies respectfully show as follows:

I.

ENO is an electric and gas utility organized and operating under the laws of Louisiana, with its general office and principal place of business at 1600 Perdido Street, Building 505, New Orleans, Louisiana 70112. ENO manufactures, produces, transmits, distributes, and sells electricity to approximately 168,000 residential, commercial, industrial, and governmental consumers in Orleans Parish, except in Algiers Entergy New Orleans also provides natural gas service throughout Orleans Parish, including Algiers, serving approximately 104,000 retail gas customers.

ELL is a limited liability company duly authorized and qualified to do business in Louisiana, created and organized for the purposes, among others, of manufacturing, generating, transmitting, distributing and selling electricity for power, lighting, heating, and other such uses. ELL operates in 46 of the 64 parishes in Louisiana and serves approximately 22,000 customers in Algiers. ELL's retail sales of electricity and service in Algiers are subject to the jurisdiction of the Council.

#### III.

In July 2009, ENO submitted a filing in which it detailed the specifics of the design and funding levels for programs to be included in the Energy Smart Plan programs (*e.g.*, selection of a third party administrator, verification of deemed savings calculations, proposed goals and targets). On September 17, 2009, Council Resolution R-09-483 approved the Energy Smart Plan programs as designed and found ENO's programs to be just, reasonable and in the public interest, including funding levels, allocations, goals, and targets recommended by ENO.

#### IV.

In April 2011, ENO and the third party administrator, CLEAResult, implemented the Energy Smart Plan programs and began offering programs to ENO electric customers. ENO filed status reports as outlined and required by Council Resolution R-11-52. ENO and CLEAResult presented the first, second and third year results and discussed the progress of the Energy Smart programs at meetings of the Council's Utility, Cable, Telecommunications and Technology Committee ("UCTTC") (formerly known as the Council Utility Committee). Additionally, ENO submitted written reports summarizing the first, second and third year results of the program.

Council Resolution R-13-17, dated January 24, 2013, stated that the Council wants to consider ENO's Supplemental Implementation and Cost Recovery filings in concert with the public process established in the IRP docket (UD-08-02) and such other recommendations as may be provided by intervenors and the Council's Advisors in a timely fashion, and directed ENO to make its Supplemental Implementation and Cost Recovery filing.

#### VI.

In accordance with Council Resolution R-12-393, on April 1, 2013, in order to assure the continuity of the Energy Smart Plan, the Companies filed with the Council implementation and cost recovery plans for future energy efficiency and demand side management programs based on optimal levels contained in their Integrated Resource Plan ("IRP") filings or other such programs as determined by the Council.

#### VII.

After consideration of the Companies' Implementation and Cost Recovery filing, and in realization that there remain some unresolved issues with respect to ENO's IRP, the Council, in Resolution R-13-363 stated:

[T]o assure that the existing Energy Smart and NOLA Wise programs continue without interruption until a final order in the instant docket determining the appropriate level of DSM, program selection, DSM related expenditures, cost recovery, incentives and rate mechanisms is rendered, the Council finds it in the public interest to provide the necessary funding to continue the existing Energy Smart programs to assure continuity of energy efficiency programs in New Orleans through the end of calendar year 2014. In furtherance of this finding, ENO is directed to confer with the Advisors on the details for implementation of the extension of the existing Energy Smart Programs, as discussed herein, for subsequent filing with the Council and its approval no later than January 2014. In the extension of the Council's existing Energy Smart Program through December 2014, as ordered herein, the Council will continue to allow ENO to recover Lost Contribution to Fixed Costs and the existing ROE incentive as provided for in Attachments G and H to the now expired ENO FRP.

### VIII.

The Council approved Resolutions R-14-122 and R-14-227 which extended the ENO and ELL-Algiers Energy Smart programs for the nine month period from April 1, 2014 through December 31, 2014, respectively. Subsequently, Resolution R-14-509 required the Companies to file implementation plans which detailed the Companies plans to extend the programs until successor programs could begin. In accordance with Resolution R-14-509, the Companies filed their implementation plans on December 5, 2014. A resolution considering these plans is currently on the consent agenda for the January 2015 full Council meeting. If approved, the cumulative budgets and targets for ENO Energy Smart and ELL-Algiers Energy Smart during the full 12 month extension period will be as follows:

Extension of ENO Energy Smart Programs (April 1, 2014 – March 31, 2015):

Program Description	Goal (kWh)	Program Cost
HPwES	4,039,652	\$1,011,505
Energy Star A/C	389,773	\$127,152
A/C Tune Up	969,536	\$240,447
Energy Efficient New Homes	177,490	\$314,049
CFL Direct Install	1,817,349	\$97,355
Income Qualified	912,750	\$798,918
Solar Water Heater	27,191	\$12,330
Small Commercial Solutions	2,666,423	\$710,202
Large Commercial Solutions	6,138,592	\$1,061,149
NOLA Wise	-	\$333,333
Total	17,138,755	\$4,706,442

Extension of ELL Energy Smart Programs (April 1, 2014 – March 31, 2015):

Program Description	Goal (kWh)	Program Cost
Home Performance with	395,693	\$122,160
Energy Star	,	7122,100
Energy Star A/C	70,201	\$22,093
A/C Tune Up	80,295	\$23,304
Energy Efficient New Homes	17,779	\$5,333
CFL Direct Install	734,869	\$121,537
Income Qualified	62,692	\$33,411
Solar Water Heater	9,808	\$4,511
Small Commercial Solutions	272,772	\$79,184
Large Commercial Solutions	377,357	\$95,157
NOLA Wise	3,,,33,	
Total	2.024.466	\$51,333
	2,021,466	\$506,690

IX.

Council Resolution R-14-509 amended Resolution R-13-363 requiring that "[w]ithin 35 days of the issuance of this Resolution, the Companies are directed to file their detailed DSM Program Implementation Plans incorporating the results of this Resolution and to convene a technical conference."

Pursuant to Resolutions R-14-509 and R-13-363, the Companies propose the attached Supplemental Implementation and Cost Recovery Plan for the energy efficiency programs for the two-year period, April 1, 2015 through March 31, 2017. A summary description of the proposed programs is set forth below:

### **Residential Programs**

Home Performance with ENERGY STAR ("HPwES"): ENO will continue to offer the HPwES program that is already being implemented. The program will continue to align with the Department of Energy's ("DOE") requirements and will offer a whole-home approach for single-family unit customers. The program model acquires savings from both the shallow

measures, such as those which are directly installed, as well as deeper savings measures with longer measures lives yielding a more enduring energy savings within the territory.

Consumer Products: This retail channel program initiative includes specialty lighting and appliance measures for this plan cycle. Besides offering incentives for room air conditioners ("A/C"), the program will add incentives for the highest efficient "Energy Star" labeled refrigerators. The program will lay the foundation for developing retailer and manufacturer partnerships supporting the integration of additional measures during the next program cycle. As this program is being run at the same time as the Compact Fluorescent Light ("CFL") Direct Install Program, the retail channel will focus on specialty CFL and light emitting diode ("LED") light bulbs.

**Multi-Family Weatherization**: In the revised 2014 – 2015 Portfolio Plan, the weatherization for multi-family properties has been incorporated into the Low-Income Audit & Weatherization Program.

Low Income Audit & Weatherization: Because this program has already proven successful through the Energy Smart Program, this will continue to be included in the revised portfolio plan. This income-qualified program targets a hard to reach segment of the market with significant weatherization of single family and multi-family units up to a maximum of \$3,000 of incentives per unit. Unlike low income programs implemented in other jurisdictions, the Energy Smart Low Income Audit & Weatherization program directly manages the installation contractor and inspects nearly 100% of installed measures assuring a high quality and customer satisfaction.

School Kits & Energy Education: Energy Smart currently offers this program through a partnership with a local non-profit organization and under the NOLA Wise brand. The program will remain as a program offering in the revised portfolio plan. The program will

continue to offer energy education and energy conservation kits to fifth through seventh grade class rooms in Orleans Parish schools. The program delivery model has proven to be successful. Savings will be claimed as measures are installed and self-reported by those students' families via an online system via the Energy Smart web site. Additionally, NOLA Wise will continue to offer a loan program (funded by the Southeast Energy Efficiency Alliance) and will broaden its community outreach, contractor training, contractor recruitment, and marketing.

Residential Heating & Cooling: In 2014, Energy Smart implemented a high performance tune-up program that uses DSM industry best practices and an measurement and verification ("M&V") approach to generate measured savings. It has already shown success in participation and energy savings. The program offering is beneficial because it combines the Tune Up program with incentives to purchase high efficiency air conditioners. This program is included in the revised portfolio plan. The original plan incorporated high performance tune-ups for small commercial customers. This measure will continue to be offered in the revised portfolio plan.

CFL Direct Install: This program is being incorporated into the revised portfolio plan based on feedback from the New Orleans City Council. The program was not included in the original portfolio plan filed in April 2013. The program targets the residential customer market segment by providing customer education and to increase the market penetration of ENERGY STAR CFLs through the direct installation by local non-profit Green Light New Orleans.

Commercial Programs: The Commercial & Industrial Programs outlined in the original Portfolio Plan will continue to be offered in the revised portfolio plan with no modifications to the program design. Below provides a summary of the commercial programs being offered to this market segment.

Large Commercial & Industrial: In the revised portfolio plan, the Large Commercial & Industrial program maintains some of the existing program design with facility audits and incentives for a suite of common energy efficiency measures, but is evolved into a more sophisticated offering with the addition of energy master planning and benchmarking, which helps to build the program infrastructure required for emerging behavioral modification strategies, and will also add custom incentives for large custom projects that do not participate through the traditional prescriptive path.

Small Commercial & Industrial: the Small Commercial Solutions program will continue to offer facility audits and a suite of common energy efficiency measures, but adds two initiatives targeted at enhancing participation in key market segments and improving measure diversity achieved through the program by increasing the adoption a high performance tune ups to enhance the HVAC program offerings. In addition, this more comprehensive program streamlines contractor participation through the use of field tools, and follows a more targeted market segmentation approach to specific market segment customer types.

**Behavioral Pilot**: In the April 1, 2013 Implementation filing, the Companies recommended the inclusion of a behavioral pilot program. These programs are designed to motivate customers to make behavioral changes which result in kWh savings. The Companies have set aside \$300,000 for the inclusion of a behavioral pilot in Year 6. Having a duration of one year decreases the likelihood of the overall behavioral pilot being cost-effective. Should the Council be interested, the cost-effectiveness requirement would have to be considered.

X.

The proposed Year 5 budget and savings are as follows:

The proposed Year 6 budget and savings are as follows:

#### XI.

Council Resolution R-14-509 also required the Companies to propose a cap on the rate impact for large commercial customers, to estimate the impact on monthly customer bills, to include after-the-fact estimates of lost contribution to fixed costs ("LCFC") and to include a provision for performance incentives. For discussions on these items please see the attached implementation report.

In support of the request set forth herein, the Companies submit this application for the extension of Energy Smart and the accompanying proposed budget.

WHEREFORE, the Companies respectfully request that this Council issue a Resolution:

- 1. Approving the Companies' proposal for the implementation of the DSM programs as set forth herein through March 31, 2017.
- 2. Approving the level of funding allocated to each program;
- 3. Approving the continued usage of the current lost contribution mechanism;
- 4. Approving the recommended performance incentive mechanism;
- 5. Concurring that a cap on the rate impact for large commercial customers is unnecessary at this time;
- 6. Approving the choice of CLEAResult as the third party implementer for the aforementioned two-year period;
- 7. Approving the development and implementation of a behavioral pilot to be conducted during Year 6;

- 8. Concurring that the expected total energy savings as the kWh Goals satisfy the applicable Council requirements; and
- 9. Granting all other general and equitable relief that the law and the nature of this proceeding may permit or require.

Respectfully Submitted:

By:

Kathryn J. Lichtenberg, Bar No. 1836

Timothy S. Cragin, Bar No. 22313

Courtney R. Nicholson, Bar No. 32618

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ATTORNEYS FOR ENTERGY NEW ORLEANS, INC. AND ENTERGY LOUISIANA, LLC

# **CERTIFICATE OF SERVICE** Docket No. UD-08-02

I hereby certify that I have this 29 number of copies of the foregoing report	oth day of December 2014, served the required upon all other known parties of this proceeding, by
<ul><li>☑ electronic mail, ☐ facsimile, ☐ over</li><li>☐ United States Postal Service, postage</li></ul>	might mail, hand delivery, and/or
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Abby Schwimmer. Policy Manager Southeast Energy Efficiency Alliance 50 Hurt Plaza SE, Suite 1250 Atlanta, GA 30303

Robert L. Suggs, Jr., CEO C. Tucker Crawford, Co-Founder, Partner South Coast Solar, LLC 2605 Ridgelake Drive Metairie, LA 70002

New Orleans, Louisiana, this 29<sup>th</sup> day of December, 2014.

Timothy S. Cragin

Supplemental Implementation and
Cost Recovery Filing of
Entergy New Orleans, Inc. and
Entergy Louisiana, LLC
Pursuant to
Council Resolution R-14-509

### I. Introduction

The purpose of this Supplemental Implementation and Cost Recovery Filing is to provide a summary description of the proposed energy efficiency programs and associated costs and energy savings of the Energy Smart Plan of Entergy New Orleans, Inc. ("ENO") and Entergy Louisiana, LLC ("ELL")(collectively ,the "Companies") for the two year period from April 2015 through March 2017, and to discuss performance incentives; the third party administrator; evaluation, measurement and verification ("EM&V"); lost contributions to fixed costs; and caps on customer bills. Council of the City of New Orleans ("Council") Resolution R-14-509 requires the Companies to submit a Supplemental Implementation and Cost Recovery filing in order to seek approval of the Energy Smart programs and any modifications to those programs. Accordingly, attached to this report is detailed information on the proposed Energy Smart programs from the third party administrator ("TPA") of the Energy Smart Plan, CLEAResult. As detailed further below and in CLEAResult's plan, the Companies propose the following programs and associated costs and energy savings for the two year period from April 2015 through March 2017 of Energy Smart:

Year 5 and Year 6 Proposal for Energy Smart - ENO:

	Section 1	Company of the Company	DSM Portf	olio Savings	第二字位置 100	T DESCRIPTION
		2015		Part 1	2016	
Sector	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)
Residential	9,415	4,700	1.5	11,094	5,596	1.7
C&I	73	11,575	2.3	80	14,217	2.8
Total	9,488	16,274	3.76	11,173	19,813	4.51

# Year 5 and Year 6 Proposal for Energy Smart – ELL (Algiers):

			DSM Portf	olio Savings		
		2015			2016	
Sector	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)
Residential	779	397	0.1	782	395	0.1
C&I	6	984	0.2	6	1,004	0.2
Total	785	1,381	0.3	788	1,399	0.3

## II. Overview of the Energy Smart Plan

### A. Background

Since at least 2007, through a series of Council Resolutions and public participation, the Council has recognized energy efficiency as a high-priority resource and has expressed its desire to, among other things: (a) identify cost-effective energy

efficiency potential; (b) develop processes to align incentives for demand-side management ("DSM") with those for supply resources; (c) set energy savings goals consistent with cost-effective potential; (d) establish appropriate EM&V mechanisms; (e) establish effective DSM measures for residences and businesses in New Orleans; (f) align customer pricing and incentives to encourage investment in energy efficiency; and (g) provide sufficient, timely and stable program funding to deliver energy efficiency programs where cost effective.<sup>1</sup>

In 2009, Council Resolution R-09-136 established the criteria for ENO to implement the Energy Smart Plan. The programs to be established through this framework were initially intended to be for the benefit of ENO's electric customers located on the Eastbank of the Mississippi River in Orleans Parish. No provisions were adopted at the time to implement such programs for Algiers electric customers located on the Westbank of the Mississippi River in Orleans Parish and served by ELL.

In July 2009, ENO submitted a filing in which it detailed the specifics of the design and funding levels for programs to be included in the Energy Smart Plan programs (e.g., selection of CLEAResult as TPA; verification of deemed savings calculations; proposed goals and targets). In September 2009, the Council approved the Energy Smart Plan programs as designed and found ENO's programs to be just, reasonable and in the public interest, including the funding levels, allocations, goals, and targets recommended by the ENO.<sup>2</sup>

In April 2011, ENO and CLEAResult implemented the Energy Smart Plan programs and began offering programs to ENO electric customers. Thereafter, ENO filed bi-monthly status reports as outlined and required by Council Resolution R-11-52. Additionally, ENO and CLEAResult made annual presentations on the results and progress of the Energy Smart programs to the Council Utility Committee, now known as the Utility, Cable, Telecommunications and Technology Committee ("UCTTC"). Additionally, ENO submitted a written report to the Council summarizing the first year results of the programs.

# B. Addition of Energy Smart for Algiers

Based on public comment, the direction of the Council, and the success of the Energy Smart Plan programs implemented by ENO, ELL filed with the Council its plan for offering Energy Smart programs to ELL Algiers electric customers on July 27, 2012. ELL leveraged the extensive work already undertaken by community stakeholders, including ENO, under the leadership and direction of the Council and its Advisors by replicating the Energy Smart Plan programs offered by ENO for delivery to its customers in Algiers. On October 18, 2012, the Council approved ELL's request to implement Energy Smart programs in Algiers and effective October 22, 2012, programs became available to Algiers customers. Using funds from a federally-mandated production cost equalization calculation, approximately \$939,000 was allocated for

Council Resolution R-07-600 approved December 6, 2007. Council Resolution R-09-483 approved September 17, 2009.

Algiers' Energy Smart Plan programs. The Council approved Algiers' Energy Smart programs for a period of 18 months through March 31, 2014, ending concurrently with the Energy Smart programs offered by ENO to New Orleans East Bank residents.

# C. Summary of programs results from first 3 years of ENO Energy Smart programs and the first 18 months of ELL Energy Smart programs

The ENO Energy Smart Program and the ELL-Algiers Energy Smart program continue to show success in both participation rates and in energy savings. The initial phase of ENO Energy Smart programs ran for three consecutive one year periods beginning in April 2011 and ending in March 2014. The initial ELL-Algiers programs ran for eighteen months beginning in October 2012 and ending in March, 2014. At the end of their initial phases, Energy Smart attained cumulative energy savings of 52,393,369 kilowatt-hours ("kWh") and 3,207,488 kWh at ENO and ELL-Algiers, respectively.

Results from the first three years of ENO Energy Smart appear below:

Year 1	15,812,954kWh
Year 2	20,572,422kWh
Year 3	16,007,993kWh

## D. Extension of Energy Smart Programs

On April 1, 2013, the Companies filed an Implementation Plan for the continuation of Energy Smart programs beyond the first phase. The intended beginning of the new programs was to be April 1, 2014; however, to allow more time for several matters to be decided, the Council extended the then-current programs. In Council Resolutions R-14-122 and R-14-227, respectively, the Council extended the ENO and ELL Energy Smart programs for the nine month period covering April 2014 through December 2014. The Companies have filed quarterly reports during the extension to update the Council on the progress of the programs. Through November 2014, results at ENO were as follows:

Program	kWh	Participants	Measures
Home Performance with Energy Star	2,927,512	2,378	23,574
Energy Star A/C	218,562	211	247
A/C Tune Up	287,876	79	772
Energy Smart New Homes	83,480	53	55
CFL Direct Install	823,449	1,437	29,579
Income Qualified	562,421	603	9,175
Solar Water Heater Pilot	0	0	0
Small Commercial Solutions	1,331,799	39	40
Large Commercial Solutions	4,408,023	16	16
Totals Program totals may shift as inc	10,643,121	4,816	63,458

Program totals may shift as income verification information becomes available

### For ELL-Algiers:

Program	kWh	Participants	Measures
Home Performance with Energy Star	940,765	851	10,656
Energy Star A/C	16,737	9	11
A/C Tune Up	3,690	5	6
Energy Smart New Homes	0	0	0
CFL Direct Install	71,538	99	2,796
Income Qualified	3,904	1	5
Solar Water Heater Pilot	0	0	0
Small Commercial Solutions	132,089	5	5
Large Commercial Solutions	0	0	0
Totals	1,168,723	970	13,479

<sup>\*\*</sup>Program totals may shift as income verification information becomes available

A proposal to extend the programs through the end of March 2015 has been approved by the UCTTC and is currently being considered by the full Council.

### III. Summary of Initial Implementation Plan

### A. Summary of Programs

For the April 1, 2013 implementation plan, Entergy New Orleans worked with CLEAResult to develop a proposed, detailed DSM plan for the Energy Smart program.

The Council provided numerous opportunities for public input into the development of the IRP and Implementation and Cost recovery plans. Public input included:

- Stakeholder involvement in quarterly IRP meetings;
- Stakeholder involvement in DSM sub-group meetings;
- A technical conference for presentation of the IRP held on February 23, 2013; and
- A fifteen-day question period in which the public was allowed to post questions to the Entergy New Orleans website.

The Companies considered this public input in the design of the energy efficiency portfolio presented in the April 2013 filing.

A summary description of each proposed program in the original Energy Smart Plan is described below. In addition, the CLEAResult Report that was attached to the April 2013 Implementation Plan provided a more detailed review of each program plan.

1. Home Performance with ENERGY STAR ("HPwES"): Formerly, Residential Solutions, this officially sponsored HPwES program aligns with the ongoing

- Department of Energy requirements changes and offers a whole home approach for single family unit customers.
- 2. **Consumer Products:** This retail channel program initiative includes lighting and room air conditioning ("A/C") measures for this plan cycle. The program will lay the foundation for developing retailer and manufacturer partnerships supporting the integration of additional measures during the next program cycle.
- 3. **Multi-Family Weatherization:** The Multi-Family Weatherization program initiative provides direct installation of instant savings measures and weatherization to buildings with individually metered units through a streamlined assessment and customer process focused on the property manager.
- 4. **Low Income Audit & Weatherization:** This program targets a hard to reach income-qualified segment of the market with significant weatherization of single family and multi-family units up to a maximum of \$2,500 incentives per unit.
- 5. **School Kits & Energy Education:** Local partner organizations deliver energy education and energy conservation kits to fifth to seventh grade classrooms in Orleans Parish schools. Savings will be claimed as instant savings measures are installed and self-reported by those students' families via an online system via the EnergySmart web site.
- 6. **Residential Heating & Cooling:** Implemented with the Small Commercial A/C tune-up measure, this program initiative will use DSM industry best practices for delivery of tune-ups using a measurement and verification ("M&V") approach to generate more precise energy savings, as well as incentives for A/C replacements.
- 7. Small Commercial Solutions Program: The Small Commercial Solutions program will continue to offer facility audits and a suite of common energy efficiency measures with savings assigned per the New Orleans Technical Reference Manual ("TRM"), allowing for simple approaches to quality assurance/quality control ("QAQC") and savings verification. In addition, the program will offer two specific initiatives targeted at enhancing participation in key market segments and improving measure diversity achieved through the program by increasing the adoption of HVAC efficiency measures. The Small Commercial Solutions initiatives focus on a direct install model that engages contractors to deliver measures into customer facilities through the use of field tools that greatly streamline and simplify program participation while also improving data collection and data accuracy. This will also improve program retention rates, helping contractors close and complete more projects.
  - Hospitality Initiative: Targets small hotels, bed and breakfasts, and restaurants, with applicability to grocery and convenience stores as well. This initiative will be delivered through a network of participating contractors equipped with advanced field tools; these tools are an added feature for the new program that will enable them to quickly deliver program applications and project financials to customers, and streamline their program activity

- Commercial Heating and Cooling Initiative: Targets small HVAC units under 15 tons for tune-ups and upgrades, run in conjunction with the Residential Heating and Cooling Program. This initiative will be delivered through a network of participating contractors equipped with a field tool that will enable them to quickly deliver program applications and project financials to customers, and the program will cover 100% of costs of the tune-ups for eligible systems and customers.
- 8. Large Commercial Solutions Program: The Large Commercial Solutions program will continue to offer facility audits and incentives for a suite of common energy efficiency measures with savings assigned per the New Orleans TRM, allowing for simple approaches to QAQC and savings verification. In addition, the program will offer two new initiatives targeted at enhancing participation with school and city accounts through additional service offerings, and enhancing the existing custom program offering through the provision of M&V services for projects that achieve a minimum of 100,000 kWh in annual savings. This is an expanded service offering compared to the existing program that required third party verified savings for custom projects.
  - School and City Initiative: This initiative will offer benchmarking and Energy Master Planning services to school and city accounts that are motivated to reduce energy use at their facilities. These services will facilitate the prioritization and planning of energy improvements in schools and city government facilities, and provide these customers with an Energy Master Plan for achieving energy management goals.
  - Custom Initiative: This initiative will target efficiency improvements affecting systems that cannot be captured under prescriptive measure offerings by offering expanded M&V services for large projects that are pre-approved by the program and are expected to achieve a minimum of 100,000 kWh annual savings. These projects may include retro-commissioning, process improvements, and other system level custom projects or projects involving unique equipment not part of the prescriptive offerings. Program staff will pre-approve projects for customer and measure eligibility, and provide M&V services or review as needed to verify measures savings. The program will provide technical support to identify custom project opportunities in customer facilities.

# B. Rationale for Choice of Energy Smart Plan programs.

In analyzing measures for the next steps of the Companies' Energy Smart Plan, the overall approach was to retain the aspects of the existing program that have generated or are likely to generate cost effective savings while achieving their strategic objectives within the portfolio, and then to modify the remainder of the program to best achieve Energy Smart goals and objectives. Some of the Residential Program initiatives have been re-organized to better leverage economies of scale and better suit their respective market channels. For example, the Residential Heating & Cooling program initiative has combined A/C tune-ups with unit replacements and will work in conjunction

with the A/C tune-up component of the Small Commercial program. This allows for the same program implementation staff and the same program delivery mechanisms to be used across these two initiatives. Room A/C units and lighting products were combined into a program initiative focused on the retail channel. Multi-family weatherization was broken out into its own program initiative to better focus light weatherization directed at property managers. The new School Kits & Energy Education program initiative will deliver education and generate savings in a unique way through local schools which impacts residential energy consumption in the local communities. The Residential Portfolio as a whole represents a comprehensive DSM portfolio that utilizes multiple market channels, addresses multiple market segments and optimizes a cost effective approach to energy and demand savings.

The Energy Efficient New Homes program initiative has been eliminated due to its very low participation and a very low projected Total Resource Cost ("TRC") result. In order for this plan to offer a number of separate program initiatives, the budget from the Energy Efficient New Homes program was reallocated within the Plan to allow builders to still participate in other program initiatives, such as the Home Performance with Energy Star and Residential Heating & Cooling Programs.

Regarding residential program pilots, an initiative to show that savings can be generated through residential new construction code compliance will be implemented within the first two years of the plan cycle. In certain states, studies of compliance of actual construction practices to local active building, mechanical and energy codes have shown gaps. These compliance gaps offer real opportunity for energy and demand savings for DSM programs. A code compliance pilot should consider energy code training, a circuit rider technical assistance offering and development of documentation tools to support compliance with the energy code. The pilot will involve working closely with the utility staff, local engineering code department and building inspectors, and external stakeholders consisting of the building community (owners, developers, architects, engineers, contractors, etc).

Additionally, a study on new "learning" thermostats will be determined in program year one, and run in either program year one or two. A pilot may result from this study. The market offers a Nest brand learning thermostat which makes savings claims that should be verified prior to including the measure in programs. This study will provide industry ground breaking understanding as to the savings potential of such learning thermostats.

Regarding commercial and industrial ("C&I") program pilots, a suggested pilot is to use contractor cash "spiffs" to encourage the removal of tubular T12 lighting prior to the shift in baseline for these retrofits. To date, the program has had great success with installing highly efficient LED and CFL lamps in small commercial facilities, with lower participation for removing highly inefficient T12 lighting. The purpose of this pilot would be to ensure that customers take maximum advantage of program incentives available to replace highly inefficient T12 lighting while sufficient incentives are still available for these retrofits. Although these spiffs are typically small in amount (on the order of \$25), they could have a substantial impact on program activity. The pilot would measure the improvement in activity and realized T12 retrofit savings achieved by offering contractor

spiffs for T12 retrofits. This pilot would apply to both Small and Large C&I Solutions programs.

For Small Commercial Solutions, a pilot initiative is to enhance activity in the Small Commercial Solutions Program by offering contractors spiffs for each correct and complete application that is submitted to the program using the program tool. This pilot is suggested if the program finds that contractors need an additional incentive to take advantage of the program tool, and it would measure the effectiveness of using spiffs to engage contractors in using new technology that streamlines program participation.

For Large Commercial Solutions, Resource Conservation Manager ("RCM") services could be offered as a pilot to a limited number of schools that take advantage of benchmarking and Energy Master Planning services ("EMP"). Benchmarking and EMP services frequently suggest the incorporation of an energy awareness program and RCM is an effective way of following through with that. RCM employs an energy accounting tool to track energy usage and covers the cost of training and maintaining an energy manager to use the energy accounting tool to improve energy awareness for building occupants and achieve substantial energy savings through behavior modification and operations adjustments. These initiatives are found to reduce electric and gas energy use in schools by 10-30%. Another large C&I pilot is the extension of benchmarking and EMP services to large C&I customers outside of schools. The purpose of this pilot would be to measure enhanced program activity that is driven by providing data on facility energy use through benchmarking, bringing together facility stakeholders through Energy Master Planning activities, and providing the facility with an Energy Master Plan.

# C. Summary of the Changes to the Original Plan

Please see the attached CLEAResult report for updates to the April 2013 plan.

# D. Proposed Behavioral Program

In the April 1, 2013 implementation filing, the Companies recommended including a behavioral pilot program. Behavior based programs are a relatively new addition to the energy efficiency arena. As such, the Companies have had limited experience with behavioral programs or administrators of such programs. Given the increase in funding in Year 6, the Companies propose to have a behavioral pilot program in the ENO Energy Smart Program. The pilot is expected to add to the energy savings, peak demand savings, and program awareness of the other Energy Smart programs. The pilot is envisioned to include home energy reports to compare a customer's electricity usage to the usage of other similar homes in the New Orleans area. The program is expected to encourage energy conservation behavior and increased awareness of the Energy Smart Plan to customers at the household level. The expected cost of a pilot program is between \$250,000 and \$500,000 annually. As such, the budget includes an allotment of \$300,000 for a pilot behavioral program in year 6 of the ENO programs. Starting in Year 6 allows ample time for consideration and development of the pilot program. However, it is the Companies' understanding that behavioral programs are less likely to be cost-effective when the duration is less than two years. As such, the

Council would have to consider whether the cost-effectiveness rule should be applied to the behavioral pilot.

A detailed summary of behavioral programs has been included in Appendix B.

# E. Continuation of CLEAResult as Principal Contractor

Inasmuch as CLEAResult has performed to an exemplary standard through the first three years and through the first nine month extension of Energy Smart, ENO proposes that CLEAResult continue to operate as the third party implementer of programs. As previously mentioned, Energy Smart has surpassed its targeted goals in each of the first two years of the program and achieved over 96% of its Year 3 goal. Additionally, CLEAResult has maintained a focus on providing opportunity for locally-owned and minority contractors to benefit from the program. The process of selecting an implementing contractor is both a time-consuming and a costly endeavor. The RFP process can take up to seven months or more to complete. The extension of the current CLEAResult as implementer will save program costs and prevent the delays associated with bidding out the contract. Such delays could cause the loss of available contractors now that programs have begun throughout the rest of the state of Louisiana and thus having a longer effect on the programs' effectiveness.

Having been involved with the Energy Smart program for over three years, CLEAResult has the advantage of familiarity and experience in working with the program. More specifically, CLEAResult, is familiar with participating contractors, customers and other individuals associated with Energy Smart. It would take a new entity a substantial amount of time to acclimate to a level in which it would enjoy the efficiencies that experience has brought the current contractors. Given the aforementioned factors, ENO proposes to extend the arrangement with CLEAResult as principal implementer through Years 5 and 6 of the Energy Smart programs.

# IV. Cost Effectiveness Testing

CLEAResult performed program cost effectiveness tests on the potential measures and programs being considered. They performed the Total Resource Cost Test (TRC), the Program Administrator Cost test (PACT) and the Participant Test. As shown in the table below, all programs passed all three of the cost effectiveness tests, including the Low Income Weatherization program. A benefit/cost ratio that exceeds a 1.0 indicates that it is passing that particular test.

Program	TRC Benefits (\$)	TRC Ratio	UCT Ratio
Home Performance with Energy Star	\$1,131,842	1.12	0.90 <sup>3</sup>
Consumer Products POS	\$1,148,171	1.16	1.13
Low Income Audit & Wx	\$844,175	0.56	0.51
School Kits & Education	\$235,392	0.22	0.20
Res Heating & Cooling	\$1,098,332	1.12	1.31
Small C&I	\$4,536,285	1.56	1 93
Large C&I	\$8,324,121	1.05	1.95
Total Portfolio	\$17,318,318	1.06	1.37

All tests are based upon the cost-effectiveness analysis established by the California Standard Practice Manual. The Total Resource Cost Test (also known as the All Ratepayers Test, or "ART") is the primary cost-effectiveness test most generally relied upon for demand side management program design. The Total Resource Cost Test compares the total cost of the program (including the costs to both the participants and the Company) to the total benefits derived from the program. The Program Administrator Cost Test compares program administrator costs, including program incentive and non-incentive costs, to the avoided costs resulting from electric energy and peak demand savings. It should be noted that many customers choose to participate in a demand side program for reasons that cannot be quantified; therefore an unfavorable benefit/cost ratio does not necessarily prevent customers from participating in a program.

## V. Lost Revenue, Customer Caps and Incentives

### A. Lost Revenue Recovery and Calculation

Concerns have been expressed that there are inconsistencies in the recovery of lost contribution to fixed costs at ENO and ELL-Algiers. These concerns are based on calculations illustrating that the lost contributions to fixed costs ("LCFC") per program cost collected at ELL-Algiers is disproportionately greater than the LCFC per program at ENO. The Companies believe that this assertion is not focused on the correct measures. The LCFC is conceived to compensate the utility for its kWh loss due to energy efficiency.

The current mechanism closely approximates the utility's loss by multiplying the adjusted gross margin ("AGM") and the kWh savings. A mechanism based upon a percentage of program costs is not tied to the utility's actual loss. This type of mechanism serves as a disincentive for a utility in going after projects with larger kWh savings per incentive dollar spent because the lost contribution to fixed costs will be the same as that resulting from projects with lower kWh savings per incentive dollar spent.

<sup>&</sup>lt;sup>3</sup> Home Performance with Energy Star passes the TRC test. The .90 UCT ratio can be raised by reducing incentive dollars in this program if the Council desires.

Any disparity between ENO's LCFC and ELL-Algiers's LCFC is primarily due to the difference in AGM at the Companies. Additionally, if the program dollars per kWh differs for the companies, there will be a difference in LCFC with respect to program costs.

Therefore, the Companies propose continuing the current method of lost revenue recovery currently in use. Under the current mechanism, the estimated lost contribution for ENO and ELL-Algiers is displayed below.

ENO	Year 5	\$805,563 <sup>4</sup>
	Year 6	\$980,744
ELL-Algiers	Year 5	\$64,328 <sup>5</sup>
	Year 6	\$65,166

#### B. Customer Caps

In August 2013, the Louisiana Public Service Commission ("LPSC") adopted new rules to implement Quick Start energy efficiency programs. Direct program and administrative costs for energy efficiency as well as projected LCFC are recoverable via a rider mechanism. EGSL and ELL recently filed for such cost recovery via a rider called EECR-QS (Quick Start Energy Efficiency Cost Rate Rider).

As part of the LPSC's Quick Start rules, participating utilities are required to: (1) allow large industrial customers that qualify and provide appropriate notice to opt out of participating and paying for programs; and (2) limit bill increases via a cap for all participating customers to no more than \$75 per month. Regarding (1), a number of large industrial facilities provided notice and are exempt from participating in and paying for energy efficiency programs. Regarding (2), in order to implement the \$75 monthly bill cap, EGSL and ELL had to spend a significant amount on software coding changes to its Customer Care System (CCS).

In contrast to EGSL and ELL and other Entergy Operating Companies, ENO and ELL-Algiers do not have a separate rider mechanism like EECR-QS to recover energy efficiency costs. Instead, costs have historically been recovered from existing funds like the bandwidth remedy payments and via ENO's formula rate plan. In the absence of a separate rider mechanism where a cost cap can actually be implemented and calculated each month (albeit at significant upfront programming cost), there does not appear to be any means to compute such a monthly bill cap using a rider like the formula rate plan ("FRP") because ENO does not currently have an FRP and, in any event, the FRP reflects much more than just energy efficiency costs. After considerable internal discussion and evaluation, the only means available to ENO to implement a cost cap would be to compute a separate offset rider that would provide a credit on the bill for any overage above the bill cap level. In other words, if the Council were to impose a bill cap of, for example, \$200 per month per customer for energy efficiency,

 $<sup>^4</sup>$  Based upon AGM = .0495

<sup>&</sup>lt;sup>5</sup> Based upon AGM = .0466

ENO would need to separately calculate a rider offset in order to refund back any over-collection above the \$200 bill cap. It is simply not cost-beneficial to create, program, and test such a refund mechanism. Given the very small number of affected customers, the cost of programming such a refund mechanism that would be socialized across all of ENO's customers is expected to far exceed the benefit to the limited number of affected customers. Therefore, ENO strongly recommends that no cost cap be implemented until such time as a separate energy efficiency cost recovery rider mechanism is created for ENO.

### C. Incentive Mechanism

During the Integrated Resource Plan process ("IRP"), the Regulatory Assistance Project ("RAP"), which was permitted to participate in the IRP discussions midway through the process although not a party to the docket, provided comments which included suggestions for energy efficiency programs in New Orleans. Pursuant to these recommendations, Council Resolution R-13-363 adopted "an incentive mechanism which rewards the utility for performance in the implementation of DSM programs an incentive payment of:

- a. 5% of shared net benefits for reaching 100% of the Council's energy savings target;
- b. 7.5% of shared net benefits for the increment over 100% of the Council's energy savings target; and
- c. 10% of shared net benefits for the increment over 110% of the Council's energy savings target."

The Resolution further provided that "the Council hereby adopts a penalty mechanism of 5% of program costs to be applicable if the Companies do not meet the Council's energy savings targets."

The Companies express serious concern with the RAP's recommendations, especially considering the following:

- The RAP never joined the IRP docket as a formal intervenor, thereby bypassing the customary rules of participation; the other intervenors and parties were not afforded the usual process commenting on the RAP's determinations
- The RAP missed several months of an interactive process, in which other intervenors had worked cooperatively

In addition to the RAP's informal participation in the process, the Companies also have serious concerns with the parameters of the RAP's mechanism. The Companies' concerns are attached in Appendix A. Also in Appendix A, the Companies, for the Council's consideration, propose a mechanism which is more commensurate with nationwide trends.

### VI. Customer Impact

Council Resolution R-14-509 detailed the funding mechanisms for both ENO and ELL:

"The ENO Energy Smart Program shall be funded at a level of \$6.5 million for Program Year 5, which shall be inclusive of all program costs, a 6.5% of program cost budget for EM&V, the lost contributions for fixed costs and incentives for reaching 100% of the Council's energy savings targets. Should the program exceed 100% of the Council's energy savings target, the incentives for the increments over 100% of the Council's energy savings targets would be in addition to the \$6.5 million budget.

The ENO Energy Smart Program shall be funded at a level of \$7.8 million for Program Year 6, which shall be inclusive of all program costs, a 6.5% of program cost budget for EM&V, the lost contributions for fixed costs and incentives for reaching 100% of the Council's energy savings targets. Should the program exceed 100% of the Council's energy savings target, the incentives for the increments over 100% of the Council's energy savings targets would be in addition to the \$7.8 million budget.

The expected \$0.9 million in RPCE refunds expected in FERC Docket No. ER08-1056 shall be added to the \$13.1 million held in the interest bearing account reserved for energy-efficiency, conservation, and renewable energy programs. These RPCE funds plus interest shall be utilized to fund the ENO Energy Smart programs for Program Years 5 and 6. For Program Year 5, all program costs should be funded out of that sum. For Program Year 6, the remaining RPCE funds available should be spread evenly across all twelve months to offset the costs of the program. Any monthly program costs above the available RPCE funds shall be recovered through the FAC charge until such time as the Council, through an ENO base rate case, considers and renders a determination regarding whether such charges should be included in base rates."

As a result, customer rates are will only be affected in program year 6. The chart below shows that the expected charges during the program years. ENO expects that \$1,796,532 will flow through the FAC in Year 6. These charges are expected to result in a \$0.33 increase on customers' bills.

3-month extension amount	\$1,076,532 <sup>6</sup>	
Extension Lost contribution and performance incentive (estimated at 1/3 of the 9 month extension amount)	\$420,000	
Year 5	\$6,500,000	
AYear 6	\$7,800,000	
Total Amount	\$15,796,532	
RPCE Funding		\$13,100,000
Extra RPCE Funding		\$900,000
Total Funding		\$14,000,000
Amount to be collected	\$1,796,532	1

Regarding the ELL Energy Smart programs, Council Resolution R-14-509 prescribed, "The ELL-Algiers Energy Smart program shall be funded at a level of \$718,265 per year for Program Year 5 and 6, which shall be inclusive of all program costs, a \$6.5% of program cost budget for EM&V, the lost contributions for fixed costs and incentives for reaching 100% of the Council's energy savings targets. Should the program exceed 100% of the Council's energy savings targets, the incentives for the increments over 100% of the Council's energy savings targets would be in addition to the \$718,265 budget...The ELL-Algiers Energy Smart program shall continue to be collected through the FAC charge until such time as the Council, through a base rate case, considers and renders a determination regarding whether such charges shall be included in base rates."

As a result, the \$718,265 per annum for two years will be flowed through the ELL-Algiers FAC beginning in April 2015. However, approximately this amount is already being charged to ELL-Algiers customers so the bill amount will not be significantly impacted.

#### VIII. Conclusion

In summary, the Companies recommend the following programs be included in the continuation of energy efficiency programs in New Orleans:

- Home Performance with Energy Star
- Consumer Products
- Low Income Audit & Weatherization
- School Kits & Energy Education (NOLA Wise)
- Residential Heating and Cooling

<sup>&</sup>lt;sup>6</sup> Based on the amount of spending estimated in the Extension Implementation Plan (12/5/2014). The amount that is up for consideration at the January full Council meeting is \$1,247,953.

- CFL Direct Install
- Large Commercial and Industrial
- Small Commercial and Industrial
- NOLA Wise
- Behavioral Pilot

As seen in this report, these programs will offer substantial savings over the program period. In addition, the Companies request that the Council issue a resolution:

- 1. Approving the Companies' proposal for the implementation of the DSM programs as set forth herein through March 31, 2017.
  - 2. Approving the level of funding allocated to each program;
  - 3. Approving the continued usage of the current lost contribution mechanism;
  - 4. Approving the recommended performance incentive mechanism;
- 5. Concurring that caps on the rate impact for large commercial customers is unnecessary at this time;
- 6. Approving the choice of CLEAResult as the third party implementer for the aforementioned two-year period;
- 7. Approving the development and implementation of a behavioral pilot to be conducted during the Year 6;
- 8. Concurring that the expected total energy savings as the kWh Goals satisfy the applicable Council requirements; and

Granting all other general and equitable relief that the law and the nature of this proceeding may permit. Considering the foregoing, the Companies seek Council approval of this Supplemental Implementation and Cost Recovery Plan in its entirety, and as further detailed in the Companies' Application submitted contemporaneously herewith.

PLEASE NOTE: The preparation of this document required many assumptions surrounding LCFC, performance incentives, and behavioral programs, as well as other predictive assumptions that may differ significantly from actual performance. The Companies request the ability to collect the LCFC and performance incentives above and beyond the amounts estimated in these analyses should those estimations prove to be too small. Inasmuch as the Companies would like to ensure the Council and ratepayers of New Orleans have as accurate information as possible, the Companies propose that the Council's Advisors and the Companies continue working together and updating analysis as the Council makes decisions regarding the programs and recovery mechanisms.

#### **APPENDIX A**

#### Shareholder Incentive Mechanism

ENO believes that the Energy Smart Program Incentive mechanism set forth in Resolution R-13-363 and as proposed by the Regulatory Assistance Project (RAP) is inappropriate and should be revised. The reasons that the RAP proposal is inappropriate include:

- 1. The specifics of the mechanism are not explained in sufficient detail to enable the incentive to be calculated and applied without extensive further direction and resolution of policy issues;
- 2. The mechanism fails to provide a meaningful shareholder incentive (i.e., the potential dollar value is too small);
- 3. The mechanism provides no cap on the shareholder incentive;
- 4. The mechanism results in a significant and automatic penalty even if ENO were to reach 99.9% of its goal;
- 5. The mechanism provides no incentive to increase savings in the range of 0-99% of goal, and very little incentive to increase savings above 100% of goal:
- 6. The shareholder incentive is highly sensitive to volatile factors outside of ENO's control, possibly resulting in windfall profits or extreme penalties which ENO cannot influence and should not be held accountable for; and
- 7. The mechanism is complicated and difficult to explain to stakeholders and customers.

Each of these reasons is discussed below, and a revised proposal addressing these concerns is presented.

### SHORTCOMINGS IN THE RAP SHAREHOLDER INCENTIVE MECHANISM

### The Specifics of the RAP Mechanism Are Not Explained in Sufficient Detail

The RAP shareholder incentive mechanism is explained in high level terms in the Advisors' Recommendations in Docket UD-08-02, and is summarized below:

- 1. 5% of shared net benefits for reaching 100% of the Council's energy savings target;
- 2. 7.5% of shared net benefits for the increment over 100% of the Council's energy savings target;
- $3. \ \ 10\%$  of shared net benefits for the increment over 110% of the Council's energy savings target; and
- 4. A penalty mechanism of 5% of the program costs will be applied if the Companies do not meet the Council's energy savings targets.

Although this is the most detailed description we have of the RAP mechanism, it does not provide sufficient guidance on how the incentive is to be calculated and is therefore unimplementable. For example, while the mechanism refers to "net benefits", it is not clear which perspective is to be used when calculating net benefits (e.g., Total Resource Cost Test or Program Administrator Cost Test.)

Further, the mechanism would pay a varying amount of net benefits (5%, 7.5%, and 10%) for energy savings at varying levels of goal achievement (100%, 100-110%, and > 110%). However, ENO is not aware of any way to parse out the net benefits (necessary to apply the different shares) associated with different levels of goal achievement. That is to say, if ENO were to achieve 105% of goal, there is no methodology supplied (nor is ENO aware of any) which separately identifies the net benefits associated with the 100% achievement and the 5% achievement, which would be required under the RAP mechanism.

Finally, it is not clear if the shareholder incentive amounts are additive across each level of achievement, factor in gross-up of the incentive for taxes, or address whether the incentive would be included in any earnings tests applied to ENO's overall rate of return.

## The Mechanism Fails to Provide a Meaningful Shareholder Incentive

For the shareholder mechanism to provide a meaningful incentive, it needs to afford ENO the opportunity to earn a return that is significant in the context of: a) the budget and level of resources ENO is required to dedicate to the programs, b) ENO's overall earnings, and c) the earnings that ENO would otherwise have the opportunity to earn if it were to pursue supply-side alternatives. This is especially so when we consider that utility shareholder incentives are not an "extra incentive" that is paid for implementing energy efficiency. Rather, they are a modest and incomplete offset to the foregone earnings that the utility would otherwise earn by investing in supply-side resources.

The RAP proposal would result in a shareholder incentive of only \$61,663 if ENO were to hit 100% of its goal<sup>7</sup> and spend a budget of approximately \$5 million. Put another way, ENO's shareholder incentive (before taxes) would be equivalent to only 1.23% of the budget. This amount is inconsistent with the level of effort ENO will put into the programs, is not significant relative to ENO's earnings, and does little to offset the implicit disincentive to invest in energy efficiency. Further, this 1.23% incentive opportunity is significantly lower than the shareholder incentives earned by other utilities, which average 10-11% of the overall budget.<sup>8</sup>

### The Mechanism Provides no Cap on the Shareholder Incentive

The RAP proposal would permit ENO to continue earning a shareholder incentive no matter how far above the goal energy savings extend. Despite the fact that the RAP incentive pays a very modest amount, ENO believes it is good policy to provide a cap on the maximum shareholder incentive that can be earned.

# The Mechanism Results in a Significant and Automatic Penalty Even if ENO Reaches 99.9% of its Goal

The shareholder incentive that would be provided by the RAP mechanism under varying levels of goal achievement is illustrated in Figure 1.

<sup>&</sup>lt;sup>7</sup> This assumes a total program expenditure of \$5,016,806 and assumes ENO earns 5% of the net TRC benefits on a portfolio with TRC benefit cost ratio of 1.18.

<sup>&</sup>lt;sup>8</sup> See for example, "Carrots for Utilities" Providing Financial Returns for Utility Investments in Energy Efficiency" ACEEE, January 2011.

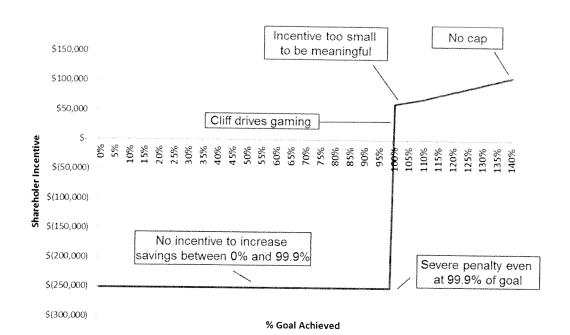


Figure 1. RAP Shareholder Incentive by Goal Achievement

As shown by Figure 1, the RAP mechanism provides for an automatic penalty of 5% of program expenditures, or approximately \$250,000, even if ENO achieves 99.9% of goal. This penalty is unnecessary, inconsistent with the earnings opportunity afforded to ENO, and places excessive emphasis on meeting the goal and could incentivize the Company to overemphasize high impact measures and customers (i.e., gaming), which could come at the expense of residential customers, and potentially at the expense of other objectives such as serving low income customers, supporting technologies with long measure lives, and providing a broad base of programs for all customer classes. Further, the penalty would be applied even if the failure to meet goal was outside of ENO's control, without any showing that ENO was imprudent in the implementation of the programs, and could be considered confiscatory.

ENO believes that such automatic penalties are not appropriate given that the Energy Smart programs already receive a great deal of scrutiny in planning and oversight in implementation by third-party experts, as well as the community and interested parties. Additionally, the Council has other means by which to address any shortcomings in program implementation (if such were to be identified), including failure to approve programs, adjustment of program budgets, and other regulatory tools. Such a penalty also could provide an incentive to understate the potential future impacts of the programs and lower its goals in an effort to manage risk. Finally, despite the fact that ENO is aware of no other U.S. utility that has ever had to pay a penalty, it seems likely that ENO will at some point in the future be subject to penalties under the RAP mechanism.

### The Mechanism Provides no Incentive to Increase Savings Between 0-99% or Above 100% of Goal

As illustrated by Figure 1, the RAP incentive mechanism is insensitive to changes in energy savings between 0-100% of goal. This is in appropriate because ENO should have an incentive to

increase savings from say, 80% up to 90% of goal, even if it has limited ability to meet 100% of goal. Similarly, the RAP incentive is comparatively "flat" above 100% of goal, giving ENO little incentive to increase savings above 100% of goal.

# The RAP Incentive is Highly Sensitive to Volatile Factors Outside of ENO's Control

In basing the incentive on shared savings, the incentive calculation includes estimates of:

- Customer incremental costs (in the case of the TRC test) which cannot be measured precisely
- Future avoided capacity costs
- Future natural gas and other fuel prices, and avoided energy costs
- Escalation rates
- Discount rates, and
- Potential impacts revisions due to EM&V revisions and changes to Net-to-Gross, etc.

In the current climate of low gas prices and capacity costs, ENO's incentive would be significantly reduced even if it does an exemplary job of implementing the programs. Similarly, as these costs rise in the future, ENO could earn a much higher incentive irrespective of how effectively it implements the programs.

This makes the mechanism: unfair in that ENO cannot control or even influence all the elements, volatile from year to year, and unsustainable in the long run because the % share and other factors would need to be reviewed for equity every time avoided costs or other key factors change.

# The Mechanism is Complicated and Difficult to Explain to Stakeholders and Customers

ENO believes that the complexity of the RAP mechanism, and the fact that it requires familiarity with specialized concepts such as benefit-cost testing of energy efficiency programs and development of utility avoided costs, diminishes its power as an incentive to management and causes customers and stakeholders to be skeptical of its appropriateness. A mechanism that is easier to explain, and is obviously not subject to manipulation, would be preferable and is likely to receive greater support from customers and require fewer expert and regulatory resources to administer.

### A PROPOSED ALTERNATE SHAREHOLDER INCENTIVE MECHANISM

To address the above shortcomings, ENO has developed an alternate mechanism which provides a fixed performance payment for all qualifying energy savings. Specifically, the proposed ENO mechanism would:

- Set a target annual incentive equal to 10% of all program costs in each year to be paid at 100% of goal achievement (approximately \$501,681 for 2015)
- Set a target energy savings goal equivalent to the net lifecycle kWh energy savings (i.e., annual net energy savings \* useful life of the energy efficient measures) of measures planned to be installed in the program year (170,763,286 kWh for 2015)
- Set the per kWh incentive payment as the target annual incentive divided by the net lifecycle energy savings goal (\$0.00294 for 2015)
- At goal achievement less than 50% of goal, no shareholder incentive is paid

- At goal achievement between 50% and 120% of goal, pay an incentive of the per kWh incentive payment times the verified net lifecycle energy savings of measures installed that program year
- Cap the incentive payment for the amount payable at 120% of goal

Measure kWh savings, measure life, and net-to-gross ratios would be stipulated at the beginning of each program year and would not be retroactively adjusted for the purposes of the incentive calculation. The incentive would not be included in any earning tests calculations, and would not be grossed up for taxes.

The incentive payment under this mechanism is illustrated in Figure 2, which also illustrates the previously approved shareholder incentive mechanism, as well as the RAP proposal.

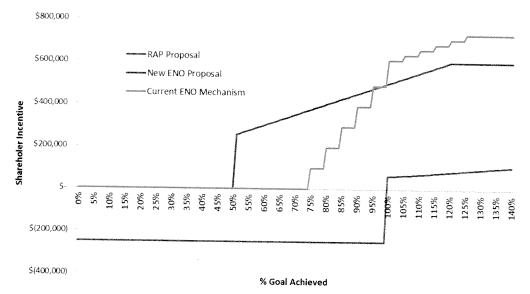


Figure 2. Comparison of ENO Newly Proposed Mechanism with Previous and RAP Proposed Mechanisms

The new mechanism (shown in red), starts paying a shareholder incentive at 50% of goal, and provides a steadily increasing incentive up to 120% of goal. The 2015 incentive at 100% of goal is \$501,681 or 10% of program cost, and is capped at \$602,017 for 120% of goal and higher.

This mechanism provides a consistent incentive for increasing savings across a broad range of goal achievement, eliminates the "cliff" effect associated with radical changes in the incentive for small changes in the achievement. Although the new mechanism provides a smaller incentive to ENO than the previously approved mechanism when goal is exceeded, it is still a meaningful amount. In addition, the use of lifecycle energy savings (as opposed to annual energy savings) ensures that measures with short lives are not inappropriately emphasized over measures with long lives.

The new mechanism is driven primarily by the customer participation rate (the primary factor that ENO can influence), and limits (although doesn't eliminate) exposure to things outside of ENO's control. It is also comparatively easy to administer and explain, and the cap protects ratepayers against

excessive shareholder incentives. The new proposed mechanism is also more predictable than the RAP mechanism and allows for estimation of likely incentives throughout the program year.

It should be noted that the complex, contentious, and resource intensive nature of shareholder incentive mechanisms based on shared net benefits has in recent years led more states, most notably California, to permit a "performance payment" approach instead of shared net benefits as proposed by RAP. Although the specifics of each state's mechanism varies, approximately 11 states now permit use of the performance payment approach.

#### APPENDIX B

### **BEHAVIORAL PILOT**

### Introduction

1 . .

In an effort to encourage and promote the efficient use and conservation of energy, Entergy New Orleans would like to include a behavioral energy efficiency program in its efficiency portfolio. As indicated in the detailed program design information provided below that includes projected budgets and forecasts for the duration of the program cycle, the proposed Home Energy Reporting (HER) program is cost effective and successfully promotes the efficient use and conservation of energy.

The discussion below provides estimates of results that a two-year behavioral program could be designed to produce.

### Program Design

The program design below assumes a sample size of 30,000 residential households. By providing customers with better information on their energy use and personalized energy saving advice, HERs motivate customers to measurably and verifiably use less energy and save money on their monthly bills. The HER program also helps to increase participation in other utility-run efficiency programs.

HER programs have delivered more than \$440 million in bill savings for residential customers, including low-income and seniors, and over 5 TWh's in energy savings. Today, over 90 utilities, in 35 states and 8 countries deliver energy saving information to over 30 million residential households through Home Energy Reports. HER programs are an approved energy efficiency resource in 31 states and its impact has been consistently and independently verified over 40 times.

HER programs provide residential customers with better energy information through personalized mailed reports and an integrated web portal to empower them to make better energy usage decisions. There are multiple public benefits associated with this energy efficiency program, including but not limited to:

- (i) **Cost effective energy savings:** This program consistently results in 1.5 2.5% for average electric savings, as has been demonstrated through independent evaluations of programs across millions of households.<sup>ii</sup> This leads to reduced energy costs and lower bills for families who participate in the program.
- (ii) Widely distributed benefits: HER programs have the added benefit of delivering energy savings to residential customers regardless of demographics, including age and income. On average, seniors, renters, and low-income customers save just as much, if not more, than homeowners and customers in average and high-income groups, respectively.
- (iii) Heightened awareness of efficiency: HER programs deliver energy savings by providing better energy information. Through Home Energy Reports, households become more aware of their energy usage and opportunities for conservation through both changes in behavior and the

purchase of energy efficient products. For example, HER programs have demonstrated an ability to lift participation in other utility efficiency programs. A customer receiving Home Energy Reports is more likely to buy efficient appliances, which is a secondary benefit of the HER program.

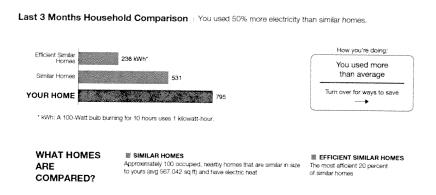
The program's design will maximize savings for its customers. Specifically, the program will automatically deliver the program on an opt-out basis to 30,000 households with average energy use. The program is designed with the following characteristics:

- 1. **Delivery of reports:** Targeted households automatically receive one welcome insert to introduce them to the program followed by four home energy reports annually. These reports provide periodic updates on the energy usage behavior of a given household, and offer tips for saving energy (see Appendix B for a Sample Home Energy Report).
- 2. **Delivery of web portal**: All program participants will have access to a web portal that will be integrated into Entergy New Orlean's website. This site will enable participants to create a profile, perform an online audit, access energy savings tips, monitor usage over time, and compare usage to neighbors for benchmarking purposes.
- 3. **Ability to opt-out**: All participants will have a clear method for opting out of the program if they no longer want to receive the information. The opt-out rate for the HER program has generally been less than 1%.

# Applied Behavioral Science at the Core of Program Design

The HER program is organized around two concepts. First, motivate consumers to change their behavior by putting their usage in context. Second, provide them with salient, personalized advice to capitalize on this motivation to use less energy and save money. Figure 1 provides a sample neighbor comparison that puts a household's usage in context to motivate them to take action.

Figure 1: Sample Neighbor Comparison Module



Consumers change how they use energy when they receive relevant insights about their energy use in a format that provokes their interest and action. Behavioral science research has demonstrated that peer-based comparisons are highly motivating ways to present information. HER programs leverage a dynamically created comparison group for each residence that compares it to other similarly sized and located households. This behavioral science complements other residential energy efficiency approaches, and is a driving force behind consistent and reliable behavior-based energy efficiency.

Once motivated by this comparison, customers receive individually targeted savings tips based on their energy usage patterns, housing characteristics, and demographics. HER programs present customers with the most relevant suggestions that are likely to deliver the greatest savings.

### **Program Results**

Multiple independent evaluations have verified the cost effectiveness of behavioral programs. Vii Dr. Hunt Allcott (2011), for example, verified average cost effectiveness of 3.3 cents/kWh across seventeen separate deployments, with a range from 1.3 – 5.4 cents/kWh. Viii

Increased program participation occurs even without directly promoting particular programs. This is often referred to this as the "halo" effect of the program. With direct promotion of programs, HER programs can drive further increases in program participation. For example, an HER program recently increased participation by 59% in a refrigerator-recycling program for an electric utility in the Midwest.<sup>ix</sup>

The ability of HER programs to drive increased participation in installed measure programs delivers more energy and bill savings, and reduces the marketing costs associated with other programs. In this sense, HER programs enhance the effectiveness of the entire efficiency portfolio.

### **Program Savings**

These forecasted savings use data from nearly 200 other HER programs to forecast savings rates, and energy usage information specific to Entergy New Orleans's service territory to create a

forecast of total savings in each program year. The forecasting model draws data from over 90 utilities and 30 million households, resulting in consistently reliable savings forecasts with over 80% confidence.

Table 1: Program Delivers Significant Savings<sup>9</sup>

£2.	Apr 2015 – Mar 2016	Apr 2016 – Mar 2017	Total
Number of Households <sup>x</sup>	30,000	30,000	30,000
Estimated Vendor Costs	\$376,000	\$264,000	\$640,000
Utility Internal Costs	-		40.00
Total Program Costs	\$376,000	\$264,000	\$640,000
Savings (MWhs) <sup>10</sup>	3,381	5,815	9,196

Research shows that behavioral program savings tend to increase over time, as customers become accustomed to the messaging and adopt more energy efficient behaviors the longer they receive Home Energy Reports. \*i This gradual ramp accounts for the increased savings in program years 2 and 3.

The program's cost effectiveness results included in Table 2. Detailed calculations for the TRC cost test are included in Appendix A.

Table 2: HER Program is Cost Effective

Cost Effectiveness				
Test	Score			
2 Year TRC	1.06			

<sup>&</sup>lt;sup>9</sup> We can also include additional years to indicate the potential of this program over a longer time horizon, including our estimate of persistent savings.

<sup>&</sup>lt;sup>10</sup> Annual savings equals all of the savings delivered during the life of the program to date, including both maintained and new savings.

# Methodology for Measuring and Verifying Program Savings

The HER program uses randomized controlled trials (RCTs) and *ex-post* measurement—rather than *ex ante* deemed savings—to measure savings with over 90% statistical confidence. Under this approach, parameters are established to create an eligible group of recipients, households are randomly assigned to control and treatment groups, groups are tested to ensure statistical equivalence, reports are sent only to the treatment group, and the difference in energy usage between the two groups is measured using statistical billing analysis. This approach measures savings without bias and with precision. Key components of this approach include:

- (i) Statistically equivalent and randomly allocated control and treatment groups
- (ii) Opt-out design
- (iii) Ex-post measurement
- (iv) Panel data methodology billing analysis for comparison of control and treatment groups

The following is the basic calculation of impact:

kWh saved (test group) = kWh used (control group) - kWh used (test group) - kWh saved by rebated equipment (product participation) for the same time period and same customers

## Randomized Control Trials with Panel Data Analysis are Best Practice

This methodology is consistent with the recommendations of the Department of Energy-led State & Local Energy Efficiency (SEE) Action Network's EM&V of Residential Behavior-Based Energy Efficiency Programs: Issues and Recommendations." SEE Action is a consensus group comprised of utilities, consumer advocates, commission staff, and government officials. This SEE Action report concludes:

"We recommend using a randomized controlled trial for behavior-based efficiency programs, which will result in robust, unbiased program savings impact estimates, and a panel data analysis method, which will result in precise estimates."

This is a low-risk approach because the results are proven and predictable, but also because they are measured *ex post*, so the credit is given for results actually achieved. This is different from many other efficiency programs, which have expected values but no means by which to measure after savings have occurred. It is an approach that has been recognized as the gold standard by the U.S. Department of Energy and used by over fifteen independent evaluations of program impact.<sup>xiv</sup>

This approach is also consistent with best practices supported by the National Action Plan for Energy Efficiency guidelines, \*\* the California Evaluators Manual, \*\* and The Brattle Group's Principles of Behavior-Based Energy Efficiency.\*\*

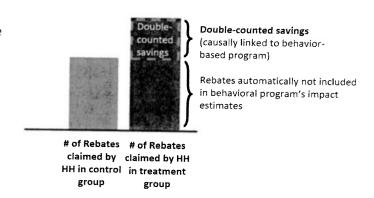
### Addressing Double Counting

There is evidence that HER programs increase participation in other energy efficiency programs. This effect can lead to more savings at lower cost for households, which creates greater net benefits for households. But it also creates the potential for savings from these programs to be double counted – by both the HER program and the other utility-run efficiency program.

SEE Action's recommendations will be utilized to address double counting, as articulated in Figure 2 below. $^{\text{xviii}}$ 

Figure 2: Addressing Double Counting

- Calculate the savings that result from participation in a given program in the control (blue shading) and treatment groups (green shading)
- Measure the difference between savings in treatment and control groups ("double-counted savings" in chart)
- Assign double-counted savings and associated program cost to the HER program, the other efficiency program, or both



For individually tracked utility-run efficiency programs, double-counted savings can be estimated with statistical precision. From an accounting perspective, these savings can either be subtracted from the HER program's overall savings reported to the City Council or shared between the HER program and the other programs.

### **Endnotes**

See, for example, the following select independent evaluations:

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- (vii) January 2014. "First Annual Report to the Pennsylvania Public Utility Commission for the Period June 2012 through May 2013, Program Year 4" The Cadmus Group, Inc.
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- (xiii) August 2013. "Review of PG&E Home Energy Reports Initiative Evaluation." DNV KEMA.
- (xiv) July 2013. "Evaluation of Residential Incentive Program Portfolio: May 2012 through December 2012." ADM Associates, Inc.
- (xv) May 2013. "Home Energy Reports Program: Program Year 2012 Evaluation Report." Navigant Consulting;
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- (xvii) March 2013. "Puget Sound Energy's Home Energy Reports: 2012 Impact Evaluation." KEMA;
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- (xxxix) Ayres, Ian, et al., September 2009. "Evidence From Two Large Field Experiments That Peer Comparison Feedback Can Reduce Residential Energy Usage." NBER Working Paper;
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ii Ibid.

- iii See, for example, the following select independent evaluations:
- (i) Gunn, Randy, December 2010. "Energy Efficiency / Demand Response Plan: Plan Year 2 (6/1/2009-5/31/2010), Evaluation Report: OPOWER Pilot." Navigant Consulting.
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- (v) May 2013. "Home Energy Reports Program: Program Year 2012 Evaluation Report." Navigant Consulting
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- iv See, for example, the following select independent evaluations:
- (vii) Gunn, Randy, December 2010. "Energy Efficiency / Demand Response Plan: Plan Year 2 (6/1/2009-5/31/2010), Evaluation Report: OPOWER Pilot." Navigant Consulting.
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- ix Ibid.
- \* This program is designed to optimize cost effectiveness, which can affect the types of households selected to be in the program. This ensures that the greatest net benefits accrue to households in the utility service territory. xi See, for example, the following select independent evaluations:
- Allcott, Hunt and Rogers, Todd, October 2012. "The Short-Run and Long-Run Effects of Behavioral Interventions: Experimental Evidence from Energy Conservation" NBER Working Paper.
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# **Appendix A: Cost Test Calculations**

## Cost Effectiveness Calculations

		Tot
->	MegaWatt-hour (MWhs)	
[A]	Savings	9,1
[B]	Program Costs	
	Avoided Supply Cost (per	YR1\$.66 YR2 \$.7
[C]	MWh)	YR3 \$.8
[D]	Discount Rate	7
C Ca	lculation	
		Tot
***************************************		101

3 Year TRC 1.06

Appendix B: Sample Home Energy Report

# EnergyCo

## **Home Energy Report**

Account number: CA:0xf82ba04 Report period: 12/20/11-01/20/12

We are pleased to provide this personalized report to you as part of an energy saving program.

The purpose of this report is to:

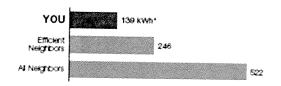
- Provide information
- Track your progress
- Share energy efficiency tips



This information and more available at www.utilityuri.com/energyreports

John Smith 38 NEWLANDS DR PAYNESVILLE VIC, 3880

Last Month Neighbor Comparison You used 43% LESS electricity than your efficient neighbors.



\* kWh: A 100-Watt bulb burning for 10 hours uses 1 kilowatt-hour.

All Neighbors: Approximately 100 occupied, nearby homes that are similar in size to yours.

(avg 1,006 sq ft) and have electric heat

hits dis thesic as was eigen

How you're doing:

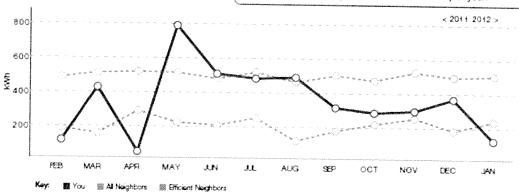
GREAT @ @

Efficient Neighbors: The most efficient 20 percent from the "Al Neighbors" group

# Who are your Neighbors?

Last 12 Months Neighbor Comparison

You used **69% MORE** electricity than your efficient neighbors.
This costs you about **\$878 EXTRA** per year.

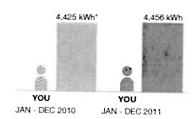


Turn over for savings →

N.6 21207 6-0301

### Personal Comparison

How you're doing compared to last year:



\* kWh: A 100-Watt bulb burning for 10 hours uses 1 kilowatt-hour.

in 2011, you used 1% MORE electricity than in 2010.

### Action Steps | Personalized tips chosen for your home

### Great Investment A big idea for big savings

# Buy ENERGY STAR and help the rebels defeat the empire!

The Department of Energy tests the energy efficiency of many home appliances and electronics, and the best earn the official ENERGY STAR-Æ label. In 2007 Americans saved \$16 billion on their energy bills thanks to this program.

The ENERGY STAR label can be found on efficient models of clothes washers, refrigerators, televisions, computers and many other products.

Visit www.energystar.gov for more details.

\$600'YE

### **Great Investment**

A big idea for big savings

# Choose an efficient refrigerator The Department of Energy tests

the energy efficiency of many home appliances and electronics, and the best earn the official ENERGY STAR-Æ label. In 2007 Americans saved \$16 billion on their energy bills thanks to this program.

The ENERGY STAR label can be found on efficient models of clothes washers, refrigerators, televisions, computers and many other products.

Visit www.energystar.gov for more details.

\$2,500 PER YEAR

### Great Investment A big idea for big savings

# Choose an efficient clothes dryer

This is a copy and paste from tip002 to let the unit tests pass. The Department of Energy tests the energy efficiency of many home appliances and electronics, and the best earn the official ENERGY STAR-Æ label. In 2007 Americans saved \$16 billion on their energy bills thanks to this program.

The ENERGY STAR label can be found on efficient models of clothes washers, refrigerators, televisions, computers and many other products.

Visit www.energystar.gov for more details.

\$15 PER TV PER YEAR

# EnergyCo

runs on OP@WER\*

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NATES SOOF

# **CLEAResult**

# 2015-2016 Revised Energy Smart DSM Plan

December 26, 2014

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Entergy New Orleans, Inc.

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# **Summary**

Entergy New Orleans ("ENO") and Entergy Louisiana-Algiers (ELL), with the assistance of CLEAResult, have developed a revised two-year plan for the implementation of electric Demand Side Management (DSM) programs for the program years 2015-2016 based on the output of the most recent IRP process and public input received to date. Through this process, CLEAResult worked with the intent to review and adjust the original 2014 – 2017 Portfolio Plan and deliver a revised plan that satisfies the DSM goals identified in the 2012 Integrated Resource Plan (IRP) and is representative of public input, while working within the framework for DSM program delivery established in the previously developed Council rules for DSM planning. The following report briefly summarizes the modifications to the original ENO and ELL-Algiers portfolio of Residential and Non-Residential energy efficiency programs.

The revised portfolio for 2015-2016 includes seven (7) Residential and two (2) Commercial & Industrial programs targeting a total estimated annual gross savings of 18,984,923 kWh in the first year at a cost of \$5,089,742. Two-year cumulative annual portfolio savings are 38,867,394 gross kWh with an overall two year cost of \$12,537,543.

# RESIDENTIAL PROGRAMS

The revised portfolio will include the same residential program offerings that were included in the original Portfolio Plan with slight modifications to the budgets, savings and the measures being offered. Based on information from the IRP and input from the New Orleans City Council, a CFL/LED Direct Install Program has been added to the list of residential programs to continue on the success that has been achieved during the initial phase of Energy Smart Programs. For a complete program summary of each of the existing programs, please refer to the original Portfolio Plan filed in April 2013. The residential programs being included in the revised portfolio plan are set forth below.

- Home Performance with ENERGY STAR: Entergy New Orleans will continue to offer the HPwES program that is already being implemented. The program will continue to align with DOE's requirements and offer a whole home approach for single family unit customers. The program model acquires savings from both the shallow measures, such as those which are directly installed, as well as deeper savings measures with longer measures lives yielding a more enduring energy savings within the territory.
- Consumer Products: This retail channel program initiative includes specialty lighting and appliance measures for this plan cycle. Besides offering incentives for room AC's the program will add incentives for the highest efficient ENERGY STAR labeled refrigerators. The program will lay the foundation for developing retailer and manufacturer partnerships supporting the integration of additional measures during the next program cycle. As this program is being run at the same time as the CFL Direct Install Program, the retail channel will focus on specialty CFL & LED light bulbs.
- Multi-Family Weatherization: In the revised 2014 2015 Portfolio Plan, the weatherization for multi-family properties
  has been incorporated into the Low-Income Audit & Weatherization Program.
- Low Income Audit & Weatherization: Because this program has already proven successful through the Energy Smart Program, it will continue to be included in the revised portfolio plan. This income-qualified program targets a hard-to-reach segment of the market with significant weatherization of single family and multi-family units up to a maximum of \$3000 of incentives per unit. Unlike low income programs implemented in other jurisdictions, the Energy Smart Low Income Audit & Weatherization program directly manages the installation contractor and inspects nearly 100% of installed measures assuring a high quality and customer satisfaction.
- School Kits & Energy Education: Energy Smart currently offers this program through a partnership with a local non-profit organization. The program will remain as a program offering in the revised portfolio plan. The program will continue to offer energy education and energy conservation kits to fifth through seventh grade class rooms in Orleans Parish schools. The program delivery model has proven to be successful. Savings will be claimed as measures are installed and self-reported by those students' families via an online system via the Energy Smart web site.
- Residential Heating & Cooling: In 2014, Energy Smart implemented a high performance tune up program to support the use of DSM industry best practices for delivery of tune-ups using an M&V approach to generate measured savings. It has already shown success in participation and energy savings. The program offering is beneficial because it combines the Tune-Up program with incentives to purchase high efficiency air conditioners. This program is included in the revised portfolio plan. The original plan incorporated high performance tune ups for small commercial customers. This measure will continue to be offered in the revised portfolio plan.
- CFL Direct Install: This program is being incorporated into the revised portfolio plan based on feedback from the New Orleans City Council. The program was not included in the original portfolio plan filed in April 2013. The program

targets the residential customer market segment by providing customer education and to increase the market penetration of ENERGY STAR CFLs through the direct installation by local non-profit Green Light New Orleans.

## **COMMERCIAL PROGRAMS**

The Commercial & Industrial Programs outlined in the original Portfolio Plan will continue to be offered in the revised portfolio plan with no modifications to the program design. A summary of the commercial programs being offered to this market segment is set forth below.

- Large Commercial & Industrial: In the revised portfolio plan, the Large Commercial & Industrial program maintains some of the existing program design with facility audits and incentives for a suite of common energy efficiency measures, but is evolved into a more sophisticated offering with the addition of energy master planning and benchmarking, which helps to build the program infrastructure required for emerging behavioral modification strategies, and will also add custom incentives for large custom projects that do not participate through the traditional prescriptive path.
- Small Commercial & Industrial: The Small Commercial Solutions program will continue to offer facility audits and a suite of common energy efficiency measures, but adds two initiatives targeted at enhancing participation in key market segments and improving measure diversity achieved through the program by increasing the adoption a high performance tune ups to enhance the HVAC program offerings. In addition, this more comprehensive program streamlines contractor participation through the use of field tools, and follows a more targeted market segmentation approach to specific market segment customer types.

# **Background**

In April 2013, Entergy New Orleans filed the original 2014 – 2017 Entergy New Orleans Demand Side Management Portfolio Plan. The intent was to implement the new programs starting in January 2014 and ending in December 2017. Since the filing, Entergy New Orleans continued to offer the original Energy Smart Programs to its residential and small commercial programs until the new portfolio plan could be approved by the New Orleans City Council.

In 2014, Entergy New Orleans filed a new Integrated Resource Plan ("IRP") to cover resource planning over the 2014 - 2017 period. Among other analyses, the IRP included a revised assessment of the markets achievable potential for DSM programs across the planning horizon. The following revised DSM Plan is derived from the content of the 2014 IRP and represents the revised DSM portfolio for the program years 2015 - 2016. Furthermore, this plan takes into consideration any new baseline changes affecting the 2015 - 2016 Portfolio. Because the revised programs are expected to be implemented in both the ENO and ELL-Algiers territories, the programs themselves will continue to be identical.

The CLEAResult Team concentrated on the re-evaluation of the 2014 – 2017 Program Portfolio forecasts and design. This process takes into consideration the local and national implementation experience of the project team to establish participation estimates by measure. These estimates were used to calculate the proper incentive levels required to achieve appropriate program savings. The project team also evaluated under-represented market sectors and new service offerings that will advance market development. The analysis concluded with program, sector and portfolio level savings estimates and spending requirements

	Measure	Current Baseline as of March 2013	Change Date	Baseline Change
	Water heater 40 gal	0.92 EF	4/16/2015	0.95 EF
	Water heater 50 gal	0.90 EF	4/16/2015	0.95 EF
ential	Water heater 80 gal	0.86 EF	4/16/2015	1.97 EF
Residenti	Lighting: General Use Lamps	EISA has rolling baseline changes:		

	100 W incandescent (already adjusted)	1/1/2012	72 W halogen
	75 W incandescent (already adjusted)	1/1/2013	53 W halogen
	60 W incandescent	1/1/2014	43 W halogen
	40 W incandescent	1/1/2014	29 W halogen
Room Air Conditioners	Varies by type - 9.8 EER for most common type	4/21/2014	10.9 CEER for mos common type
Linear Lighting (Existing only)	T12 baseline	1/1/2015	T12 with electronic
Central Air Conditioning (5 tons and under)	Efficiency Requirement: SEER 13	1/1/2015	SEER 14
Air Source Heat Pump (5 tons and under)	Efficiency requirement: SEER 13, 7.7 HSPF	1/1/2015	SEER 14, 8.2 HSPF
Ductless Heat Pump	Efficiency requirement: SEER 13, 7.7 HSPF	1/1/2015	SEER 14, 8.2 HSPF
	EISA has rolling baseline changes:		
Lighting: General Use Lamps	100 W incandescent (already adjusted)	1/1/2012	72 W halogen
Screw-in & Hard Wired CFL and LED Lamps	75 W incandescent (already adjusted)	1/1/2013	53 W halogen
	60 W incandescent	1/1/2014	43 W halogen
	40 W incandescent	1/1/2014	29 W halogen
Linear Lighting: Higher Performance T8s (Existing only)	T12 baseline	1/1/2015	T12 with electronic ballast
Central Air Conditioning (5 tons and under)	Efficiency Requirement: SEER 13	1/1/2015	SEER 14
Air Source Heat Pump (5 tons and under)	Efficiency requirement: SEER 13, 7.7 HSPF	1/1/2015	SEER 14, 8.2 HSPF

# **DSM Portfolio – REVISED**

# **PORTFOLIO BUDGETS & SAVINGS**

The CLEAResult Project Team developed the revised Portfolio Plan through a critical analysis including the performance of the existing portfolio of programs and the evaluation of the recently implemented programs offered on a statewide basis. CLEAResult also evaluated the most recent Entergy New Orleans IRP to assure that new programs have incorporated an appropriately aggressive portfolio that targets a diverse set of customer end-uses and markets while also pushing the Orleans Parish residents toward installation of emerging technologies. The following sections provide an overview of the revised Program Portfolio metrics as a whole and within each sector, as well as the overarching sector strategies.

### **Energy Smart New Orleans**

	THE PARTY OF THE P		10/50	DSM Portfo	olio Budgets	A STATE OF THE PARTY OF	150	
		2015				2016		
Sector	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total
Residential	\$1,234,121	\$1,200,659	\$102,413	\$2,537,193	\$1,400,441	\$1,413,385	\$120,841	\$2,934,666
C&I	\$1,179,500	\$1,388,444	\$222,708	\$2,790,652	\$1,409,180	\$1,674,364		
Total	\$2,413,620	\$2,589,103	\$325,121	\$5,327,845	\$2,809,620	\$3,087,749	SPECIAL SECTION SE	\$6,280,990

	DSM Portfolio Savings								
	2015								
Sector	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)			
Residential	9,415	4,700	1.5	11,094	5,596	1.7			
C&I	73	11,575	2.3	80	14,217	2.8			
Total	9,488	16,274	3.76	11,173	19,813	4.51			

### **Energy Smart Algiers**

	DSM Portfolio Budgets								
		2015			The Spatial of	2016			
Sector	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total	
Residential	\$145,283	\$100,207	\$10,570	\$256,060	\$145,283	\$99,667	\$10,570	\$255,519	
C&I	\$101,139	\$117,796	\$19,629	\$238,564	\$101,139	\$118,194	\$19,629	\$238,962	
Total	\$246,422	\$218,003	\$30,199	\$494,624	\$246,422	\$217,861	\$30,199	\$494,481	

		NOME OF THE PERSON OF THE PERS	DSM Port	folio Savings	The second of the			
		2015		2016				
Sector	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)		
Residential	779	397	0.1	782	395	0.1		
C&I	6	984	0.2	6	1,004	0.2		
Total	785	1,381	0.3	788	1,399	0.3		

# DSM PORTFOLIO NET BENEFITS AND COST EFFECTIVENESS ANALYSIS

The revised program designs were loaded into a portfolio screening model, and screened for cost-effectiveness. The portfolio screening model takes into consideration savings and costs over the lifetime of each measure, the costs associated with delivering the programs, as well as economic factors, and avoided costs of energy and demand. The table below summarizes the cost effectiveness results for both the Total Resource Cost test (TRC) and the Utility Cost test (UCT), sometimes referred to as the Program Administrator Cost test (PACT).

Program	TRC Benefits (\$)	TRC Ratio	UCT Ratio
Home Performance with Energy Star	\$1,131,842	1.12	0.90
Consumer Products POS	\$1,148,171	1.16	1.13
Low Income Audit & Wx	\$844,175	0.56	0.51
School Kits & Education	\$235,392	0.22	0.20
Res Heating & Cooling	\$1,098,332	1.12	1.31
Small C&I	\$4,536,285	1.56	1.93
Large C&I	\$8,324,121	1.05	1.95
Total Portfolio	\$17,318,318	1.06	1.37

The total benefits derived from the programs over the two year implementation are approximately \$17.4 million. The table shows that the programs are cost-effective, with a portfolio level TRC benefit-cost ratio of 1.06 and a UCT benefit-cost ratio of 1.38. That means that every dollar invested in energy efficiency returns \$1.06 in total benefits to ratepayers and \$1.38 in total benefits to the utility. If the programs that are not required to pass TRC, School Kits and Education, and Low Income Audit and Weatherization, are removed from the portfolio, the TRC jumps to a 1.18, and the UCT rises to a 1.67.

The benefit categories in the TRC test include the value of energy savings, electric system benefits, and other measurable benefits (for example, participant resource benefits, participant non-resource benefits, and benefits due to measurable market effects). The screening tool relies on the most recent avoided costs provided by Entergy New Orleans in the 2012 IRP. Costs included in the TRC test include all Program Administrator costs and program participant costs. Program Administrator costs include program implementation expenses, evaluation costs, any proposed performance incentives, and the tax liability for performance incentives. The tool calculates a present value of the sum total of all costs and benefits.

# **RESIDENTIAL PROGRAM PORTFOLIO - REVISED**

The overall approach driving this revised DSM plan was to retain the aspects of the original Portfolio Plan filed in April 2013 that have or are likely to generate cost effective savings while achieving their strategic objectives within the portfolio, and then to modify the remainder of the program to best achieve Energy Smart goals and objectives. Some of the Residential programs have been re-evaluated to better suit their respective market channels. Some of the aspects originally incorporated in the original plan are still beneficial to incorporate in the revised residential program. For example, the Residential Heating & Cooling program combined A/C tune-ups with unit replacements. The Consumer Products offering has combined Room A/C units and lighting products, which when delivered through retail channels, is a cost-effective option for delivering savings. The program develops retail and manufacturer partnerships streamlining the delivery of these products. CLEAResult will continue to monitor/evaluate the cost-effectiveness of learning thermostats to determine whether it is feasible to offer them through the Consumer Product offering.

Because of the widespread success of the Energy Smart CFL Direct Install Program, CLEAResult has included a revised CFL Direct Install Program in the portfolio plan. LEDs may be included in this program if the per unit cost for bulbs meets cost effectiveness requirements

# **Energy Smart New Orleans**

	Residential Portfolio Budgets						
		2015			2016		
Residential Program	Incentives	Non-Incentives	Total	Incentives	Non-Incentives	Total	
Home Performance with Energy Star	\$296,027	\$225,324	\$521,350	\$380,633	\$269,176	\$649,810	
Consumer Products POS	\$244,172	\$184,651	\$428,823	\$293,105	\$220,584	\$513,689	
Low Income Audit & Wx	\$330,286	\$374,147	\$704,433	\$398,427	\$446,282	\$844,710	
School Kits & Education	\$73,392	\$428,768	\$502,160	\$89,012	\$437,543	\$526,555	
Res Heating & Cooling	\$256,783	\$123,643	\$380,426	\$252,207	\$147,695	\$399,903	
Total	\$1,200,659	\$1,336,534	\$2,537,193	\$1,413,385	\$1,521,281	\$2,934,666	

	Residential Portfolio Savings								
		2015	STATE OF STATE	Name of the last	2016				
Residential Program	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)			
Home Performance with Energy Star	872	745	0.3	1,074	957	0.3			
Consumer Products POS	4,531	953	0.3	5,146	1,214	0.3			
Low Income Audit & Wx	578	535	0.2	698	646	0.2			
School Kits & Education	3,302	960	0.1	4,004	1,164	0.1			
Res Heating & Cooling	132	1,508	0.6	172	1,616	0.6			
Total	9,415	4,700	1.5	11,094	5,596	1.5			

### **Energy Smart Algiers**

	Residential Portfolio Budgets								
		2015		2016					
Residential Program	Incentives	Non-Incentives	Total	Incentives	Non-Incentives	Total			
Home Performance with Energy Star	\$23,806	\$20,064	\$43,870	\$26,795	\$20,064	\$46,859			
Consumer Products POS	\$19,333	\$15,579	\$34,912	\$20,616	\$15,579	\$36,195			
Low Income Audit & Wx	\$28,321	\$30,243	\$58,564	\$28,139	\$30,243	\$58,382			

					\$10,436	\$28,260
ool Kits & Education  Heating & Cooling	\$6,433 \$22.315	\$79,530 \$10.436	\$85,963 \$32.752	\$6,293 \$17.824	\$79,530	\$85,823

	Residential Portfolio Savings									
	Arradic Street	2015	Late out we	18 18 1 AV	2016					
Residential Program	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)				
Home Performance with Energy Star	70	60	0.02	76	67	0.02				
Consumer Products POS	358	75	0.02	362	85	0.03				
Low Income Audit & Wx	50	46	0.02	49	46	0.02				
School Kits & Education	289	84	0.01	283	82	0.01				
Res Heating & Cooling	12	131	0.05	12	114	0.05				
Total	779	397	0.1	782	395	0.1				

While the Algiers Energy Smart programs will have their own budget and separate reporting, the programs offered in Algiers will mirror those offered in ENO's territory.

# COMMERCIAL AND INDUSTRIAL PROGRAMS - REVISED

The revised commercial and industrial program portfolio will employ a comprehensive approach to program delivery by providing a suite of program offerings with targeted services and measures to address different aspects of a customer's energy requirements. CLEAResult has incorporated initiatives outlined in the original 2014-2017 program portfolio to stimulate activity in markets that are currently underserved by existing programs or represent sectors of vital interest to the New Orleans culture and economy. The program includes opportunities for schools, small hospitality, and industrial sectors to participate, which improves the measure diversity achieved by the programs. Other improvements previously recommended are to streamline program participation through the use of field tools; larger incentives for non-lighting measures in order to increase measure diversity; enhanced program services for Large C&I customers to identify and achieve savings; and targeted program services for specific market sectors.

For the revised program portfolio, CLEAResult recommends C&I sector continue to be served through two umbrella programs; Small Commercial Solutions for customers under 100 kW, and Large Commercial Solutions for customers 100 kW and over.. This approach reduces confusion in the market while still offering relevant messaging to each market segment. In addition, establishing the programs as overarching umbrellas, under which the individual initiatives are implemented, this approach helps keep the programs flexible and able to target specific customer segments as the program learns more about the needs of specific market segments. Under each umbrella program there will be targeted initiatives that together will enhance participation in key customer segments.

### **Energy Smart New Orleans**

C&I Portfoli	o Budgets
2015	2016

C&I Program	Incentives	Non-Incentives	Total	Incentives	Non-Incentives	Total
Small C&I	\$472,792	\$499,384	\$972,175	\$608,960	\$595,256	\$1,204,216
Large C&I	\$915,652	\$902,824	\$1,818,476	\$1,065,404	\$1,076,704	\$2,142,108
Total	\$1,388,444	\$1,402,208	\$2,790,652	\$1,674,364	\$1,671,960	\$3,346,324

	C&I Portfolio Savings									
	100	2015	W. C.	The same	2016					
Program	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)				
Small C&I	39	3,829	1.0	47	4,837	1.3				
Large C&I	34	7,745	1.3	33	9,380	1.5				
Total	73	11,575	2.3	80	14,217	2.8				

### **Energy Smart Algiers**

	C&I Portfolio Budgets									
	10 met 2000	2015			2016	The state of				
C&I Program	Incentives	Non-Incentives	Total	Incentives	Non-Incentives	Total				
Small C&I	\$41,913	\$43,548	\$85,461	\$43,078	\$43,548	\$86,626				
Large C&I	\$75,883	\$77,220	\$153,103	\$75,116	\$77,220	\$152,336				
Total	\$117,796	\$120,768	\$238,564	\$118,194	\$120,768	\$238,962				

	C&I Portfolio Savings										
		2015	4 1 2 7 1 1 2	2016							
Program	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)					
Small C&I	3	340	0.1	3	342	0.1					
Large C&I	3	645	0.1	2	662	0.1					
Total	6	984	0.2	6	1,004	0.2					

As originally proposed, the Small Commercial Solutions program will continue to offer facility audits and a suite of common energy efficiency measures. The program will incorporate two specific initiatives that will improve measure diversity achieved through the program. The first initiative is to increase the adoption of HVAC efficiency measures for small commercial customers by offering high performance A/C tune ups combined with high efficiency A/C rebates. Offering this combined

option will enhance participation from contractors and customers increasing the effectiveness of the program. The second modification is to incorporate a direct install model that engages contractors to deliver measures into customer facilities through the use of field tools that greatly streamline and simplify program participation while also improving data collection and data accuracy. This will improve program retention rates, helping contractors close and complete more projects.

In the original Portfolio Plan, CLEAResult recommended two additional pilots for consideration. The two pilots should continue to be considered to help enhance activities in the small and large commercial program. Please refer to the original 2014 – 2017 Portfolio Plan for additional details on the proposed pilot programs.

### **EM&V BUDGET**

The budgets outlined above continue to include an allocation toward EM&V, which totals roughly 3% of the annual portfolio budget. This amount is comparable to the EM&V spending in the first cycle of programs and is consistent with the average percentage of utility DSM annual spending on EM&V as described by a recent E Source research brief on budget breakdowns in utility DSM programs.

### **BUDGET FLEXIBILITY**

Entergy New Orleans' experience has shown that program implementation often occurs at different rates for different programs, and that these implementation rates can vary significantly from predictions in program applications that formed the basis for program approval. It's important that there continue to be budget flexibility within each rate class.

# **APPENDICES**

Appendix: Revised Detailed Measure List

			Savings Character			Cost (	Cost Character	
Program Measure Name		#	EUL (yr.)	Energy Savings on peak (kWh)	Demand Savings (kW)	Incentive (\$/unit)	Equipment Cost (\$/unit)	
Consumer Products POS	Advanced Power Strip	79	10	4,437	0.6	\$594	\$515	
Consumer Products POS	CFL 10W	12,988	6	64,942	13.0	\$7,876	\$9,498	
Consumer Products POS	CFL 13W	5,195	6	41,556	10.4	\$3,150	\$3,798	
Consumer Products POS	CFL 18W	3,564	6	33,859	7.1	\$2,131	\$3,185	

* 2							
Consumer Products POS	CFL 23W		6			\$0	\$0
Consumer Products POS	LED 10W Downlights	12,116	20	199,921	42.4	\$51,029	\$35,441
Consumer Products POS	LED 12W Downlights	11,182	20	212,456	44.7	\$46,823	\$43,609
Consumer Products POS	LED 12W Downlights - outdoors	88	20	3,009		\$375	\$345
Consumer Products POS	LED 13W A-lamp	3,912	20	46,949	9.8	\$12,668	\$13,351
Consumer Products POS	LED 14W Downlights	5,310	20	122,129	26.5	\$22,264	\$27,612
Consumer Products POS	LED 18W A-lamp	3,725	20	61,470	13.0	\$12,060	\$24,215
Consumer Products POS	LED 7W A-lamp	4,758	20	30,930	7.1	\$15,206	\$9,279
Consumer Products POS	LED 8W Downlights	8,080	20	88,882	20.2	\$33,946	\$39,391
Consumer Products POS	LED 9W A-lamp	4,283	20	44,969	8.6	\$13,871	\$11,135
Consumer Products POS	Refrigerator - Energy Star Most Efficient	178	14	15,549	2.1	\$2,666	\$3,465
Consumer Products POS	Room Air Conditioners	1,955	9	112,392	124.1	\$43,979	\$31,763
Home Performance with Energy Star	Advanced Power Strip	636	10	35,596	4.4	\$9,535	\$7,628

Home Performance with Energy Star	Air Sealing (1000 CFM50 reduction)	545	33	106,890	70.9	\$68,167	\$54,533
Home Performance with Energy Star	Air Sealing (1000 CFM50 reduction)	545	33	106,890	70.9	\$68,167	\$54,533
Home Performance with Energy Star	Air Sealing (1000 CFM50 reduction)	545	33	106,890	70.9	\$68,167	\$54,533
Home Performance with Energy Star	Audit	710	: <b>-</b>	-	-	\$53,240	\$0
Home Performance with Energy Star	Celing Insulation R00- 04 to R30	133	60	95,480	50.6	\$19,912	\$15,929
Home Performance with Energy Star	Celing Insulation R00- 04 to R30	133	60	95,480	50.6	\$19,912	\$15,929
Home Performance with Energy Star	Celing Insulation R00- 04 to R30	133	60	95,480	50.6	\$19,912	\$15,929
Home Performance with Energy Star	Celing Insulation R05- 08 to R30	131	60	46,820	24.3	\$13,124	\$10,499
Home Performance with Energy Star	Celing Insulation R05- 08 to R30	131	60	46,820	24.3	\$13,124	\$10,499
Home terformance with Energy Star	Celing Insulation R05- 08 to R30	131	60	46,820	24.3	\$13,124	\$10,499
	Celing Insulation R09- 14 to R30	89	60	16,583	8.5	\$8,865	\$7,092
	Celing Insulation R09- 14 to R30	89	60	16,583	8.5	\$8,865	\$7,092
	Celing Insulation R09- 14 to R30	89	60	16,583	8.5	\$8,865	\$7,092

Home Performance with Energy Star	Celing Insulation R15- 22 to R30	96	60	7,454	4.5	\$8,376	\$6,701
Home Performance with Energy Star	Celing Insulation R15- 22 to R30	96	60	7,454	4.5	\$8,376	\$6,701
Home Performance with Energy Star	Celing Insulation R15- 22 to R30	96	60	7,454	4.5	\$8,376	\$6,701
Home Performance with Energy Star	CFL 13W	8,447	6	76,026	16.9	\$16,895	\$7,603
Home Performance with Energy Star	Duct Sealing	229	54	175,533	43.9	\$45,720	\$36,576
Home Performance with Energy Star	Duct Sealing	229	54	175,533	43.9	\$45,720	\$36,576
Home Performance with Energy Star	Duct Sealing	229	54	175,533	43.9	\$45,720	\$36,576
Home Performance with Energy Star	Faucet Aerator 1.5 GPM	703	10	10,199	1.1	\$1,758	\$1,407
Home Performance with Energy Star	Floor Insulation to R19	89	60	13,725	9.4	\$8,856	\$7,084
Home terformance with Energy Star	Floor Insulation to R19	89	60	13,725	9.4	\$8,856	\$7,084
Home erformance vith Energy Star	Floor Insulation to R19	89	60	13,725	9.4	\$8,856	\$7,084
Home erformance vith Energy Star	Heat Pump Water Heater (2.2 EF)	176	10	144,695	21.1	\$52,744	\$42,196
	LED 12W Downlights - outdoors	2	20	61		\$7	\$14

Home	LED 9W	2011	20	20 545			
Performance with Energy Star	: : : :	2,811	20	29,515	5.6	\$11,244	\$8,995
Home Performance with Energy Star	Low Flow Showerhead (1.75 GPM)	88	10	8,168	8.0	\$439	\$351
Home erformance vith Energy Star	Pipe Insulation	395	13	2,767	<u>.</u>	\$2,964	\$2,371
Home Performance with Energy Star	Pool Pump, ENERGY STAR	18	10	18,716	2.9	\$3,513	\$2,811
Home Performance with Energy Star	Radiant Barrier	5	75	1,253	1.3	\$531	\$425
Home erformance vith Energy Star	Radiant Barrier	5	75	1,253	1.3	\$531	\$425
Home Performance vith Energy Star	Radiant Barrier	5	75	1,253	1.3	\$531	\$425
Home Performance with Energy Star	Solar Screens (E or W 15 sf window)	179	30	5,916	3.3	\$1,340	\$1,072
Home erformance vith Energy Star	Solar Screens (E or W 15 sf window)	179	30	5,916	3.3	\$1,340	\$1,072
Home erformance vith Energy Star	Solar Screens (E or W 15 sf window)	179	30	5,916	3.3	\$1,340	\$1,072
Home erformance vith Energy Star	Wall Insulation	88	60	55,175	29.8	\$11,056	\$8,845
Home erformance vith Energy Star	Wall Insulation	88	60	55,175	29.8	\$11,056	\$8,845
Home Performance vith Energy Star	Wall Insulation	88	60	55,175	29.8	\$11,056	\$8,845

Home Performance with Energy Star	Water Heater Insulation (R-6.7 or higher)	2	13	92	0.0	\$44	\$35
Large C&I	Anti Sweat Heater Controls	41	12	53,692	0.9	\$8,591	\$15,750
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	25	23	639,667	156.0	\$102,347	\$866,422
Large C&I	Custom - Compressed Air Projects	2	9	525,703	61.6	\$53,523	\$75,969
_arge C&I	Custom - General Heat/Cool	2	19	305,375	18.1	\$49,026	\$101,596
arge C&I	Custom - General non-Heat/Cool	2	5	125,918	14.6	\$14,802	\$20,545
.arge C&I	Custom - Industrial Process Improvement	2	6	116,507	10.9	\$10,278	\$19,218
.arge C&I	Custom - VFD (Commercial)	2	15	44,525	5.5	\$3,142	\$4,105
arge C&I	Custom - VFD (Industrial, motor<250 HP)	2	15	169,968	21.3	\$20,730	\$36,340
	Custom - VFD (Industrial, motor>250 HP)	2	15	1,778,847	203.7	\$325,450	\$483,888
arge C&I	Custom Lighting	12	10	1,030,613	175.8	\$103,061	\$488,107
	Dual-Sided LED Exit Signs	348	15	21,379	5.6	\$2,729	\$8,343
	Evaporator Fan Controller	47	16	12,248	1.4	\$1,877	\$3,041

Large C&I	Faucet Aerator 1.5 GPM	75	10	13,302	3.7	\$299	\$299
Large C&I	HE HVAC Equipment	3	15	9,858	4.8	\$952	\$4,371
Large C&I	Hi Bay T5HO	261	16	90,196	23.5	\$6,517	\$31,803
Large C&I	LED 18W linear replacing T12	87	15	3,996	1.3	\$434	\$1,529
Large C&I	LED Downlight	801	: 15	122,951	24.0	\$14,818	\$24,030
Large C&I	LED Exterior Lighting	37	15	31,417	- - -	\$3,106	\$9,955
Large C&I	LED Screw-in	6,947	9	482,831	138.9	\$93,787	\$83,367
Large C&I	LED Traffic Lights	347	10	92,823	22.3	\$9,282	\$8,328
Large C&I	Lighting Controls	147	8	31,409	6.6	\$1,548	\$5,368
Large C&I	Low flow showerhead	12	10	759	0.2	\$121	\$97
Large C&I	Packaged Heat Pump/AC	312	10	192,662	106.2	\$41,593	\$101,046
Large C&I	PC Power Management	2,227	4	375,264	_	\$12,026	\$13,363
Large C&I	Pre Rinse Spray Valve	66	5	106,676	17.1	\$1,712	\$1,370

Large C&I	Process Improvements	4	9	324,299	37.1	\$4,864	\$31,133
Large C&I	RCx	13	9	960,896	110.5	\$14,413	\$92,246
Large C&I	Server Virtualization		4			\$0	\$0
Large C&I	T12 Upgrade to HP T8	2,752	15	68,793	17.9	\$13,759	\$20,913
Large C&I	T12 Upgrade to HP T8s and delamp	6,060	15	799,923	206.0	\$60,600	\$92,112
Large C&I	T8 Upgrade to HP T8	6,055	15	30,277	9.1	\$15,138	\$46,020
ow Income Audit & Wx	Air Sealing (1000 CFM50 reduction)	173	33	36,903	22.5	\$23,778	\$19,023
ow Income Audit & Wx	Air Sealing (1000 CFM50 reduction)	173	33	36,903	22.5	\$23,778	\$19,023
ow Income Audit & Wx	Air Sealing (1000 CFM50 reduction)	173	33	36,903	22.5	\$23,778	\$19,023
ow Income Audit & Wx	Audit	173	_	· · · · · · · · · · · · · · · · · · ·	_	\$25,937	\$14,174
ow Income Audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611
ow Income audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611
ow Income Audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611

Low Income Audit & Wx	Celing Insulation R05- 08 to R30	52	120	25,927	9.6	\$13,482	\$10,786
Low Income Audit & Wx	Celing Insulation R05- 08 to R30	52	120	25,927	9.6	\$13,482	\$10,786
Low Income Audit & Wx		52	120	25,927	9.6	\$13,482	\$10,786
Low Income Audit & Wx	Celing Insulation R09- 14 to R30	52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx	Celing Insulation R09- 14 to R30	52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx	Celing Insulation R09- 14 to R30	52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	CFL 13W	2,769	12	24,924	5.5	\$5,539	\$3,116
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011

Low Income Audit & Wx	Faucet Aerator 1.5 GPM	121	10	1,753	0.2	\$302	\$302
Low Income Audit & Wx	Floor Insulation to R19	26	60		2.8	\$6,477	\$5,181
Low Income Audit & Wx	Floor Insulation to R19	26	60		2.8	\$6,477	\$5,181
Low Income Audit & Wx	Floor Insulation to R19	26	60		2.8	\$6,477	\$5,181
Low Income Audit & Wx	LED 9W	2,768	40	29,062	5.5	\$6,920	\$6,920
Low Income Audit & Wx	Low Flow Showerhead	60	10	5,621	0.6	\$302	\$242
Low Income Audit & Wx	Pipe Insulation	60	13	423		\$453	\$363
Low Income Audit & Wx	Radiant Barrier		75			\$0	\$0
_ow Income Audit & Wx	Radiant Barrier	-	75	<u>*</u>	<del>-</del>	\$0	\$0
ow Income Audit & Wx	Radiant Barrier	- -	75 ;	=	_	\$0	\$0
ow Income Audit & Wx	Room A/C	35	9	2,072	2.3	\$863	\$4,317
.ow Income Audit & Wx	Wall Insulation	26	60	3,134	8.7	\$15,542	\$12,434
ow Income	Wall Insulation	26	60	3,134	8.7	\$15,542	\$12,434

Low Income Audit & Wx		26	60	3,134	8.7	\$15,542	\$12,434
Low Income Audit & Wx		2	10	97	0.0	\$26	\$21
Low Income Audit & Wx		1,025	33	69,486	66.6	\$102,496	\$81,997
Low Income Audit & Wx	Air Sealing (500 CFM50 reduction)	1,025	33	69,486	66.6	\$102,496	\$81,997
Low Income Audit & Wx	Air Sealing (500 CFM50 reduction)	1,025	33	69,486	66.6	\$102,496	\$81,997
ow Income Audit & Wx	Beverage Machine Controls	5	15	2,661	0.1	\$533	\$426
ow Income Audit & Wx	Beverage Machine Controls	5	15	2,661	0.1	\$533	\$426
ow Income Audit & Wx	Beverage Machine Controls	5	15	2,661	0.1	\$533	\$426
ow Income Audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611
ow Income Audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611
ow Income Audit & Wx	Celing Insulation R00- 04 to R30	103	120	68,671	29.7	\$25,764	\$20,611
ow Income Audit & Wx	Celing Insulation R05- 08 to R30	52	120	25,927	9.6	\$13,482	\$10,786
ow Income Audit & Wx	Celing Insulation R05- 08 to R30	52	120	25,927	9.6	\$13,482	\$10,786
ow Income Audit & Wx	Celing Insulation R05- 08 to R30	52	120	25,927	9.6	\$13,482	\$10,786

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Low Income Audit & Wx		52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx		52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx	Celing Insulation R09- 14 to R30	52	120	13,507	5.0	\$11,666	\$9,333
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	Celing Insulation R15- 22 to R30	77	120	6,186	3.0	\$11,763	\$9,411
Low Income Audit & Wx	CFL 13W	2,769	12	24,924	5.5	\$5,539	\$3,116
Low Income Audit & Wx	Daylight Sensor Controls (\$0.09 per sq ft)		-	-	<u></u>	\$0	\$0
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011
Low Income Audit & Wx	Duct Sealing	428	108	208,489	57.7	\$105,014	\$84,011
Low Income Audit & Wx	exterior lighting (70HPS down to 26W LED)	•	22	_	-	\$0	\$0
Low Income Audit & Wx	Faucet Aerator, 1.5GPM, in unit	1,500	10	21,748	2.2	\$3,750	\$3,000
Low Income Audit & Wx	LED 9W	2,768	40	29,062	5.5	\$6,920	\$6,920
Low Income Audit & Wx	LED Exit Sign	<u>.</u> !	15	-	-	\$0	\$0

Low Income Audit & Wx	Showerhead, 1.75 GPM, in unit	750	10	69,737	7.1	\$3,749	\$2,999
Low Income Audit & Wx	Occupancy Sensors under 500 W	*	*		*	\$0	\$0
Low Income Audit & Wx	t12 4' 2 Lamp retrofit to t8 4' 2 lamp with ballast	-	15	_	·	\$0	\$0
_ow Income Audit & Wx	t12 4' 4 Lamp retrofit to t8 4' 3 lamp with ballast		15	_	<del>-</del>	\$0	\$0
New Homes	AC 15 SEER, ROB	-	15	-	***************************************	\$0	\$0
New Homes	AC 16 SEER, ROB	-	15	-	······································	\$0	\$0
New Homes	AC 17 SEER, ROB		15	<del>-</del> :		\$0	\$0
New Homes	AC 18 SEER, ROB	······································	15		- -	\$0	\$0
New Homes	Ductless Heat Pump (18 SEER/9 HSPF)	-	15	: ***	-	\$0	\$0
New Homes	ENERGY STAR v3 - prescriptive path gas heat/central AC	: : : : : : : :	22		_	\$0	\$0
lew Homes	Energy Star Windows		20	<b>-</b>	•	\$0	\$0
lew Homes	HERS Target 55 - gas heat/central AC	-	22	-	-	\$0	\$0
lew Homes	HERS Target 70 - gas heat/central AC	-	22 :	-	-	\$0	\$0
lew Homes	HP 15 SEER, ROB	<u> </u>	15	· · · · · · · · · · · · · · · · · · ·	_	\$0	\$0
lew Homes	HP 16 SEER, ROB	_	15	-		\$0	\$0

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New Homes	HP 17 SEER, ROB	· · ·	15	-		\$0	\$0
New Homes	HP 18 SEER, ROB	<del>-</del>	15	<del>_</del>		\$0	\$0
New Homes	Lighting - 100% efficient lighitng	· · · · · · · · · · · · · · · · · · ·	6	<u>-</u>	-	\$0	\$0
New Homes	Radiant Barrier - for non E*Homes	-	22	•	•	\$0	\$0
New Homes	Whole Home Design - HERS 55 (with ASHP)	+ ····· - · · · · · · · · · · · · · · ·	22	: :	-	\$0	\$0
Res Heating & Cooling	AC 15 SEER, ROB	215	15	113,361	28.7	\$31,302	\$44,700
Res Heating & Cooling	AC 16 SEER, ROB	302	15	189,464	56.1	\$52,241	\$105,277
Res Heating & Cooling	AC 17 SEER, ROB	17	15	15,789	4.4	\$3,631	\$8,485
Res Heating & Cooling	AC 18 SEER, ROB	9	15	8,545	2.3	\$2,069	\$5,472
Res Heating & Cooling	CoolSaver modeled tune-up, MF	86	5	29,301	14.1	\$4,303	\$3,915
Res Heating & Cooling	CoolSaver modeled tune-up, Res bldg	1,257	5	783,156	309.2	\$109,994	\$100,094
Res Heating & Cooling	Coolsaver modeled tune-up, school	172	5	78,477	56.4	\$15,042	\$13,688
Res Heating & Cooling	CoolSaver modeled tune-up, small comm bldg	344	5	321,116	141.0	\$30,083	\$27,376
tes Heating & Cooling	DHP (18 SEER, 9 HSPF) in 800 sf Addition	5	15	2,653	0.5	\$773 ;	\$1,650
les Heating & Cooling	EC Motor Retrofit Kit w/ Coolsaver tune-up	· · · · · · · · · · · · · · · · · · ·	15	· · · · · · · · · · · · · · · · · · ·	·	\$0	\$0

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Res Heating & Cooling	HP 15 SEER, ROB	9	15	4,975	1.3	\$1,580	\$2,051
Res Heating & Cooling	HP 16 SEER, ROB	9	15	7,617	1.4	\$1,736	\$3,464
Res Heating & Cooling	HP 17 SEER, ROB	3	15	3,239	0.6	\$819	\$1,950
Res Heating & Cooling	HP 18 SEER, ROB	3	15	3,818	0.9	\$920	\$2,515
School Kits & Education	Advanced Power Strip	2	10	96	0.0	\$26	\$13
School Kits & Education	CFL 13W	19,486	6	175,377	39.0	\$19,486	\$10,961
School Kits & Education	Faucet Aerator	12,989	10	188,340	19.5	\$12,989	\$1,948
School Kits & Education	LED 9W	6,494	20	68,189	13.0	\$16,235	\$8,118
School Kits & Education	LED Night Light	12,987	10	25,974	2.6	\$12,987	\$6,493
	Low Flow Showerhead	6,493	10	603,837	61.7	\$19,479	\$2,922
Small C&I	Aerators	1,666	10	295,725	85.8	\$9,996	\$7,997
	Anti Sweat Heater Controls	17	12	22,670	0.4	\$3,627	\$6,650
	Auto-closers for Walk- ins	91	8	46,283	6.5	\$5,507	\$4,405
	Connectionless Steamer	10	12	196,186	33.5	\$7,728	\$6,182
Small C&I	Door Gaskets	209	4	36,137	1.9	\$6,143	\$12,079

Small C&I	Dual-Sided LED Exit Signs	1,374	15	84,476	22.0	\$13,478	\$32,966
Small C&I	Duct Sealing	163	15	80,718	73.5	\$13,722	\$32,613
Small C&I	ECM Motor (Refrigeration)	232	15	100,779	11.6	\$9,334	\$27,801
Small C&I	Energy Star Ice Machine	31	10	41,630	4.8	\$3,088	\$3,397
Small C&I	Evaporator Fan Controller	60	10	15,673	1.8	\$2,402	\$3,891
Small C&I	Exterior Lighting	17	8	52,593		\$6,574	\$10,847
Small C&I	Guest Room Occupancy Sensors	228	15	34,680	-	\$12,606	\$21,629
Small C&I	HE HVAC Equipment	50	15	680,300	197.1	\$115,651	\$108,848
Small C&I	LED 18W linear replacing T12	86	15	3,941	1.3	\$428	\$1,508
Small C&I	LED Downlight	790	15	121,197	23.7	\$14,607	\$23,687
Small C&I	LED Screw-in	10,727	22	970,250	230.2	\$154,257	\$151,971
Small C&I	LED Screw-In	10,727	22	970,250	230.2	\$154,257	\$151,971
Small C&I	Lighting Controls	63	8	155,210	37.0	\$19,401	\$44,555
Small C&I	Low flow showerhead	12	10	748	0.2	\$120	\$96
Small C&I	Packaged Heat Pump/AC	231	10	192,173	112.5	\$32,669	\$110,803
Small C&I	PC Power Management	120	4	20,150		\$718	\$718
Small C&I	PRSVs	105	10	213,458	24.6	\$4,217	\$3,374

Small C&I	PRSVs	105	10	213,458	24.6	\$4,217	\$3,374
Small C&I	T12 Upgrade to HP T8	5,980	15	149,490	38.9	\$29,898	\$45,445
Small C&I	T12 Upgrade to HP T8s and delamp	5,977	15	789,000	203.2	\$59,773	\$90,855
Small C&I	T8 Upgrade to HP T8	5,972	15	29,861	9.0	\$14,931	\$45,389
Small C&I	Vending Misers	-	5		-	\$0	\$0