



Entergy New Orleans, Inc.  
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**Gary E. Huntley**  
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*Via Hand Delivery*

April 1, 2013

Ms. Peggy Lewis, Director  
Clerk of Council  
Room 1E09, City Hall  
1300 Perdido Street  
New Orleans, LA 70112

**RE: Resolution R-13-17 Regarding Proposed Rulemaking to Establish Integrated Resource Planning Components and Reporting Requirements for Entergy New Orleans, Inc. (Docket No. UD-08-02)**

Dear Ms. Lewis:

Enclosed are an original and three copies of Entergy New Orleans, Inc.'s ("ENO") Supplemental Implementation and Cost Recovery Filing pursuant to Resolution R-13-17 in Docket No. UD-08-02.

Please file the original and two copies into the record in the above mentioned matter, and return a date stamped copy to ENO. Thanking you for your attention and courtesies in this matter, I am

Sincerely,

A handwritten signature in black ink that reads "Gary E. Huntley".

Gary E. Huntley

cc: w/attachments  
Official Service List (UD-08-02)

**BEFORE THE  
COUNCIL OF THE CITY OF NEW ORLEANS**

***IN RE: RESOLUTION REGARDING***        )  
**PROPOSED RULEMAKING TO**        )  
**ESTABLISH INTEGRATED**            )  
**RESOURCE PLANNING**                )  
**COMPONENTS AND REPORTING**      )  
**REQUIREMENTS FOR**                )  
**ENTERGY NEW ORLEANS, INC.**        )

**DOCKET NO. UD-08-02**

**JOINT APPLICATION OF ENTERGY NEW ORLEANS, INC.  
AND ENTERGY LOUISIANA, LLC FOR APPROVAL OF SUPPLEMENTAL  
IMPLEMENTATION AND COST RECOVERY FILING FOR ENERGY SMART PLAN**

**NOW BEFORE THIS COUNCIL**, through its undersigned counsel, comes Entergy New Orleans, Inc. (“Entergy New Orleans” or “ENO”) and Entergy Louisiana, LLC (“Entergy Louisiana” or “ELL”) for this, their Joint Application (the “Application”) for approval, as required by Council Resolution R-13-17, of the Supplemental Implementation and Cost Recovery filing for the Energy Smart New Orleans Plan (“Energy Smart Plan”), and, in support of this Application, the Company respectfully shows as follows:

**I.**

Entergy New Orleans is an electric and gas utility organized and operating under the laws of the State of Louisiana, with its general office and principal place of business at 1600 Perdido Street, Building 505, New Orleans, Louisiana 70112. The Company is engaged in the manufacture, production, transmission, distribution, and sale of electricity to residential, commercial, industrial, and governmental consumers throughout the City of New Orleans, with the exception of the Fifteenth Ward of the City of New Orleans, Algiers. Entergy New Orleans furnishes electric service to approximately 141,000 customers in Orleans Parish. Entergy New

Orleans also is engaged in the provision of natural gas service throughout the City of New Orleans, serving approximately 86,000 retail gas customers.

## **II.**

ELL is a limited liability company duly authorized and qualified to do and doing business in the State of Louisiana, created and organized for the purposes, among others, of generating, transmitting, distributing, and selling electricity for power, lighting, heating, and other such uses; and ELL is engaged in the business thereof in forty-six (46) of the sixty-four (64) parishes of the State of Louisiana. As of December 31, 2012, ELL provides retail electric service to approximately 584,000 residential customers, 76,500 commercial customers, 6,900 industrial customers, 4,200 governmental and municipal customers, and 1,600 lighting customers; a total of approximately 673,200 customers. All of ELL's retail sales of electricity and service are subject to the jurisdiction of the Louisiana Public Service Commission ("LPSC" or the "Louisiana Commission") except in the Fifteenth Ward of the City of New Orleans (Algiers), where retail sales and service are subject to the jurisdiction of the Council.

## **III.**

In Algiers, as of December 31, 2012, ELL provides retail electric service to approximately 20,501 residential customers, 1,433 commercial customers, 86 governmental customers, 93 industrial customers, and 22 lighting customers, a total of approximately 22,135 customers.

## **IV.**

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 and allocations, and goals and targets recommended by the ENO.

#### **V.**

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 bi-monthly status reports as outlined and required by Council Resolution R-11-52. Representatives of ENO and CLEAResult made a presentation on the first year results and progress of the Energy Smart programs to the Council Utility Committee ("CUC") at a meeting held on April 12, 2012. Additionally, on June 1, 2012, ENO submitted a written report summarizing the first year results of the programs.

#### **VI.**

ELL filed with the Council its plan for offering Energy Smart programs to ELL's Algiers electric customers on July 27, 2012. 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; approximately \$939,000 was allocated for Algiers Energy Smart Plan 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.

#### **VII.**

Council Resolution R-12-393 stated that in order to assure the continuity of the Energy Smart Plan, it would be beneficial for both ENO and ELL to file with the Council

implementation and cost recovery plans for future energy efficiency and demand side management programs to based on optimal levels contained in their Integrated Resource Plan (“IRP”) filings or other such programs as determined by the Council.

### **VIII.**

Council Resolution R-13-17 stated that the Council was desirous of considering ENO and ELL’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 intevenors in the docket and the Council’s Advisors in a timely fashion, and directed ENO and ELL to make their Supplemental Implementation and Cost Recovery filings on April 1, 2013.

### **IX.**

In accordance with Council Resolution R-13-17, ENO and ELL request that the Council approve the design, selection, and implementation of the DSM programs listed in the following tables, find that such programs to be cost effective, approve the level of funding allocated to each program, and concur that the expected energy savings (expressed in kilowatt-hours, or “kWh”) satisfy the applicable Council requirements.

X.

3-Year Proposal for Energy Smart – ENO:

Program Name	3-year Budget	3-Year Savings (gross kWh)
Home Performance with Energy Star	1,907,722	3,561,286
Consumer Products	1,471,700	5,434,460
Multi Family Weatherization	1,134,577	1,661,840
Low Income Audit & Weatherization	1,180,099	1,077,255
School Kits & Education	590,840	3,934,980
Res Heating & Cooling	1,118,376	3,124,648
<b>Total Residential</b>	<b>\$7,403,314</b>	<b>18,794,469</b>
Small Commercial Solutions	2,231,417	9,638,184
Large Commercial Solutions	5,124,284	27,853,606
<b>Total Non-Residential</b>	<b>\$7,355,701</b>	<b>37,491,790</b>
<b>Sub -Total Portfolio</b>	<b>\$14,759,015</b>	<b>56,286,259</b>
EM&V	\$240,000	
Behavioral Program	\$1,125,000	
<b>Total Program Spending</b>	<b>\$16,124,015</b>	

XI.

3-Year Proposal for Energy Smart – ELL (Algiers):

Energy Smart Algiers - Portfolio Savings Table		
Program Name	3-year Budget	3-Year Savings (gross kWh)
Home Performance with Energy Star	140,890	393,007
Consumer Products	165,092	600,224
Multi Family Weatherization	126,767	183,262
Low Income Audit & Weatherization	131,124	118,805
School Kits & Education	65,803	433,967
Res Heating & Cooling	125,346	344,911
<b>Total Residential</b>	<b>\$755,022</b>	<b>2,074,176</b>
Small Commercial Solutions	224,219	1,064,183
Large Commercial Solutions	544,543	3,068,424
<b>Total Non-Residential</b>	<b>768,762</b>	<b>4,132,607</b>
<b>Sub -Total Portfolio</b>	<b>1,523,784</b>	<b>6,206,783</b>
EM&V	24,750	
Behavioral Program	116,150	
<b>Total Program Spending</b>	<b>\$1,664,684</b>	


**XII.**

In support of the above requests, ENO and ELL submit contemporaneously with this Application (1) the Report on Supplemental Implementation and Cost Recovery filing; (2) the Entergy New Orleans and Entergy Louisiana DSM Plan of CLEAResult; and, (3) Appendices and workpapers thereto.

**WHEREFORE**, Entergy New Orleans, Inc. and Entergy Louisiana, LLC pray as follows that, after due and lawful proceedings are had, this Council issue an order:

1. Approving ENO and ELL's design, selection, and implementation of the DSM programs listed in the table set forth above, finding that such programs are cost effective, approve the level of funding allocated to each program, and concur that the expected total energy savings as the kWh Goals/Performance Incentives satisfy the applicable Council requirements;
2. Approving an appropriate form of contemporaneous cost recovery for the expenses related to the next phase of the Energy Smart Plan, including the recovery of lost contributions to fixed costs and incentive mechanisms as currently provided for in ENO's Formula Rate Plan;
3. Approving the proposed Behavioral Program; and,
4. Granting all general and equitable relief that the law and the nature of the case may permit.

Respectfully Submitted:

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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 1<sup>st</sup> day of April 2013, served the required number of copies of the foregoing report upon all other known parties of this proceeding, by:

electronic mail,  facsimile,  overnight mail,  hand delivery, and/or  
 United States Postal Service, postage prepaid.

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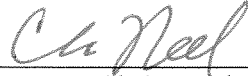
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New Orleans, Louisiana, this 1st day of April, 2013.



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Chris Neel

**Report on  
Supplemental Implementation and  
Cost Recovery Filing of  
Entergy New Orleans, Inc. and  
Entergy Louisiana, LLC  
Pursuant to  
Council Resolution R-13-17**

## I. Introduction

The purpose of this Report on 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 three year period from April 2014 to March 2017, and to describe the cost recovery mechanisms that the Companies seek in order to provide these programs. Council of the City of New Orleans (“Council”) Resolution R-13-17 requires the Companies to submit a Supplemental Implementation and Cost Recover filing in order to seek approval for the continuation of the existing Energy Smart programs, and to seek 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 next three years of Energy Smart:

### 3-Year Proposal for Energy Smart – ENO:

Program Name	3-year Budget	3-Year Savings (gross kWh)	3-year Participation
Home Performance with Energy Star	1,907,722	3,561,286	2,400
Consumer Products	1,471,700	5,434,460	10,000
Multi Family Weatherization	1,134,577	1,661,840	4,488
Low Income Audit & Weatherization	1,180,099	1,077,255	300
School Kits & Education	590,840	3,934,980	1,550
Res Heating & Cooling	1,118,376	3,124,648	3,945
<b>Total Residential</b>	<b>\$7,403,314</b>	<b>18,794,469</b>	<b>32,683</b>
Small Commercial Solutions	2,231,417	9,638,184	294
Large Commercial Solutions	5,124,284	27,853,606	64
<b>Total Non-Residential</b>	<b>\$7,355,701</b>	<b>37,491,790</b>	<b>358</b>
<b>Sub -Total Portfolio</b>	<b>\$14,759,015</b>	<b>56,286,259</b>	<b>33,041</b>
<b>EM&amp;V</b>	<b>\$240,000</b>		
<b>Behavioral Program</b>	<b>\$1,125,000</b>		
<b>Total Program Spending</b>	<b>\$16,124,015</b>		

### 3-Year Proposal for Energy Smart – ELL (Algiers):

Energy Smart Algiers - Portfolio Savings Table		
Program Name	3-year Budget	3-Year Savings (gross kWh)
Home Performance with Energy Star	140,890	393,007
Consumer Products	165,092	600,224
Multi Family Weatherization	126,767	183,262
Low Income Audit & Weatherization	131,124	118,805
School Kits & Education	65,803	433,967
Res Heating & Cooling	125,346	344,911
<b>Total Residential</b>	<b>\$755,022</b>	<b>2,074,176</b>
Small Commercial Solutions	224,219	1,064,183
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<b>Total Non-Residential</b>	<b>768,762</b>	<b>4,132,607</b>
<b>Sub -Total Portfolio</b>	<b>1,523,784</b>	<b>6,206,783</b>
EM&V	24,750	
Behavioral Program	116,150	
<b>Total Program Spending</b>	<b>\$1,664,684</b>	

## 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 equally for demand-side management (“DSM”) and supply resources; (c) set energy savings goals consistent with cost-effective potential; (d) establish appropriate evaluation, measurement and verification mechanisms; (e) establish effective DSM measures by 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

<sup>1</sup> Council Resolution R-07-600 approved December 6, 2007.

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 TPA CLEAResult, 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 funding levels and allocations, and goals and targets recommended by the Company.<sup>2</sup>

In April 2011, ENO and CLEAResult implemented the Energy Smart Plan programs and began offering programs to ENO electric customers. ENO filed bi-monthly status reports as outlined and required by Council Resolution R-11-52. Representatives of ENO and CLEAResult made a presentation on the first year results and progress of the Energy Smart programs to the Council Utility Committee ("CUC") at a meeting held on April 12, 2012. Additionally, on June 1, 2012, ENO submitted a written report 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's 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 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 2 years of programs**

To date, the Energy Smart Plan programs continue to show success in both participation rates and in energy savings. The initial phase of the Energy Smart programs will end on March 31, 2014. Twenty-three months into program implementation, Energy Smart has attained cumulative energy savings of 33,736,610 kilowatt-hours ("kWh").

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<sup>2</sup> Council Resolution R-09-483 approved September 17, 2009.

**Energy Smart Plan  
Savings**

(23 Months - April 2012 thru March 2013)

Program Name	Market Focus	Yr 1 Apr 2011-March 2012			Yr 2 Apr 2012-March 2013			Cumulative results 23 Months Ending February 2013		
		kWh	# of Participants	# of Measures	kWh	# of Participants	# of Measures	kWh	# of Participants	# of Measures
Home Performance with Energy Star	Residential	2,912,495	2,018	31,869	2,381,384	1,322	19,522	5,293,879	3,340	51,391
Energy Star Air Conditioning	Residential	134,655	218	262	193,127	391	483	327,782	609	745
A/C Tune-up	Residential	429,291	719	909	381,020	828	908	810,311	1,547	1,817
Energy Smart New Homes	Residential	207,067	101	101	552,350	201	530	759,417	302	631
CFL Direct Install	Residential	3,726,006	4,931	90,254	2,177,823	3,356	51,183	5,903,829	8,287	141,437
Income Qualified	Residential	378,771	450	6,024	684,126	658	11,753	1,062,897	1,108	17,777
Solar Water Heater Pilot	Residential	5,438	1	2	0	0	0	5,438	1	2
Small Commercial Solutions	Commercial	2,239,113	78	81	2,252,959	86	86	4,492,072	164	167
Large Commercial Solutions	Commercial	5,560,440	24	42	9,520,545	18	18	15,080,985	42	60
<b>Totals</b>		<b>15,593,276</b>	<b>8,540</b>	<b>129,544</b>	<b>18,143,334</b>	<b>6,860</b>	<b>84,483</b>	<b>33,736,610</b>	<b>15,400</b>	<b>214,027</b>

**D. Integrated Resource Plan**

In order to adequately address the effects of energy efficiency measures in the resource planning process, the Council directed the Companies to consider these measures in their Integrated Resource Plan (“IRP”) filing, to review the benefits of demand side management (“DSM”) within the IRP framework, and to forecast the projected levels and funding for DSM in comparison with supply side resources. This resulted in a preferred portfolio of cost effective energy efficiency programs, including a general level of spending and associated savings.

On October 30, 2012, the Companies filed the Entergy New Orleans IRP and Entergy System IRP for a 20 year time horizon ranging from 2012-2031. In settling upon an optimal portfolio, the IRP considered a wide range of scenarios and energy efficiency measures. The preferred portfolio identified in the IRP is shown in the table below.

Sector	Type	Program Name	Energy Smart?	Level of Spending on Incentives
C&I	EE	Large Commercial Energy solutions	Yes	Low
C&I	EE	Small Commercial Energy Solutions	Yes	Low
Res.	EE	Energy Smart New Homes	Yes	Low
Res.	EE	ENERGY STAR Air Conditioning	Yes	Low
Res.	EE	Residential Lighting and Appliances	Yes	Low
C&I	EE	Commercial Building Energy Management	No	Low
C&I	EE	Commercial New Construction	No	Low
C&I	EE	Industrial	No	Low
C&I	DR	Interruptible Rate	No	High
Res.	DR	Direct Load Control	No	High

The preferred portfolio has the potential to reduce peak load by 203 megawatts (“MW”) at the end of 2031 at a cost of \$5 to \$6 million per year. Based on the IRP’s analysis, the range of \$5-6 million annually for energy efficiency programs resulted in an appropriate level of energy savings in relation to the relative costs of implementation; under current circumstances, the IRP analysis demonstrates that higher levels of energy efficiency expenses do not result in corresponding energy savings.

### III. **Summary of Implementation Plan**

#### **A. Summary of Programs**

Because the IRP represents a high level point of view regarding the City’s projected electricity needs over a long term time horizon, the Companies have undertaken a more detailed analysis when considering specific supply-side or DSM investments.

Council Resolution No. R-13-17, approved on January 24, 2013, established the procedural schedule for the Council’s IRP docket (UD-08-02). The resolution also required that the Companies file a more detailed Implementation and Cost Recovery filing outlining their plans for investment over the new term. Entergy New Orleans worked with CLEAResult to develop a proposed, detailed DSM plan for the next three years of the Energy Smart program.

The Council has provided numerous opportunities for public input into the development of the IRP and Implementation and Cost recovery plans. Public input to date has 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 15 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 this filing.

A summary description of each proposed program for the next three years of the Energy Smart Plan is described below. In addition, the CLEAResult Report provides a more detailed review of each program plan, costs, EMV methods and expected outreach plan.

1. **Home Performance with ENERGY STAR:** Formerly, Residential Solutions, this officially sponsored HPwES program aligns with the ongoing DOE’s 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 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 will deliver energy education and energy conservation kits to fifth to seventh grade classrooms 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 an M&V approach to generate more precise energy savings as well as incentives for AC 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 TRM, allowing for simple approaches to 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** – targeting 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**– targeting 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 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. 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 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 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, contractor, 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. While 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 offer 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 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. 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. Proposed Behavioral Program**

In addition to the programs designed by CLEAResult, the Companies recommend the inclusion of a behavior-based energy efficiency 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. It is the Companies' intention to issue an RFP for these services. The Companies expect the cost of the pilot program to be between \$250,000 and \$500,000 annually over the 3 year period. The pilot is expected to be cost effective and 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.

Should there be support for such a behavioral pilot, an RFP for a small pilot with a limited scope can be issued in May 2013 with selection of an administrator by August 2013. This will allow the administrator approximately six months for program design and start up activities.

### **IV. Comparison of Energy Smart Plan to IRP**

The chart below compares the results of the IRP preferred portfolio to the portfolio of programs developed through the detailed implementation plan developed by

CLEAResult. As can be seen from the chart, most of the programs developed through the IRP process, are included in the implementation plan. Exceptions include the Interruptible rate and Direct Load Control programs outlined in the IRP. ENO and ELL have an Interruptible Rate for commercial customers; however, the Companies did not include these in the portfolio of energy efficiency programs. A residential Direct Load Control programs is not directly included in the portfolio at this time, pending the review of the programs related to the recently completed DOE AMI pilot. There are also several programs included in the DSM Implementation plan which were not included in the preferred portfolio of programs developed through the IRP process. These include a Low Income Weatherization program and a program targeting savings through K-12 education and energy efficiency kits distributed to students in New Orleans schools. These programs were selected because of their market relevance and concurrent likelihood for cost-effective, successful, long-term energy savings within the territory.

### **2012 IRP Programs and Comparable 2014-2017 Program**

2012 IRP Program Recommendation	DSM Plan Program Equivalent
Industrial Program Large Commercial Energy Solutions Commercial Building Energy Management Commercial New Construction	Large Commercial & Industrial
Small Commercial Energy Solutions Commercial New Construction	Small Commercial & Industrial
ENERGY STAR Air Conditioning	Residential Heating & Cooling (includes an AC Tune-up Component)
Residential Lighting and Appliances	Consumer Products
Residential Energy Solutions Energy Smart New Homes	Home Performance with Energy Star
NA	Low Income Audit & Weatherization
NA	School Kits & Education
NA	Multi-Family Weatherization

#### **V. 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 past 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.

#### **Cost Effectiveness Testing**

<b>Program</b>	<b>TRC</b>	<b>PACT</b>	<b>Participant Test</b>
Home Performance with Energy Star	1.18	1.63	2.71
Consumer Product Program	1.58	1.74	3.95
MultiFamily Weatherization	1.31	1.27	3.93
Low Income Audit and Weatherization	1.15	1.09	3.37
School Energy Education	1.45	1.00	13.48
Residential Heating and Cooling	1.12	1.45	3.31
Small Commercial Program	2.19	2.65	6.20
Large Commercial Program	1.30	1.83	3.42

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 Rate Payers 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. The Participant Test compares the benefits and costs for program participants and serves as a guide for program design. 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.

#### **VI. Cost Recovery, Lost Revenue and Incentives**

The Companies request approval to recover contemporaneously all prudently incurred direct costs and lost revenues associated with the Supplemental Programs. Further, the Companies request approval to recover incentives based on achievement of the Supplemental Program energy savings goals. The Companies propose to work with the Council and its Advisors to determine the most appropriate mechanism(s) for recovering these costs and incentives within the proper rate proceedings, and the Companies believe that a contemporaneous cost recovery mechanism for program expenses, as well as energy savings incentives and the recovery of any lost contribution to fixed costs, should be in place when the next phase of Energy Smart is implemented.

## **A. Proposed Cost Recovery**

One alternative for a contemporaneous cost recovery mechanism for Energy Efficiency programs in New Orleans and Algiers would be through a volumetric based Energy Efficiency Rider (“EER”) . The rider would be trued up annually based on actual program costs to ensure that there is no over or under collection of customer funding.

## **B. Lost Revenue Recovery and Calculation**

ENO and ELL propose continuing the current method of lost revenue recovery currently in use. The lost revenue recovery schedule utilizes the total energy saving projected for the upcoming 12 month period multiplied by the adjusted gross margin. This amount is then trued up for actual performance at the end of each year. The current lost revenue calculation are set forth in Attachment G to the 2012 ENO FRP. The Companies believe this is a simple, fair and equitable means to recovery lost revenue in a timely manner until such time as rates are re-adjusted.

## **C. Incentive Mechanism**

ENO and ELL propose continuing the current method for calculating a return on equity (“ROE”) incentive. The incentive mechanism is calculated on a sliding scale based on the percentage of energy savings achieved annually; if savings are between 75 and 125% of the goal in a given year, a sliding ROE percentage is multiplied by the equity portion of rate base and a tax factor. ENO’s current incentive calculation is set forth in Attachment to the 2012 ENO FRP. The Companies believe this is a simple, fair and equitable means to provide an incentive to invest in energy efficiency measures in relation to other supply side options.

## **VII. Customer Impact**

For a residential ENO customer with 1,000 kWh of monthly energy use, the proposed level of Energy Smart program expenses of \$5.5 million would increase the customer’s bill by approximately 1.9%; an illustrative calculation of this “typical bill” is attached to this report. Example bills are also provided to demonstrate the effects of Energy Smart program expenses on various demand and energy levels for ENO commercial customers.

## **VIII. Conclusion**

On April 19, 2013, the Council is expected to hold a public hearing to review the energy efficiency programs as presented by ENO, ELL and CLEAResult. Following that hearing, ENO, ELL and CLEAResult will take into consideration all comments received and if warranted, the Companies will make revisions to the programs presented. The

Companies will then file for Council approval their final recommendations for the next phase of energy efficiency programs for the City of New Orleans.



# Entergy New Orleans DSM Plan

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3/20/2013



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## Executive Summary

Entergy New Orleans (“ENO”) Entergy Louisiana-Algiers (ELL) , have developed a three-year plan for the implementation of electric Demand Side Management (DSM) programs for the program years 2014-2017<sup>1</sup> based on the output of the IRP process and public input received to date.. Through this process, the CLEAResult worked with the intent of delivering a 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 describes in detail the planned ENO and ELL-Algiers portfolio of Residential and Non-Residential energy efficiency programs.

The 2014-2017 portfolio includes six (6) 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. Cumulative annual portfolio savings are 56,286,258 gross kWh with an overall three year cost of \$14,988,220.

### *Residential Programs*

- Home Performance with ENERGY STAR: Formerly, Residential Solutions, this officially sponsored HPwES program aligns with the ongoing DOE’s requirements changes and offers 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 lighting and room 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.
- 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. In this more comprehensive offering, the property manager is targeted through an aggressive incentive design that encourages investment in all program measures. The measures included in this program target shallow savings as well as the deeper savings achieved through insulation measures.
- 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. 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 will partner with local p organizations to deliver energy education and energy conservation kits to fifth through seventh grade class rooms in Orleans Parish schools. 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: 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 an M&V approach to generate measured savings. This program also combines the Tune Up programs with incentives to purchase high efficiency air conditioner.

### *Commercial & Industrial Programs*

- Large Commercial & Industrial: 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

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<sup>1</sup> The Energy Smart Program year begins on April 1<sup>st</sup> and ends on March 31<sup>st</sup> of the subsequent year; thus program year 1 will run from 2014-2015, year 2 will run from 2015-2016 and finally year 3 will run from 2016-2017.

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 of HVAC efficiency measures. In addition, this more comprehensive program streamlines contractor participation through the use of field tools, and follows a more targeted market segmentation approach.

### Energy Smart New Orleans

DSM Portfolio Budget Table (\$ Million)												
Sector Totals	Year 1				Year 2				Year 3			
	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total
Residential	\$ 1.04	\$ 1.38	\$ 0.03	\$2.45	\$ 1.00	\$ 1.47	\$ 0.03	\$2.50	\$ 1.02	\$ 1.49	\$ 0.03	\$2.54
C&I	\$ 1.25	\$ 1.34	\$ 0.05	\$2.64	\$ 1.18	\$ 1.23	\$ 0.05	\$2.46	\$ 1.14	\$ 1.21	\$ 0.05	\$2.40
<b>Total</b>	<b>\$ 2.29</b>	<b>\$ 2.72</b>	<b>\$ 0.08</b>	<b>\$5.09</b>	<b>\$ 2.18</b>	<b>\$ 2.70</b>	<b>\$ 0.08</b>	<b>\$4.96</b>	<b>\$ 2.17</b>	<b>\$ 2.70</b>	<b>\$ 0.08</b>	<b>\$4.95</b>

DSM Portfolio Savings Table			
Totals by Sector	3-year Participation	3-Year Gross Annual Energy Savings (MWh)	3-Year Peak Demand Savings(MW)
Residential	32,683	18,794	5.20
Commercial & Industrial	358	37,491	6.93
<b>Total Portfolio</b>	<b>33,041</b>	<b>56,286</b>	<b>12.13</b>

### Energy Smart Algiers

DSM Portfolio Budget Table (\$ Million)												
Sector Totals	Yr. 1				Yr. 2				Yr. 3			
	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total
Residential	\$0.14	\$0.18	\$0.00	\$0.33	\$0.13	\$0.19	\$0.00	\$0.33	\$0.13	\$0.19	\$0.00	\$0.33
Commercial & Industrial	\$0.10	\$0.11	\$0.00	\$0.22	\$0.10	\$0.11	\$0.00	\$0.22	\$0.10	\$0.11	\$0.00	\$0.22
<b>Total</b>	<b>\$0.24</b>	<b>\$0.29</b>	<b>\$0.01</b>	<b>\$0.55</b>	<b>\$0.23</b>	<b>\$0.30</b>	<b>\$0.01</b>	<b>\$0.55</b>	<b>\$0.23</b>	<b>\$0.30</b>	<b>\$0.01</b>	<b>\$0.55</b>

DSM Portfolio Savings Table			
Totals by Sector	3-year Participation	3-Year Gross Annual Energy Savings (MWh)	3-Year Peak Demand Savings(MW)
Residential	6,962	2,481	0.687
Commercial & Industrial	32	3,312	0.545
<b>Total Portfolio</b>	<b>6,994</b>	<b>5,793</b>	<b>1.232</b>

# 2014 - 2017 DSM Plan Portfolio Summary

## Background

On July 9<sup>th</sup>, 2009, Entergy New Orleans (“ENO”) filed an application with the New Orleans City Council (“The Council”) requesting approval of Demand Side Management (“DSM”) programs to be included in the Energy Smart New Orleans Plan “Energy Smart Plan.” In July of 2009, the Council approved the initial portfolio of programs, and these have been successfully implemented in the ENO and ELL-Algiers service territories. On October 30, 2012, pursuant to Council Resolution R-10-142, ENO filed its 2012 Integrated Resource Plan (“IRP”) to cover resource planning over the 2012-2031 planning horizon. Among other analyses, the IRP included an assessment of the market achievable-potential for DSM programs across the planning horizon. The following DSM Plan is derived from the content of the 2012 IRP and represents the preferred DSM portfolio for the program years 2014 – 2017. The programs developed here are expected to be implemented in both the ENO and ELL-Algiers territories. For purposes of this report, the Energy Smart programs to be implemented in New Orleans are broken out in more detail than the descriptions for Algiers. The programs themselves are identical as will be the incentive and non-incentive splits. To most economically utilize available resources, Algiers data is not presented in the same detail as ENO program detail, however, once public input is received, and any necessary program changes are made, detail for both programs will be submitted in an identical format.

## Council DSM Rules

The 2009 Entergy New Orleans DSM Plan summarized the Guiding Principles established by the Council as necessary for the implementation of any DSM program; to reiterate as part of the 2014-2017 Plan, these are:

- Energy Smart Programs should be developed for, available to, and benefit residential, commercial, industrial and governmental customer classes.
- All programs should be cost-effective as defined by the Total Resource Cost (TRC) and the Program Administrator Cost (PAC) tests as defined in the [California Standard Practices Manual: Economic Analysis of Demand Side Programs and Projects](#), October 2001 except for those programs listed in the 2009 Agreement in Principle that are not subject to the cost effectiveness tests.
- Inputs to program design and cost effectiveness measurement should reflect reliable New Orleans data to the maximum extent practicable, while giving express recognition to allowable budget, time and technology constraints.
- Each program should be of sufficient scale to provide a meaningful contribution to kW or kWh reductions over the period of years in which the program is applied.
- Programs should reflect “best practices” as appropriate for New Orleans with consideration of the City’s unique economic, social and demographic environment and, to the extent relevant, should be consistent with successful models implemented in other jurisdictions.
- With the exception of pilot programs, technologies should be commercially available and the necessary infrastructure should be present.
- Programs should be economically significant within the budgetary realities of the Energy Smart Plan.
  - Assist in Demand Side Management market development and related job creation.
  - The programs should create measurable benefits to ratepayers and to the city.
- The costs of program design, implementation, delivery, measurement of the benefits, and the costs of administration associated with the Energy Smart plan, including the costs of the Independent

Monitor and the Third Party Administrator, shall not exceed those funds so established to be collected in rates as authorized by the Council.

- Additional DSM and energy conservation funding may be obtained from other sources and will be evaluated on its merits for inclusion in the Energy Smart program.
- Program implementation should give priority to the use of local vendors wherever possible and shall be consistent with the criteria of Entergy's Supplier Diversity Program which promotes the utilization of diverse suppliers (i.e., minority, women, veterans, disable veterans, historically underutilized business ("HUB") Zone).
- All programs shall contain a measurement and verification component for prospective evaluation, modification and improvement within standard industry practice.

## IRP DSM Recommendations

The 2012 IRP outlines the reference case and preferred portfolio of DSM Programs for the entire planning horizon. These recommendations, along with the detailed recommendations provided in the Technical Supplement- Appendix B serve as the foundation for the recommended 2014-2017 Energy Smart portfolio of programs.

All programs included in the preferred portfolio are integrated into the 2014-2017 Energy Smart Portfolio with two exceptions: ENO and ELL have an Interruptible Rate for commercial customers, however, the Companies not include these in the portfolio of energy efficiency programs. A residential Direct Load Control programs is not directly included in the portfolio at this time, pending the review of the programs related to the recently completed DOE AMI pilot. There are also several programs included in the DSM Implementation plan which were not included in the preferred portfolio of programs developed through the IRP process. These include a Low Income Weatherization program and a program targeting savings through K-12 education and energy efficiency kits distributed to students in New Orleans schools. These programs were selected because of their market relevance and concurrent likelihood for cost-effective, successful, long-term energy savings within the territory.

Table 1: 2012 IRP Programs and Comparable 2014-2017 Program

2012 IRP Program Recommendation	DSM Plan Program Equivalent
Industrial Program Large Commercial Energy Solutions Commercial Building Energy Management Commercial New Construction	Large Commercial & Industrial
Small Commercial Energy Solutions Commercial New Construction	Small Commercial & Industrial
ENERGY STAR Air Conditioning	Residential Heating & Cooling (includes an AC Tune-up Component)
Residential Lighting and Appliances	Consumer Products
Residential Energy Solutions Energy Smart New Homes	Home Performance with Energy Star
NA	Low Income Audit & Weatherization
NA	School Kits & Education

NA	Multi-Family Weatherization
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For the 3-year planning cycle considered in this plan, the recommended portfolio incremental savings per year are outlined in the table below, along with the estimated incremental annual savings from the portfolio recommended in this DSM Plan. While the savings provided in this portfolio are less than those targeted in the 2012 IRP, our analysis of existing program performance and local market and economic conditions suggest this is a realistic and achievable portfolio, while also pushing the market with more sophisticated program services and incentive designs.

Table 2: Energy Smart New Orleans - Incremental Recommended Portfolio Savings

Category	Yr. 1	Yr. 2	Yr. 3
Proposed Gross Annual Energy Savings (MWh)*	18,984	18,742	18,558
Proposed Gross Annual Demand Savings (MW)	3.96	4.07	4.09

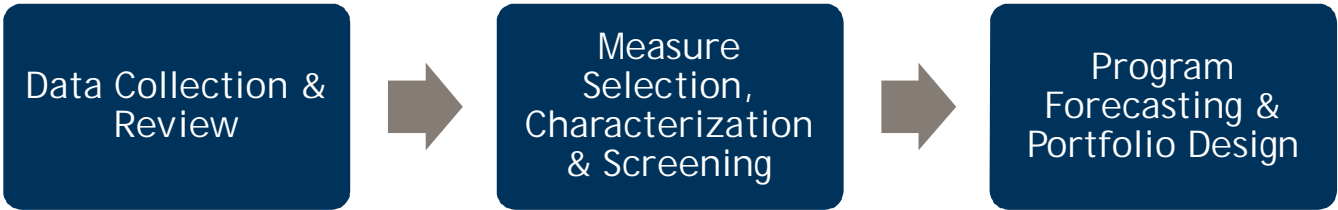
\*Gross annual MWh

Table 3: Energy Smart Algiers - Incremental Recommended Portfolio Savings

Category	Yr. 1	Yr. 2	Yr. 3
Proposed Gross Annual Energy Savings (MWh)*	1,884	1,952	1,957
Proposed Gross Annual Demand Savings (MW)	0.41	0.37	0.44

### 2014 - 2017 DSM Plan Development Methodology

CLEAResult undertook a comprehensive approach to develop this DSM Plan. This included three primary stages of analysis, which are outlined in the chart below and described in detail in the sections following.



#### Data Collection & Review

To identify programs and measures for inclusion in the 2014-2017 portfolio of programs, all available data on the service territory demographics, as well as industry best practices for DSM programs were considered. These were developed into a Market Profile (Appendix D) and Best Practices Review (Appendix E).

The Market Profile reviewed the data sources listed below to characterize the Residential and Commercial & Industrial market sectors and to better understand the current overarching economic trends within the Entergy New Orleans and Algiers territories. The assessment reviewed the prominent end-uses, consumption levels, and customer counts and used these to support the overall program savings potential:

Data Sources used in the Market Profile were:

- The 2012 IRP recommendations
- The 2010 – 2013 Energy Smart program history



- Customer sales data
- Public data mining including:
  - Federal Reserve Bank data
  - CBECS and RECS
  - Energy Information Administration (EIA)
  - The US Census Bureau

In the Best Practices Review, CLEAResult collected data on program portfolio performance and spending for a sample of 12 utilities. The analysis reviewed utilities of comparable size, as well as regional utilities operating in comparable markets. In addition, the assessment included utilities located in developed energy efficiency markets. The 2014 – 2017 DSM portfolio was compared against these utilities in terms of its economic efficiency (\$/kW, \$/kWh), equitability (\$/customer), and sophistication (program types offered).

Data sources in the Best Practices Review were:

- Investor-Owned Utility DSM program plans and annual reports
- The Energy Information Administration (EIA)
- E Source

### *Measure Selection, Characterization & Screening*

CLEAResult developed a preliminary measure list based on the three year Energy Smart program history, the best practices assessment and our understanding of the local market derived from the Market Profile and the 2012 IRP appendices. These measures were then screened by the project team engineers and analysts, using a comprehensive measure screening process that considers each measure’s engineering characteristics

- **Savings Potential:** Using the Energy Smart Deemed Savings, Installation and Efficiency Standards, we developed measure savings assumptions that account for all engineering characteristics (e.g. hours of use, applicable building types etc.).
- **Local Market Applicability:** Given the local program implementation history, we considered the participation likelihood based on the building types and end-uses located within the ENO and ELL-Algiers territory, and for existing measures, the performance of the measure over the initial three year Energy Smart implementation cycle. For both new and existing measures we reviewed measure performance in comparable markets relying on CLEAResult’s national implementation expertise and internal proprietary datasets.
- **Cost-effectiveness:** We evaluated the incentives and measure costs to develop measure level cost effectiveness results, which were used to screen-out underperforming measures.

With numerous code changes going into effect in 2014, our analysis also considered the baseline changes affecting measures included in the portfolio; primary baseline changes are outlined in the table below.

Table 4: Primary Baseline Changes Affecting the 2014 - 2017 Portfolio

	Measure	Current Baseline as of March 2013	Change Date	Baseline Change
Residential	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

	Water heater 80 gal	0.86 EF	4/16/2015	1.97 EF
	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 most common type
	Linear Lighting (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
Ductless Heat Pump	Efficiency requirement: SEER 13, 7.7 HSPF	1/1/2015	SEER 14, 8.2 HSPF	
Commercial	Lighting: General Use Lamps Screw-in & Hard Wired CFL and LED 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
	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

This process culminated with a final measure list, which served as the primary input for the program forecasting process.

### *Program Forecasting & Portfolio Design*

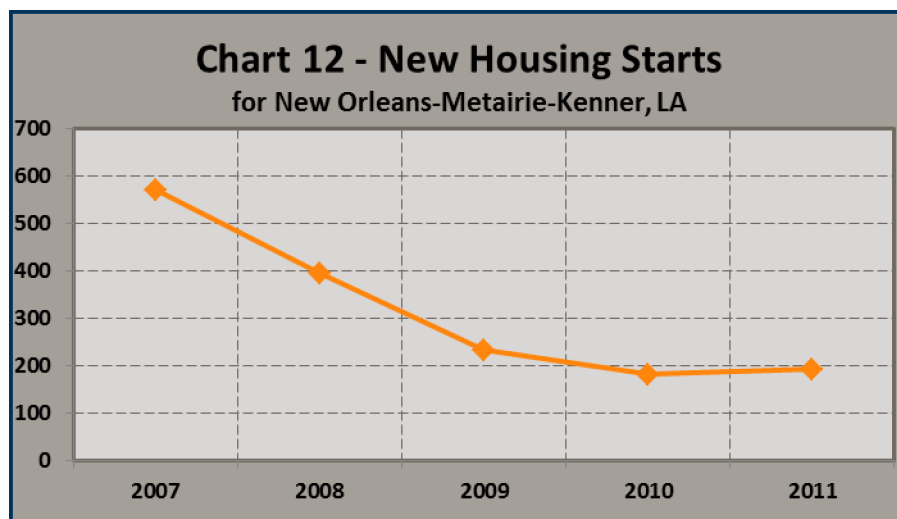
Using the final measure list developed, the CLEAResult team then considered the overall program forecasts and design. This process takes into consideration both the goals established in the 2012 IRP, the results of the three year Energy Smart portfolio implementation, the 2014 – 2017 program designs, and the national implementation experience of the project team to establish participation estimates by measure. These estimates were considered against the incentive levels required to achieve significant and cost-effective program savings. The project team also evaluated under-represented market sectors to target in the new portfolio, and new service offerings that will continue to advance market development. The analysis concluded with program, sector and portfolio level cost-effectiveness, savings estimates and spending requirements for the 2014 – 2017 DSM Portfolio.

### Market Profile Summary

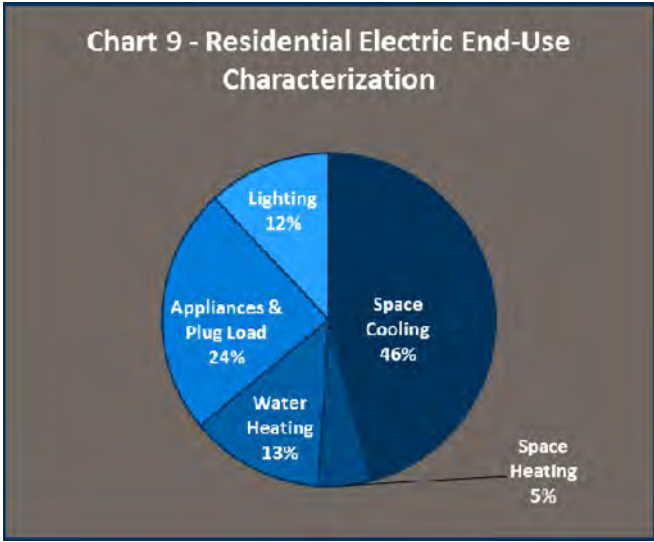
Entergy New Orleans reviewed the existing market potential study included in the 2012 IRP, publicly available datasets from the US Census, the Federal Reserve and other sources, and internal data on customer sales by meter type. We compared these findings with results from the Energy Smart Program implementation to develop a market profile for use in this DSM Plan.

The analysis found that although there is an overall upward trend in economic growth, the city labor force is still below the pre-Katrina levels, suggesting hardships experienced in the economy remain a factor within New Orleans. The analysis also looked at customer sales by market segments and primary technology end-uses within the territory. Overall, the findings are consistent with those reported previously; however, the residential new homes market findings suggest the current opportunity is more minimal than the 2012 IRP.

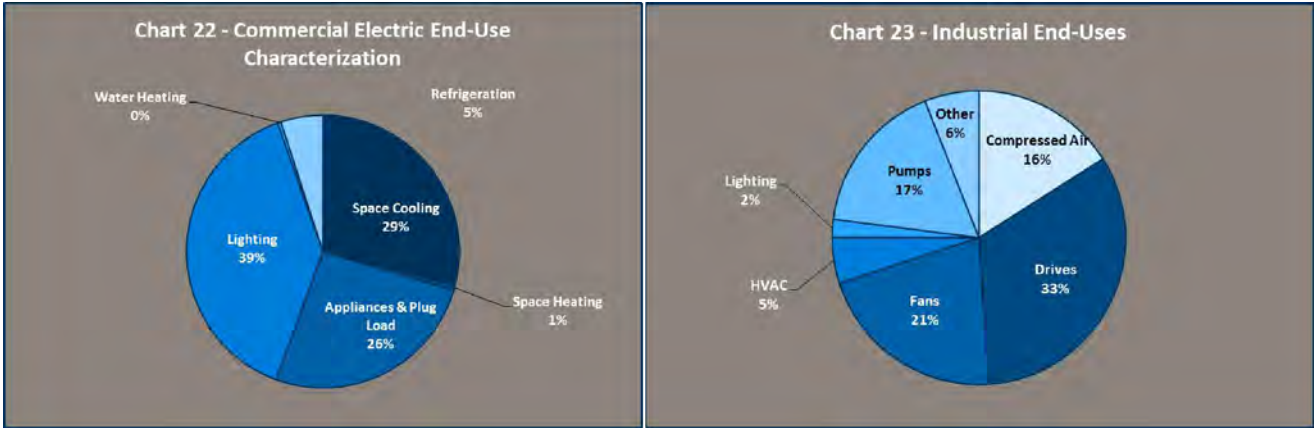
The chart below was developed using data from the regional Federal Reserve Bank serving the New Orleans area. Despite a modest gain in new housing starts, the overall decline and the historical performance of the Energy Smart New Homes program suggests the market is not appropriate for a residential new construction program at this time.



The Market Profile reviewed the 2012 IRP characterization of residential end-uses, as described in the pie chart below. The analysis showed significant overall consumption in HVAC (over 50%) with the majority of this focused in space cooling, and the remaining consumption distributed somewhat evenly between appliances and lighting.



As indicated in the pie charts below, the majority of energy use in commercial buildings is accounted for by lighting; however cooling and appliance, and plug loads are also significant end-uses. Roughly half of the industrial energy use is accounted for by process (e.g. compressed air, fans and pumps), with the remaining energy consumption in drives account for the majority of end use energy.



The complete assessment is included in Appendix D of this report.

### Best Practices Summary

To better understand how the Energy Smart DSM Plan compares with other utility DSM portfolios, as well as the industry as a whole, CLEAResult collected data on program portfolio performance and spending for a sample of 12 utilities. The analysis reviewed utilities with comparable customer counts and sales, neighboring utilities for a regional comparison, and additional utilities located in developed energy efficiency markets. Details of this analysis are presented in Appendix E of this report. Overall findings confirm the recommendations in this portfolio are appropriately aggressive given the market maturity and past program performance.

Table 5: Residential Benchmarks \$/kWh

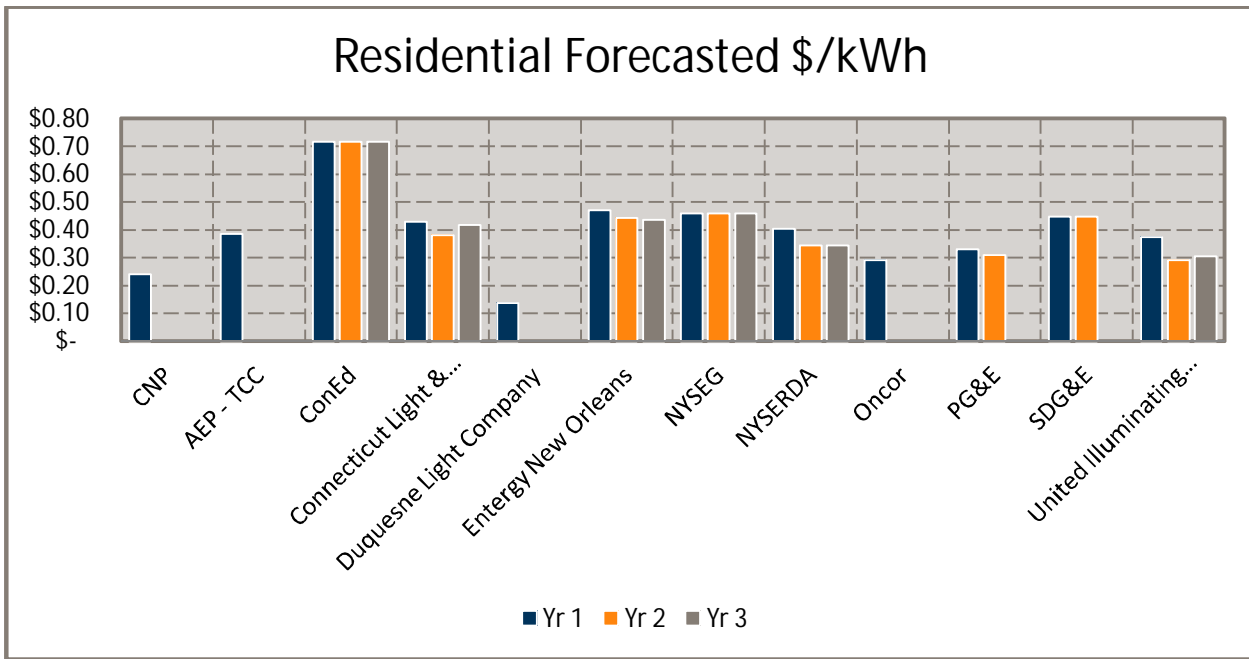


Table 6: Commercial Benchmarks \$/kWh

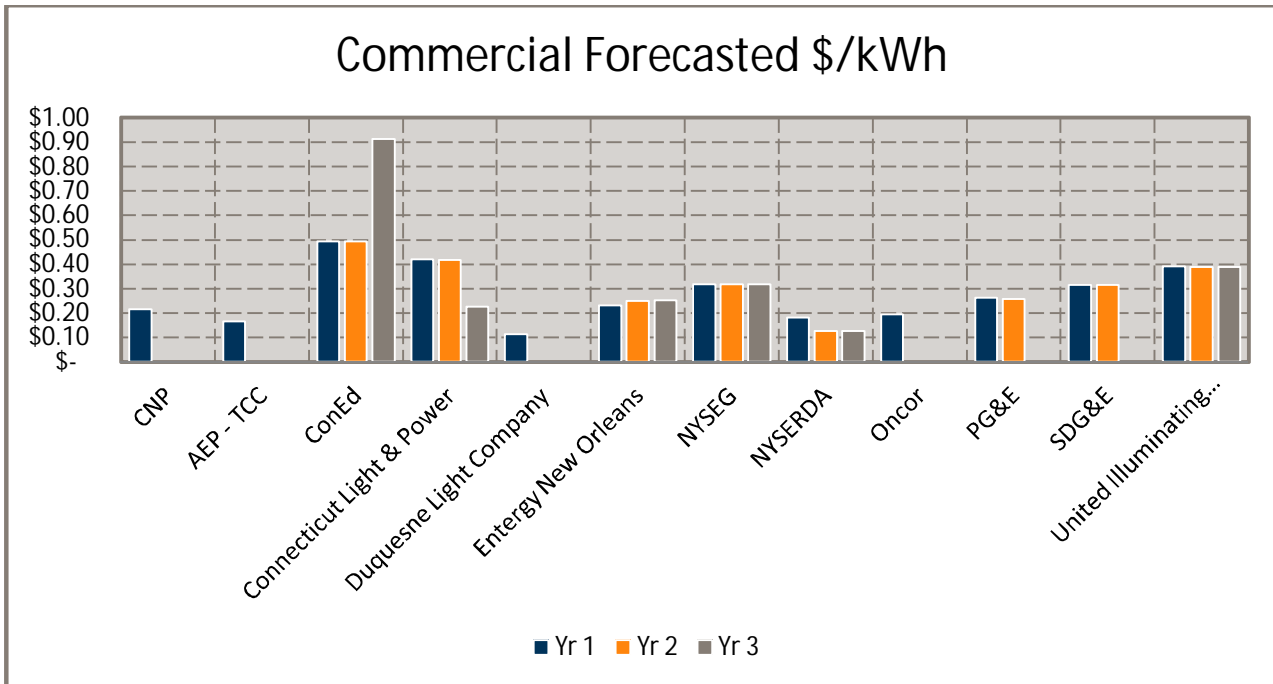


Table 7: Matrix of Program Offerings of Benchmarked Utilities

	PG&E	SDG&E	NYSERDA	Oncor	AEP - TCC	CL&P	United Illuminating	CNP	ConEd	Duquesne Light	NYSEG
ENO Program Portfolio											
Residential Consumer Products	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Residential Heating & Cooling	✓	✓	✓	✓	✓			✓	✓		
Multi-Family Weatherization	✓	✓	✓						✓		
Low Income Audit & Weatherization	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Home Performance With ENERGY STAR	✓	✓	✓	✓		✓	✓	✓			
Energy Efficient New Homes	✓	✓		✓	✓	✓	✓				
Small Commercial Solutions	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Large Commercial solutions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## DSM Portfolio

### Portfolio Budgets & Savings

The CLEAResult Project Team developed the 2012 – 2014 recommended portfolio of programs through a rigorous analytical process that considered among other things, the current market in New Orleans, the performance of the existing portfolio of programs, the performance of comparable utility portfolios as well as more aggressive portfolios offered in developed markets such as California and New York. While the portfolio does not develop all recommendations of the 2012 IRP, the programs included in this portfolio are more sophisticated than those currently offered and represent 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 portfolio metrics as a whole and within each sector, as well as the overarching sector strategies. In addition to summaries of the recommended program, each sector summary outlines pilot programs for implementation during this period; funding for one or two pilot programs would come from the existing program allocations, although specific pilot program funding has not yet been assigned.

Table 8: Energy Smart New Orleans DSM Portfolio Budget Table

DSM Portfolio Budget Table (\$ Million)												
Sector Totals	Year 1				Year 2				Year 3			
	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total
Residential	\$ 1.04	\$ 1.38	\$ 0.03	\$2.45	\$ 1.00	\$ 1.47	\$ 0.03	\$2.50	\$ 1.02	\$ 1.49	\$ 0.03	\$2.54
C&I	\$ 1.25	\$ 1.34	\$ 0.05	\$2.64	\$ 1.18	\$ 1.23	\$ 0.05	\$2.46	\$ 1.14	\$ 1.21	\$ 0.05	\$2.40
Total	\$ 2.29	\$ 2.72	\$ 0.08	\$5.09	\$ 2.18	\$ 2.70	\$ 0.08	\$4.96	\$ 2.17	\$ 2.70	\$ 0.08	\$4.95

Table 9: Energy Smart New Orleans DSM Portfolio Savings Table

DSM Portfolio Savings Table			
Totals by Sector	3-year Participation	3-Year Gross Annual Energy Savings (MWh)	3-Year Peak Demand Savings(MW)
Residential	32,683	18,794	5.20
Commercial & Industrial	358	37,491	6.93
<b>Total Portfolio</b>	<b>33,041</b>	<b>56,286</b>	<b>12.13</b>

Table 10: Energy Smart Algiers DSM Portfolio Budgets Table

DSM Portfolio Budget Table (\$ Million)												
Sector Totals	Yr. 1				Yr. 2				Yr. 3			
	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total	Implementation	Incentives	EM&V	Total
Residential	\$0.14	\$0.18	\$0.00	\$0.33	\$0.13	\$0.19	\$0.00	\$0.33	\$0.13	\$0.19	\$0.00	\$0.33
Commercial & Industrial	\$0.10	\$0.11	\$0.00	\$0.22	\$0.10	\$0.11	\$0.00	\$0.22	\$0.10	\$0.11	\$0.00	\$0.22
<b>Total</b>	<b>\$0.24</b>	<b>\$0.29</b>	<b>\$0.01</b>	<b>\$0.55</b>	<b>\$0.23</b>	<b>\$0.30</b>	<b>\$0.01</b>	<b>\$0.55</b>	<b>\$0.23</b>	<b>\$0.30</b>	<b>\$0.01</b>	<b>\$0.55</b>

Table 11: Energy Smart Algiers DSM Portfolio Savings Table

DSM Portfolio Savings Table			
Totals by Sector	3-year Participation	3-Year Gross Annual Energy Savings (MWh)	3-Year Peak Demand Savings(MW)
Residential	6,962	2,481	0.687
Commercial & Industrial	32	3,312	0.545
<b>Total Portfolio</b>	<b>6,994</b>	<b>5,793</b>	<b>1.232</b>

*EM&V Budget*

The budgets outlined above 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.<sup>2</sup>

<sup>2</sup> Drexler, Kate. *DSM Budget Breakdown: Benchmarking DSM Budgets*. E Source Research Brief, published June 20, 2012. [www.esource.com](http://www.esource.com).

## DSM Portfolio Net Benefits and Cost Effectiveness Analysis

The program designs were loaded into 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).

Table 12: Energy Smart New Orleans DSM Portfolio Costs and Benefits

DSM Portfolio Costs and Benefits (\$ Million)			
Totals by Sector	TRC Total Benefits	TRC Benefit-Cost Ratio	UCT Benefit-Cost Ratio
Residential	\$10.7	1.29	1.43
Commercial & Industrial	\$18.1	1.30	2.61
Total Portfolio	\$28.8	1.30	2.02

The total benefits derived from the programs over the three year implementation are approximately \$28.8 million. The table shows that the programs are cost effective, with a portfolio level TRC benefit-cost ratio of 1.30 and a UCT benefit-cost ratio of 2.02. That means that every dollar invested in energy efficiency returns \$1.92 in total benefits to ratepayers and \$1.87 in total benefits to the utility.

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 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.

### Bill Impacts

CLEARResult considered the portfolio impacts on customer rates in its analysis. It is important to note that the actual rate and bill impact that will be realized by a customer will depend on several variables, including the cost of service in a particular Program Administrator's service territory, the customer's actual individual usage, the level and quality of measure installation, and the availability of public or private funds other than those collected through the SBC for application towards energy efficiency expenditures.

In calculating rate and bill impacts, CLEARResult used the following methodology:

- Rate and average bill impact analysis should be performed on a portfolio basis, as opposed to a program-by-program basis, because it is the entire portfolio of programs that will affect customer rates and bills.
- Rate and average bill impact estimates should account for the impacts over the long term (e.g., for the average life of efficiency measures), in order to capture the full effect of energy efficiency savings and costs.



- Rate and average bill impact analyses should compare the estimated rates and bills with the energy efficiency programs in place to the estimated rates and bills that would be in place in the absence of the energy efficiency programs.
- Rate and average bill impact estimates should be conducted for each customer class, as well as for all customers on average.
- Rate and average bill impact estimates should present not only the absolute dollar increase in distribution rates and bills but also the percentage increase in distribution rates and bills.
- Rate and average bill impact estimates should present the percentage impact on total rates and bills, as well as the percentage impact on distribution rates and bills.

### *Residential Program Portfolio*

The overall approach driving this DSM plan was to retain the aspects of the existing program 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 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.

- Home Performance with ENERGY STAR: Formerly, Residential Solutions, this officially sponsored HPwES program aligns with the ongoing DOE's requirements changes and offers a whole home approach for single family unit customers.
- Consumer Products: This retail channel program initiative includes lighting and room 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.
- 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.
- 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.
- School Kits & Energy Education: Local partner organizations will deliver energy education and energy conservation kits to fifth to seventh grade class rooms 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.
- 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 an M&V approach to generate more precise energy savings as well as incentives for AC replacements.
- Energy Efficient New Homes: This program initiative has been eliminated due to its very low participation and a very low projected TRC result. In order for this plan to offer a number of separate program initiatives, the budget from Energy Efficient New Homes program was reallocated within the

Plan to allow builders to still prescriptively participate in other program initiatives such 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 trainings, 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, contractor, 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.

Table 13: Energy Smart New Orleans Residential Portfolio Savings

Residential Portfolio Savings Table			
Program Name	3-year Participation	3-Year Savings (gross kWh)	3-Year Demand (gross kW)
Home Performance with Energy Star	2,400	3,561,286	1,418
Consumer Products POS	10,000	5,434,460	966
MF Wx	4,488	1,661,840	791
Low Income Audit & Wx	300	1,077,255	507
School Kits & Education	11,550	3,934,980	301
Res Heating & Cooling	3,945	3,124,648	1,216
Total	32,683	18,794,468	5,200

Table 14: Energy Smart New Orleans Residential Portfolio Budgets

Program	Year 1			Year 2			Year 3		
	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
HPwES	\$ 384,381	\$ 247,000	\$ 631,381	\$ 419,639	\$ 233,000	\$ 652,639	\$ 413,702	\$ 228,000	\$ 641,702
Consumer Products POS	\$ 218,750	\$ 234,000	\$ 452,750	\$ 284,350	\$ 229,000	\$ 513,350	\$ 293,600	\$ 236,000	\$ 529,600
MF Wx	\$ 219,032	\$ 169,010	\$ 388,042	\$ 216,543	\$ 160,100	\$ 376,643	\$ 216,543	\$ 168,350	\$ 384,893
Low Income Audit & Wx	\$ 251,033	\$ 151,000	\$ 402,033	\$ 251,033	\$ 136,000	\$ 387,033	\$ 251,033	\$ 149,000	\$ 400,033
School Kits & Education	\$ 98,280	\$ 107,000	\$ 205,280	\$ 98,280	\$ 97,000	\$ 195,280	\$ 98,280	\$ 98,000	\$ 196,280
Res Heating & Cooling	\$ 208,538	\$ 163,950	\$ 372,488	\$ 197,513	\$ 176,300	\$ 373,813	\$ 215,075	\$ 175,000	\$ 390,075
New Homes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 1,380,013</b>	<b>\$ 1,071,960</b>	<b>\$ 2,451,973</b>	<b>\$ 1,467,357</b>	<b>\$ 1,031,400</b>	<b>\$ 2,498,757</b>	<b>\$ 1,488,232</b>	<b>\$ 1,054,350</b>	<b>\$ 2,542,582</b>

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.

Table 15: Energy Smart Algiers Residential Portfolio 3-Year Budgets and Savings

Program	Budget	Savings (Gross kWh)	Savings (Gross kW)	Cumulative Participation
Home Performance with Energy Star	\$ 254,452	470,295	187	317
Consumer Products	\$ 197,466	716,924	127	3,964
Multi-Family Weatherization	\$ 151,921	219,622	105	593
Low Income Audit & Weatherization	\$ 157,141	142,356	67	40
School Kits & Education	\$ 78,893	519,995	40	1,526
Res Heating & Cooling	\$ 150,127	412,436	160	521
<b>Total</b>	<b>\$990,000</b>	<b>2,481,628</b>	<b>687</b>	<b>6,962</b>

### Commercial and Industrial Programs

The overall approach driving this DSM plan was to retain the aspects of the existing program that generate cost effective savings while achieving their strategic objectives within the portfolio, and apply industry best practices to best achieve Energy Smart goals and objectives including improved measure diversity, achieving higher savings goals, and enhanced participation in the large C&I sector. The 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. The 2014-2017 program portfolio and initiatives were designed 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, including schools, small hospitality, and industrial sectors, and to improve measure diversity achieved by the programs. Other program strategy and improvements over existing programs include: streamlining 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 2014 – 2017 program years, the C&I sector will be served through two umbrella programs; Small Commercial Solutions for customers under 100 kW, and Large Commercial Solutions for customers 100 kW and over. The umbrella programs offer simplified program participation and consistent processes for participation while also offering market segmented collateral that provides marketing messages that speak to each customer segment. This approach reduces confusion in the market while still offering relevant messaging to each market segment. Contractors and customers will have a single point of contact throughout their participation. This will ease their entry into the program and facilitate relationship building between the program and its participants. Using consolidated marketing materials helps generate economies of scale which can increase the outreach capability of the program without incurring added cost.

In addition, establishing the programs as overarching umbrellas, under which the individual initiatives are implemented, helps keep the programs flexible and able to target specific customer segments as the program learns more about the needs of specific market segments. This allows the programs to remain relevant and actively evolve over time.

Under each umbrella program there will be targeted initiatives that bundle services, measures and delivery together to enhance participation in key customer segments.

The proposed programs are as follows:

- 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 TRM, allowing for simple approaches to 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* – targeting 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*– targeting 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 tune-ups for eligible systems and customers.
- 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. 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.

Regarding 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. While 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 offer 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 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. 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.

Table 16: Energy Smart New Orleans C&I Portfolio Savings

C&I Portfolio Savings Table			
Program Name	3-year Participation	3-Year Savings (kWh)	3-Year Demand (kW)
Small Commercial Solutions	294	9,638,184	2,852
Large Commercial Solutions	64	27,853,606	4,073
<b>Total</b>	<b>358</b>	<b>37,491,790</b>	<b>6.925</b>

Table 17: Energy Smart New Orleans C&I Portfolio Budgets

Program	Year 1			Year 2			Year 3		
	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total	Incentive	Non-Incentive	Total
Small C&I	\$ 357,721	\$ 316,822	\$ 674,542	\$ 399,333	\$ 375,893	\$ 775,225	\$ 429,515	\$ 394,836	\$ 824,351
Large C&I	\$ 984,547	\$ 968,017	\$ 1,952,564	\$ 834,195	\$ 841,565	\$ 1,675,759	\$ 781,440	\$ 786,612	\$ 1,568,052
<b>Total</b>	<b>\$ 1,342,268</b>	<b>\$ 1,284,838</b>	<b>\$ 2,627,106</b>	<b>\$ 1,233,528</b>	<b>\$ 1,217,457</b>	<b>\$ 2,450,985</b>	<b>\$ 1,210,955</b>	<b>\$ 1,181,449</b>	<b>\$ 2,392,403</b>

Table 18: Energy Smart Algiers C&I Portfolio 3-Year Budgets and Savings

Program	Budget	Savings (Gross Annual kWh)	Savings (Gross kW)	Cumulative Participation
Small Commercial Solutions	\$201,877	855,917	225	26
Large Commercial Solutions	\$458,123	2,456,189	321	6
<b>Total</b>	<b>\$660,000</b>	<b>3,312,106</b>	<b>546</b>	<b>32</b>

## Summary

The 2014-2017 DSM Portfolio of programs was developed through a rigorous analytical process that included sophisticated measure screening and program modeling techniques, a review of market and proprietary datasets, and an analysis of comparable utility portfolios to benchmark the sophistication and cost-effectiveness of the Energy Smart portfolio. As a whole, the portfolio represents a more sophisticated set of programs that cost-effectively target the highest end-uses while adding new program services, such as Energy Master Planning and Benchmarking, and new incentive designs to motivate participation in the deeper and more long-lasting energy efficiency measures. The following sections include additional background materials and analysis conducted during this analysis; these are outlined in the list below.

- Appendix A: Program Overviews
- Appendix B: Detailed Measure List
- Appendix C: Market Profile
- Appendix D: Best Practices Review

# APPENDICES

## Appendix A: Program Overviews

### Residential Program Overviews

Program	Home Performance with ENERGY STAR (formerly Residential Solutions)
Program Objective	The objective of the Home Performance with ENERGY STAR program is to create a platform that produces electric energy savings from bundled, phased and associated retrofits.
Program Description	<p>This program was formerly known as Residential Solutions. As a DOE Home Performance with ENERGY STAR sponsor, Energy Smart provides an energy savings program using a whole house approach. This includes online or other customer-input screening tools, three levels of in-home assessments, including walk-through and comprehensive assessments with diagnostic testing, energy savings modeling before and after retrofits and connections to other program offerings.</p> <p>The Program will align with changes at the USDOE Home Performance with ENERGY STAR Program, an evolving process that is anticipated to provide a step-wise approach to garner savings and participation, with a potential minimum savings threshold for homes to be certified. It is a market driven program, whereby marketing and referrals drive customers to participating energy auditors and home performance contractors.</p> <p>Auditors and qualified contractors perform an in-home energy assessment, create a scope of work for recommended retrofits and educate customers toward choosing cost-effective energy efficiency improvements. Savings estimates are calibrated to homeowner's energy history using industry standard software. Participating projects will have a target annual energy savings goal, with incentives tailored to encourage bundled measures and increased savings. Over the three-year program cycle, participation from new and re-engaged projects is expected to increase.</p> <p>A staged participation process allows homeowners to make improvements as their budget and priorities allow, re-engaging with the program for subsequent retrofits toward long-range persistent savings. Associated retrofits activities ties Home Performance participants to related program offers, including HVAC and products.</p> <p>The program emphasizes developing an energy efficiency plan for the customer to act upon installing multiple recommended program measures through participating contractors. This requires focus on a strong home energy assessment conversion rate to drive energy efficiency measures. Measure bundling is desirable to increase the average savings per house. Quality control field inspection sample rates should remain high to keep participating trade allies closely aligned with program expectations. Quality control results should form the basis for a feedback loop back to the trade allies for their continuous improvement. Included in Quality Control is a rigorous contractor mentorship model to assure technical and programmatic compliance and provide appropriate contractor support for a variety of workforce skillsets.</p> <p>This program serves as the comprehensive energy efficiency element within the DSM portfolio directed at market rate customers owning single family structures of up to four units. Its rich customer contact presents multiple opportunities for utility branding.</p>

Target Market(s)	All homes in Orleans Parish are eligible for the program, with an emphasis on homes built in 1990 and prior. GIS data lists 125,610 single-family detached homes in this range of years.	
Eligible Measures & Incentives	Attic Insulation	Up to \$0.35 per sq. ft.
	Wall Insulation	\$0.25 per sq. ft.
	Floor Insulation (Electric Heat)	Up to \$0.20 per sq. ft.
	Pool Pump	Up to \$400
	Air Infiltration Sealing	\$0.20 per CFM Reduced
	Duct Sealing	\$0.24 per sq. ft.
	Solar Screens / Window Film	\$1 per sq. ft.
	Radiant Barrier	\$1.20 per sq. ft.
	Heat Pump Water Heater	\$600
	Solar Screens (E or W 15 sf window)	\$15.00
	CFL/LED	Direct Install
	Pipe Insulation	Direct Install
	Faucet Aerator (<= 1.5 GPM)	Direct Install
	Low Flow Showerhead (<=2.0 GPM)	Direct Install
	Advanced Power Strip, 12 plug	Direct Install
<p>Note: Final incentive levels are subject to change pending completion of final program design.</p> <p>Participating home energy assessment contractors will perform both walk-through and comprehensive assessments. Energy Smart will offer a customer rebate for the portion of the assessment if the customer installs one or more energy efficiency upgrades recommended by the auditor. Both assessments will include the direct installation of electricity saving measures including CFL or LEDs, a low-flow showerheads, faucet aerators, hot water pipe insulation and reduced hot-water set point.</p>		



Key elements of Energy Smart Home Performance with Energy Star program include:

Contractor Recruitment and Training

Energy Smart will recruit HVAC, remodeling, insulation and weatherization contractors as well as home energy rating system (HERS), Building Performance Institute (BPI) and other trade allies interested in offering home energy performance services to their customers.. Contractors will be required to sign a participation agreement and abide by all program protocols and reporting requirements.

Intake

Customers contacting the customer service center should first get a brief pre-qualification of their house to determine their house's savings potential. Then they are to be scheduled for one of the three assessments below:

Program Implementation

Level 1 Assessment "Silver": This is a walkthrough/visual inspection quick home energy assessment. Contractors will directly install low-cost measures, such as CFLs, aerators, showerheads and pipe insulation for customers with electric water heaters, where needed and allowed by participating customers. These low cost/direct install measures will be available at no additional charge to the customer. Some homeowners may follow-up with more comprehensive energy efficiency improvements, including air and duct sealing or appliance retrofits, or request a more comprehensive energy assessment.

Level 2 Assessment "Gold": Participating contractors will provide comprehensive home assessments for interested customers for a fee. In addition to walk-through and direct install of low-cost measures, this assessment will be designed to estimate potential energy savings due to infiltration and heat loss through walls and attics. Diagnostic evaluations conducted during the Assessment may include duct and air seal testing and combustion safety testing. An assessment report will be presented to the customer with recommendations for upgrades and information about available financing or cash incentives.

Level 3 Assessment "Platinum": Walk-through assessment with blower door and duct leakage test plus computer modeling conducted to make home eligible to participate in state-funded programs, as applicable.

Incentive application

Contractors will submit applications for services performed. The program will conduct a QA/QC review of all applications to ensure that all required information and documentation has been provided.

Incentive payment

Contractors will receive incentives for approved applications.

Project verification

Energy Smart reserves the right to site-verify installations prior to project approval and incentive payment. The program will perform site verification on a statistically significant number of installations to verify the performance of work completed.

Marketing	<p>Marketing to auditors and home improvement contractors will involve a variety of strategies and tactics, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• A program website</li> <li>• Online advertising</li> <li>• Advertisements in local trade publications</li> <li>• Attending trade shows occurring in the New Orleans area</li> <li>• Purchasing contact lists of contractors in New Orleans, using sources such as USADATA</li> </ul> <p>Marketing to homeowners may include:  A program website, connection to current online screening tools where homeowners can input information about their home and see immediate recommendations  Online advertising  Brochures for direct mail, contractors, and customer outreach at community events in New Orleans  Program materials available through Energt Smart’s “One Stop Energy Shop”  Program Administrator sponsored call center  To ensure that customers perceive Energy Smart’s energy efficiency programs as a seamless set of offerings, cross-referrals from other programs will also be provided where appropriate.</p>
EM & V	<p>EM&amp;V of the Residential Solutions program should consist of a measurement of the existing baseline conditions of a sample of homes, the nature of the energy efficiency improvements installed, usage characteristics of the homes pre and post retrofit and assessing whether or not the homeowners would have undertaken the efficient actions in the absence of the program. Data gathering to expedite EM&amp;V will be coordinated with the Implementation Contactor and the EM&amp;V implementer in the final implementation design.</p>

	Year 1	Year 2	Year 3
Program Costs	\$631,381	\$652,639	\$641,701
Incentive Costs	\$384,381	\$419,639	\$413,702
Non-Incentive Costs	\$247,000	\$233,000	\$228,000
Gross Annual kWh Savings	1,103,541	1,223,492	1,234,252
Gross Annual kW Savings	445	494	479
TRC Test	1.18		
PAC Test	1.63		
Participant Test	2.71		

Net to Gross Ratio	0.8		
Utility Levelized Cost \$ / kWh	\$ 0.03		
Utility Levelized Cost \$ / kW	\$ 66.97		
No. of cust. in target group	125,610	125,610	125,610
Cumulative Participants	800	1,600	2,400
New Participants	800	800	800
Program Cost per Participant	\$ 789.23	\$ 815.80	\$ 802.13
NPV of Avg. Participant Savings	\$ 1,251		
Avg. Part. Simple Payback (Yrs)	5.6		
Lifetime Avoided CO2 (Tons)	10,032	11,123	11,221

Program Name	Consumer Products Program
Program Objective	<p>The objective of the Consumer Products Program is to generate significant energy and demand savings through the sales and installation of energy-efficient compact florescent light bulbs, LED (light omitting diode) lighting and room air conditioners sold in retail stores. The program will lay the foundation for developing retailer and manufacturer partnerships supporting the integration of additional measures during the next program filing cycle.</p>
Program Description	<p>The Consumer Products Program will achieve energy savings by motivating and incenting customer purchases. The program addresses multiple products delivered by retailers, streamlining communication and increasing the value proposition to retailers and manufacturers.</p> <p>Customers will receive point-of-purchase discounts lighting. Customers may receive a point-of-purchase-discount on room air conditioners or downstream direct to customer utility rebate on qualified, pre-selected energy-efficient products. The incentive delivery approach for room air conditioners will be determined by the retailer's ability to meet program data requirements. Promotional materials in retail locations, online and other mass marketing channels will drive consumer awareness and generate consumer demand.</p> <p>The program is designed to overcome market barriers to the stocking, sale, and purchase of efficient products. Current market barriers include:</p> <p>Limited consumer awareness about the availability, benefits and features of efficient products, proper selections and proper installation.</p> <p>Higher first cost of efficient products for consumers which can drive consumer choice to inefficient alternatives.</p> <p>Consumer and retailer sales associates lack knowledge on the benefits and features of efficient products.</p> <p>The consumer products program will engage consumers, retailers and manufacturers to overcome these barriers by:</p> <p>Educating national, regional and local retailer sales associates on products and promotions.</p> <p>Delivering consumer incentives and rebates.</p> <p>Driving marketing strategies and tactics that educate customers on energy-efficient products and support them in making informed purchasing decisions.</p>
Target Market(s)	<p>The Consumer Products Program will target residential customers and savings will be allocated to the residential portfolio.</p>

Compact fluorescent light bulbs, light emitting diode (LED) lighting, and room air conditioners.

Eligible Measures & Incentives

Measure	Incentive		
	2014	2015	2016
CFLs 15W (14W-18W) ENERGY STAR RATED	\$1.25	\$1.25	\$1.15
CFLs 20W (19W-21W) ENERGY STAR RATED	\$1.25	\$1.25	\$1.15
CFL 23W (22W-25W) ENERGY STAR RATED	\$1.25	\$1.25	\$1.15
LEDs 8W ENERGY STAR RATED Downlights	\$10.00	\$9.00	\$8.00
LEDs 13W ENERGY STAR RATED Downlights	\$10.00	\$9.00	\$8.00
LEDs 15W ENERGY STAR RATED Downlights	\$10.00	\$9.00	\$8.00
LEDs 20W ENERGY STAR RATED Downlights	\$10.00	\$9.00	\$8.00
LEDs 9W ENERGY STAR RATED A-lamp	\$8.00	\$7.00	\$6.00
LEDs 13W ENERGY STAR RATED A-lamp	\$8.00	\$7.00	\$6.00
LEDs 15W ENERGY STAR RATED A-lamp	\$8.00	\$7.00	\$6.00
LEDs 20W ENERGY STAR RATED A-lamp	\$8.00	\$7.00	\$6.00
Room Air Conditioners < 6,000 BTUs ENERGY STAR RATED	\$35.00	\$30.00	\$30.00
Room Air Conditioners 6,000- 7,999 BTUs ENERGY STAR RATED	\$35.00	\$30.00	\$30.00
Room Air Conditioners 8,000 - 13,999 BTUs ENERGY STAR RATED	\$35.00	\$30.00	\$30.00
Room Air Conditioners 14,000 - 19,999 BTUs ENERGY STAR RATED	\$50.00	\$45.00	\$45.00
Room Air Conditioners > 20,000 BTUs ENERGY STAR RATED	\$50.00	\$45.00	\$45.00

Note: Program incentive costs provided are not to exceed values. Incentives may be adjusted by the Program Administrator to reflect program design market conditions. Incentive budget can be used for cash and non-cash incentives. Measures may be added to this program during the DSM plan term.

Eligibility:

CFLs, LEDs and room air conditioners must be ENERGY STAR qualified and installed in a residential setting.

<p>Implementation &amp; Delivery</p>	<p>Program implementation will need to include final program design, start-up of operations, marketing and outreach, retailer relationship management, incentive/rebate processing, customer service center and program management and reporting.</p> <p>Specific tasks include:</p> <p>Market analysis of industry trends, procedures and partnerships.</p> <p>Retailer and manufacturer recruitment and selection. Recruitment should include RFP development and distribution and MOUs.</p> <p>Continued retailer and manufacturer outreach and support to tailor special promotions, and exchange information for enhanced in-store delivery.</p> <p>Consumer marketing through the Energy Smart website and in-store collateral.</p> <p>Field Services to verify products, promotional messaging, train retailers, staff events and ensure efforts are following proper protocols.</p> <p>Incentive and rebate processing which includes data collection and reporting to track and verify retailer point of sale data, and participant data to approve and generate incentive and rebate fulfillment to partners and/or customers.</p> <p>Employ quality control process for data collection, invoicing, incentive/rebate fulfillment and field visit efforts.</p> <p>Delivery of report monthly, quarterly and annually on progress to data for all planning and implementation activities.</p>
<p>Marketing</p>	<p>The Consumer Products Program's consumer marketing efforts will include developing and implementing. Marketing efforts will highlight the Company and product benefits and features to increase consumer awareness and acceptance of energy-efficient products.</p> <p>Marketing efforts may include:</p> <p>Providing point-of-purchase advertising and marketing materials in retail stores</p> <p>Facilitating in store consumer and retail sales associate events to educate on the consumer products program.</p> <p>Communicating and providing access to program information and participating retailers on the Energy Smart website.</p> <p>Advertising special promotions using online, other mass media channels and in-store advertising.</p> <p>Branding marketing material with the ENERGY STAR® and ENTERGY logos.</p> <p>Developing, publishing and distributing a program brochure(s).</p> <p>In general, program marketing delivery strategies and tactics are subject to change pending the final implementation plan, which will be developed by the Company in conjunction with the selected implementation contractor.</p>

EM & V

The EM & V of the consumer products program should be conducted by a third party evaluation contractor and include a multipronged approach to distinctly evaluate upstream and mid-stream efforts and a different approach for downstream end consumer efforts.

The upstream and midstream efforts can be conducted by one or both of the following approaches:

General population surveys of residential customers using screening methodologies to determine if they purchased any of the consumer product programs eligible products within the past year.

In-store intercepts can be conducted in participating retail stores near eligible consumer products in the program. Evaluators approach customers who are shopping in the aisle of eligible products and motivate customers to participate in phone or web surveys in exchange for a reward.

The downstream consumer rebates evaluation efforts can be conducted by the following approaches:

Engineering review of program savings, baseline while analyzing free ridership and spillover by interviewing program participants and non-participants questions regarding the programs influence on their purchasing decision and what their decision would have been in the absence of the program.

The final evaluation plan will be developed by a third party evaluation contractor with the Company following the development of the final program implementation plan.

	Year 1	Year 2	Year 3
Program Costs	\$452,750	\$513,350	\$529,600
Incentive Costs	\$218,750	\$284,350	\$293,600
Non-Incentive Costs	\$234,000	\$229,000	\$236,000
Gross Annual kWh Savings	1,515,500	1,898,160	2,020,800
Gross Annual kW Savings	267	346	353
TRC Test	1.58		
PAC Test	1.74		
Participant Test	3.95		
Net to Gross Ratio	0.65		
Utility Levelized Cost \$ / kWh	\$ 0.02		
Utility Levelized Cost \$ / kW	\$ 111.34		
No. of cust. in target group	144,000	144,000	144,000
Cumulative Participants	10,000	20,000	30,000
New Participants	10,000	10,000	10,000
Program Cost per Participant	\$45.28	\$51.34	\$52.96
NPV of Avg. Participant Savings	\$ 98.81		
Lifetime Avoided CO2 (Tons)	13,777	17,256	18,371

Program	Multi-Family Weatherization
Program Objective	The objective of the Multi-Family Weatherization Program is to generate energy and demand savings from weatherization and direct install measures at individually metered multifamily housing units.
Program Description	<p>This market rate program integrates multi-family measures into a targeted program. Doing so will create a better recruitment and outreach approach, capturing both residential- and commercial-type measures under one umbrella.</p> <p>This program will recruit property managers of individually metered multi-family buildings as the building owner representatives. Targeting and prequalifying the buildings prior to engagement are important aspects of the program's cost effectiveness.</p> <p>The program approach includes a walk-through on-site energy assessment of each unit and the common areas of a participating building. Where applicable, assessors will install "instant savings" measures during the walk-throughs. The program then provides an assessment report and recommendations to the property manager and building owner, as appropriate. This report includes prescriptive and performance measures. The light weatherization energy efficiency measures include ceiling insulation, air sealing and duct sealing, in addition to the direct install measures such as shower heads, faucet aerators, CFL's. Replacement HVAC equipment or HVAC tune-up opportunities will be referred to either the Residential or the commercial heating and cooling initiative within the Small Commercial Program, depending on the type of meter impacted. The "common area" measures for lighting, plug load, hot water, and others will be referred to the Small Commercial Program. Any referrals to other programs will be performed seamlessly – the property manager will be supported by a single point of contact based upon a single assessment and recommendation report.</p>
Target Market(s)	This program specifically targets multi-family buildings that have individually metered units. There are an estimated 17,300 multi-family total housing units, out of which nearly all are individually metered. Program penetration is expected to address approximately 20% to 30% of this market potential each year over three years of this DSM plan. Saturation rates should be monitored over the course of the program implementation since this is a targeted and finite market.



Eligible Measures & Incentives

Measure	Incentive
Ceiling Insulation	\$0.40/sq.ft.
Air Sealing	\$0.10/sq.ft.
Duct Sealing	\$300/unit
CFL 13W, in unit	Direct Install
Faucet Aerator, in unit	Direct Install
Low Flow Shower Head, in unit	Direct Install
HVAC Equipment & Tune-Ups (cross-program)	Note 1
Common Area Lighting, Plug Load, Hot Water, etc. (cross-program)	Note 1

Measure eligibility must be satisfied both on a measure level and on a building level. Units must be individually metered and the building or complex must contain five or more units. The incentives for in-unit measures and envelope measures impacting tenant energy consumption paid directly to the building owner. The incentives for directly installed instant savings measure cover the full measure cost, with no charge to the building owner or tenant.

Note 1: Incentives will be specified by the program initiative to which the customer is being cross referred.

Note 2: Incentives may be adjusted by the Program Administrator to reflect the program design market conditions. Incentive budget can be used for cash and non-cash incentives.”

<p>Implementati on &amp; Delivery</p>	<p>Program implementation will need to include final program design, start-up of operations, marketing and outreach, retailer relationship management, incentive/rebate processing, customer service center, and program management and reporting.</p> <p>The Implementation contractor will perform the walk-through energy assessments and manage the building or property owner relationship. The Implementation contractor will also be responsible for direct installation of instant savings measures. It is desirable that the installation of the remaining measures may be sub-contracted to local contractors as sub-contracted to the implementer. The multi-family property owner and building owner should work with one project manager as a point of contact. Part of the total value proposition to the customer is the project management of measure installation. Low income qualified buildings will be cross referred to the Low Income Weatherization program.</p> <p>The project energy assessment will collect relevant data regarding opportunities and program staff will discuss any recommendations with property manager or building owner. The property manager should be presented with a report containing recommendations, financial considerations, other tax credits or rebates the may be available, and relevant third party financing. In the delivery of the assessment report, program staff will also provide a modest level of energy education. The program will also develop and provide “leave-behind” materials for tenants following direct installation of instant savings measures to enhance measure persistence.</p> <p>Contractor training should be offered to ensure the selected sub-contractors can repeatedly and satisfactorily install measures per measures standards. It is expected that the installing sub-contractor for air infiltration and duct sealing conduct any performance tests as required by the savings protocol. The Implementer should determine a policy and standard for combustion safety testing to be conducted post-installation of measures, as appropriate.</p> <p>The Implementer will complete the incentive application on behalf of the building owner or property manager for review and approval. Rebate checks will be sent to either the building owner or property manager, as appropriate.</p> <p>Quality control will consist of field inspections during and after installations on a sample basis adequate to ensure satisfactory quality levels and measure installation compliance to measure standards.</p> <p>In general, program implementation and delivery strategies and tactics are subject to change pending the final implementation plan, which will be developed by the Company in conjunction with the selected implementation contractor.</p>
<p>Marketing</p>	<p>Since this program is targeted to individually metered multi-family buildings, the primary marketing mechanism is direct outreach to the property managers of qualifying buildings. The implementation program staff should reach out to these property managers to engage them on performing building improvements within the context of this program, as outlined above. There are no specific requirements for the customer engagement method. Advertising via direct mail, program website and local media may be used.</p>
<p>EM &amp; V</p>	<p>Program evaluation activities should include on or offsite (via phone) verification of a statistically significant sample of participants based on number of tenant units. The final evaluation plan will be developed by the third party evaluation contractor in conjunction with the Company following the development of the final program implementation plan.</p>

	Year 1	Year 2	Year 3
Program Costs	\$388,042	\$376,643	\$384,893
Incentive Costs	\$219,032	\$216,543	\$216,543
Non-Incentive Costs	\$169,090	\$160,100	\$168,350
Gross Annual kWh Savings	558,175	551,832	551,832
Gross Annual kW Savings	266	262	262
TRC Test	1.31		
PAC Test	1.27		
Participant Test	3.93		
Net to Gross Ratio	0.80		
Utility Levelized Cost \$ / kWh	\$0.04		
Utility Levelized Cost \$ / kW	\$84.19		
No. of cust. in target group	117,400	117,400	117,400
Cumulative Participants	1,496	2,992	4,488
New Participants	1,496	1,496	1,496
Program Cost per Participant	\$259.39	\$251.77	\$257.28
NPV of Avg. Participant Savings	\$294		
Avg. Part. Simple Payback (Yrs)	8.5		
Lifetime Avoided CO2 (Tons)	5,074	5,017	5,017

Program	Low Income Audit & Weatherization	
Program Objective	The objective of the Low Income Audit & Weatherization Program is to target and significantly weatherize qualified low income single family homes and low-rise multi-family dwellings.	
Program Description	<p>This program targets a hard to reach income qualified segment of the market. The implementation contractor will work with Entergy to set criteria to identify and qualify targeted homes for participation in the program. The approach is to conduct the program with audit and installation practices similar to national public weatherization grant programs. The audit will use software to assess the building state, collect data and generate an energy efficiency improvement report.</p> <p>Incentives cover full cost of measure installation and total incentive amount is limited to a maximum amount of \$2,500 per house project. Direct installation of instant savings measures will occur during the audit. Quality control and combustion safety testing, as appropriate, are conducted to help ensure occupant safety. The measures include those related to building thermal envelope, HVAC, water heating and the instant savings measures.</p>	
Target Market(s)	Target market is 33,793 units based on low income census estimates of single family dwellings, attached and detached. Of that, this program will target 100 homes for weatherization and target participants for a DIY workshop.	
Eligible Measures & Incentives	Measure	Incentive \$2,500 maximum per home
	Air Sealing	\$0 .66 per sq. ft cond. space
	Duct Sealing	\$0 .50 per sq. ft cond. space
	Ceiling Insulation	Up to \$0.90 per sq. ft
	Wall Insulation	\$0.25 per sq. ft.
	Floor Insulation	Up to \$0.20 per sq. ft.
	Room A/C	\$400
	A/C Tune-up	\$50
	CFL	Direct Install
	Low Flow Showerhead	Direct Install
	Aerators	Direct Install
Pipe Insulation	Direct Install	
<p>Program incentive costs provided are not to exceed values. Incentives may be adjusted by the Program Administrator to reflect program design market conditions. Incentive budget can be used for cash and non-cash incentives.</p> <p>Audits will include the direct installation of electricity saving measures including up to 6 CFLs, a low-flow showerhead, faucet aerators, hot water pipe insulation and reduced hot-water set point.</p>		

<p>Implementation &amp; Delivery</p>	<p>Program implementation includes final program design, start-up of operations, marketing and outreach, retailer relationship management, incentive/rebate processing, customer service center and program management and reporting.</p> <p>Key elements of Low Income program implementation include:</p> <ol style="list-style-type: none"> <li>1. Residential home improvement contractor recruitment and training: Energy Smart will recruit and train qualified contractors for weatherization projects. Contractors will be required to sign a participation agreement, and abide by all program protocols and reporting requirements.</li> <li>2. HVAC contractor recruitment and training: In conjunction with the Residential Efficient HVAC program, Energy Smart will recruit and train contractors to perform the HVAC measures. Contractors will be required to sign a participation agreement, and abide by all program protocols and reporting requirements.</li> <li>3. Proper WAC recycling and disposal: Energy Smart will work with a certified appliance recycling business to ensure that WACs removed through the program are treated with appropriate recycling and disposal processes.</li> <li>4. Coordination and implementation of “DIY” workshops: Energy Smart will coordinate with local organizations currently engaged in energy efficiency workshops for residential customers in order to maximize the benefit of these events.</li> <li>5. Incentive application: Low income customers will submit applications consistent with both WAP and Energy Smart’s Low Income program guidelines. Contractors will submit applications for services performed. The program will conduct a QA/QC review of all applications to ensure that all required information and documentation has been provided.</li> <li>6. Incentive payment: Contractors will receive incentives for approved applications.</li> <li>7. Project verification: Energy Smart reserves the right to site-verify weatherization measures prior to project approval and incentive payment</li> </ol>
<p>Marketing</p>	<p>Marketing to residential home improvement and AC contractors will involve a variety of strategies and tactics, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• A program website</li> <li>• Online advertising</li> <li>• Advertisements in local AC and construction trade publications</li> <li>• Leveraging of WAP marketing activities</li> </ul> <p>Marketing to low income homeowners may include:</p> <ul style="list-style-type: none"> <li>• Brochures for direct mail, contractors and customer outreach at events in New Orleans</li> <li>• A program website</li> <li>• Online advertising</li> <li>• Materials available through ENO’s “One Stop Energy Shop”</li> <li>• Leveraging of WAP marketing activities</li> </ul> <p>To ensure that customers perceive Energy Smart energy efficiency programs as a seamless set of offerings, cross-referrals from other programs will also be provided where appropriate.</p> <p>The final program marketing plan will be developed by the selected program implementation contractor in conjunction with ENO and ELL.</p>

## EM &amp; V

Program evaluation activities should include on or offsite (via phone) verification of a statistically significant sample of participants who had their WACs replaced, interviews with AC, construction, appliance recycling contractors and verification through the WAP program that weatherization services were provided to homeowners Energy Smart made weatherization ready. The final evaluation plan will be developed by the third party evaluation contractor in conjunction with the Company following the development of the final program implementation plan..

	Year 1	Year 2	Year 3
Program Costs	\$ 402,032	\$ 387,032	\$ 400,032
Incentive Costs	\$ 251,033	\$ 251,033	\$ 251,033
Non-Incentive Costs	\$ 151,000	\$ 136,000	\$ 149,000
Gross Annual kWh Savings	359,085	359,085	359,085
Gross Annual kW Savings	169	169	169
TRC Test	1.15		
PAC Test	1.09		
Participant Test	3.37		
Net to Gross Ratio	1.00		
Utility Levelized Cost \$ / kWh	\$ 0.05		
Utility Levelized Cost \$ / kW	\$ 106.31		
No. of cust. in target group	33,793	33,793	33,793
Cumulative Participants	100	200	300
New Participants	100	100	100
Program Cost per Participant	\$4,020.33	\$3,870.33	\$4,000.33
NPV of Avg. Participant Savings	\$ 4,144		
Avg. Part. Simple Payback (Yrs)	1.9		
Lifetime Avoided CO2 (Tons)	3,264	3,264	3,264

Program	School Kits & Energy Education Program															
Program Objective	The objective of the School Kits & Energy Education Program is to promote electric energy conservation education within the local primary school student population and to generate energy savings at those students' homes.															
Program Description	<p>This program primarily serves fifth to seventh grade students within the local schools by providing them with educational materials and energy conservation kits. Other school grades may be targeted in addition to the fifth to seventh grade. The in-school educational and kit delivery will be delivered by local non-profit groups as a grass roots approach to increase the credibility and community nature of the program's message. Students will take the kit home to install the individual measures with their parents or guardians. Conservation educational materials are also included within the kits. Participants are asked to self-report measure installations on an online system from which total savings and other results are reported to the Company.</p> <p>The ability of this program to have flexible launch dates and to throttle the rate at which schools are canvassed provides additional value to the entire EnergySmart portfolio. Moreover, the program is designed to fulfill a unique segment in the market not currently being addressed by existing programs.</p>															
Target Market(s)	This program directly targets public and private primary schools within the New Orleans city territory. It indirectly targets single family and multi-family homes where the kitted measures will be installed by the students or their parents.															
Eligible Measures & Incentives	<table border="1" data-bbox="431 940 1273 1268"> <thead> <tr> <th data-bbox="431 940 997 982">Measures</th> <th data-bbox="997 940 1273 982">Incentive</th> </tr> </thead> <tbody> <tr> <td data-bbox="431 982 997 1024">13W CFL</td> <td data-bbox="997 982 1273 1024">Kit</td> </tr> <tr> <td data-bbox="431 1024 997 1066">Faucet Aerator</td> <td data-bbox="997 1024 1273 1066">Kit</td> </tr> <tr> <td data-bbox="431 1066 997 1108">Low Flow Shower Head</td> <td data-bbox="997 1066 1273 1108">Kit</td> </tr> <tr> <td data-bbox="431 1108 997 1150">LED Night Light</td> <td data-bbox="997 1108 1273 1150">Kit</td> </tr> <tr> <td data-bbox="431 1150 997 1192">Educational Conservation Guide</td> <td data-bbox="997 1150 1273 1192">Kit</td> </tr> <tr> <td data-bbox="431 1192 997 1234">Installation Instructions</td> <td data-bbox="997 1192 1273 1234">Kit</td> </tr> </tbody> </table> <p data-bbox="431 1293 1511 1444">For simplicity, one kit is typically offered since most students do not know the home's domestic hot water fuel type and since gas thermal savings benefits may be considered. Appropriate net to gross ratios should be applied during program planning. Incentives and measures within the kit may be adjusted by the Program Administrator to reflect market conditions. Incentive budget can be used for cash and non-cash incentives.</p>		Measures	Incentive	13W CFL	Kit	Faucet Aerator	Kit	Low Flow Shower Head	Kit	LED Night Light	Kit	Educational Conservation Guide	Kit	Installation Instructions	Kit
Measures	Incentive															
13W CFL	Kit															
Faucet Aerator	Kit															
Low Flow Shower Head	Kit															
LED Night Light	Kit															
Educational Conservation Guide	Kit															
Installation Instructions	Kit															

Implementation & Delivery	<p>The implementation role of the Implementation Contractor includes program planning and design, kit supply, printed materials, program management, web page development and data reporting. Working with the Company, the Implementer will determine an outreach strategy in conjunction with the selected non-profit entities delivering the in-school component of the implementation. This resulting outreach strategy should gain approval from local authorities, as necessary. The in-school delivery component consists of a brief energy conservation tutorial to each class room and distribution of kits to students. In class room follow-up will continue to drive measure installation uptake in the home and to increase the Energy Smart presence in the schools in general.</p> <p>The kit should contain educational materials which teach both the student and the parent or adult guardian the importance of energy efficiency and conservation. The kit should also contain simple instructions at the student's level on how to install the measures. Appropriate safety warnings should advise the student to install measures with the help of a supervising adult. Installations are self-reported by the student or parent primarily online on an Energy Smart web page which displays updated energy and water savings totals in a way that children and adults can relate to. A paper reporting system may be offered as a secondary reporting vehicle. The program implementation should allow for competition between schools to occur.</p> <p>A Quality Assurance plan should emphasize preventing program issues using frequent reviews with the local non-profit delivery entities and with the school officials. Phone surveys should also be conducted by the Implementer to establish a sufficient characterization of participant satisfaction and simple correlation of measure installations reported online versus reported during the survey.</p>
Marketing	<p>There is no formal marketing necessary since the program relies on direct outreach to the school system officials. Albeit, the nature of the program's collateral offers branding opportunities for Energy Smart and the Company via kit labeling, educational materials, shirt logos of delivery personnel, and the web page.</p>
EM & V	<p>Program evaluation activities will most likely include verification of a statistically significant sample of participants based on number of tenant units via phone surveys. The final evaluation plan will be developed by the third party evaluation contractor in conjunction with the Company following the development of the final program implementation plan.</p>



	Year 1	Year 2	Year 3
Program Costs	\$ 205,280	\$ 195,280	\$ 196,280
Incentive Costs	\$ 98,280	\$ 98,280	\$ 98,280
Non-Incentive Costs	\$ 107,000	\$ 97,000	\$ 98,000
Gross Annual kWh Savings	1,311,660	1,311,660	1,311,660
Gross Annual kW Savings	101	100	100
TRC Test	1.45		
PAC Test	1.0		
Participant Test	13.48		
Net to Gross Ratio	0.27		
Utility Levelized Cost \$ / kWh	\$ 0.01		
Utility Levelized Cost \$ / kW	\$ 178.07		
No. of cust. in target group	4,200	4,200	4,200
Cumulative Participants	3,850	7,700	11,550
New Participants	3,850	3,850	3,850
Program Cost per Participant	\$53.32	\$50.72	\$50.98
NPV of Avg. Participant Savings	\$ 56		
Avg. Part. Simple Payback (Yrs)	0.1		
Lifetime Avoided CO2 (Tons)	11,924	11,924	11,924

Program	Residential Heating & Cooling Program					
Program Objective	The objective of the Residential Heating & Cooling Program is to generate energy and demand savings through both HVAC equipment replacements and tune-ups. This is accomplished by either improving the operating efficiency of the HVAC unit or replacing it with a higher rated efficiency unit. The program will work primarily through HVAC contractors and distributors.					
Design Summary	<p>The market barriers to achieving savings through high efficiency equipment and operational maintenance of residential units require a comprehensive program design to overcome. Barriers include:</p> <ul style="list-style-type: none"> <li>• Limited experience on the part of contractors with digital, diagnostic tune-ups based on refrigerant and air-side measurements.</li> <li>• Limited customer awareness on the availability and benefits of higher efficiency equipment.</li> <li>• Limited customer awareness of high efficiency tune-ups and that there are differences in rigor and benefits of high efficiency tune-ups.</li> <li>• Limited customer awareness on the comfort and humidity control benefits of properly-sized and maintained A/C units.</li> </ul> <p>This program will move the market to overcome these barriers through multiple means. First, cash incentives paid to contractors and customers will promote the purchase of high efficiency equipment and high efficiency tune-ups. Secondly, training delivered to contractors raises the local HVAC market's ability to perform proper tune-ups and installations. Thirdly, the program sets verifiable performance standards to ensure that contractors perform tune-ups that comply with industry best practices. This will help to ensure the realization of energy savings. Fourthly, education on energy savings provided to customers will inform their purchase decisions.</p> <p>The marketing collateral, outreach support, training, field data collection, and rebate application process should combine the equipment replacement and tune-up components such that contractors and customers experience one integrated HVAC program. Program measures include air-conditioning and heat pump DX units for both the replacements and the tune-ups. Tune-ups in this program require an M&amp;V savings approach to capture significantly more savings than standard deemed savings listed in the TRM. This achieves a more cost effective approach that also increases the skill set of the local HVAC contractor market.</p> <p>This program is the residential counterpart to the Small Commercial Program heating and cooling initiative. The two program initiatives combine efforts to train contractors, conduct quality control efforts, and process rebates to achieve economies of scale for program implementation and delivery. Combining HVAC equipment replacement measures and maintenance tune-ups across both sectors offers participating HVAC contractors a strong value proposition.</p>					
Target market	All single family, multi-family (individually metered) and mobile housing units in New Orleans with central air-conditioners or heat pumps. This constitutes a total unit population of 144,000.					
Eligible Measures & Incentives	<table border="1" data-bbox="511 1816 990 1900"> <tr> <td data-bbox="511 1816 998 1900">Measure</td> <td data-bbox="998 1816 1209 1900">Incentive PY1</td> <td data-bbox="1209 1816 1437 1900">Incentive PY2-PY3</td> </tr> </table>	Measure	Incentive PY1	Incentive PY2-PY3		
Measure	Incentive PY1	Incentive PY2-PY3				

Tune-Up, Residential	\$175	\$175
Tune-Up, Multi-family	\$100	\$100
A/C, 15 SEER	\$350	\$200
A/C, 16 SEER	\$425	\$225
A/C, 17 SEER	\$575	\$275
A/C, 18 SEER	\$625	\$300
Air Source Heat Pump, 15 SEER	\$400	\$300
Air Source Heat Pump, 16 SEER	\$475	\$325
Air Source Heat Pump, 17 SEER	\$625	\$375
Air Source Heat Pump, 18+SEER	\$675	\$400
Ductless Heat Pump		
Ductless Heat Pump		

Note: Incentives may be adjusted by the Program Administrator to reflect program design market conditions. Incentive budgets can be used for cash and non-cash incentives.

Tune-Up:

Those with units more than one year old which are verifiably operable are eligible for the tune-up and have not had a tune-up in the last five years that adjusted charge and airflow according to industry best practices.

At a minimum, the tune-up sub-measures should include provisions for the following:

- Filter replacement/cleaning
- Condenser coil cleaning
- Evaporator coil cleaning
- Blower cleaning
- Airflow measurement and adjustment
- Refrigeration charge measurement and adjustment

Equipment Replacement:

Units rated less than 13 SEER are eligible for equipment replacement until January 1, 2015, then less than 14 SEER beyond that date are eligible for replacement. All replacements are determined to be Replace On Burnout since Early Retirement HVAC replacement measures are not cost effective in this plan.

Market unit potential:

It is estimated there are between 5,000 and 6,500 units replaced each year in the territory. It is estimated there are 100,000 residential central A/C or heat pump units which qualify for a rigorous tune-up as specified above.

## Implementation & Delivery

Program implementation will need to include final program design, start-up of operations, marketing and outreach, retailer relationship management, incentive/rebate processing, customer service center, and program management and reporting.

This program includes a process to recruit, train and manage participating contractors. Recruiting includes leveraging local HVAC supply distributors and ACCA chapters through free program training sessions and printed collateral. Contractors must be certified in the standardized program tune-up procedure. A contractor performance standard and a dispute resolution process between implementer and contractor must be established that satisfactorily administers solutions to safeguard the program's integrity.

The program requires a tune-up approach that supports an M&V savings protocol. The tune-up M&V method must be IPMVP compliant using any option available in the standard. The tune-up should be more rigorous than the typical market tune-up and emphasize performance diagnostics relying on measured operational parameters of the unit. It should follow HVAC industry best practices. Contractors must provide their customer with a report stating tune-up results. Contractors must provide a "test-out" to verify the results of the tune-up's corrective actions.

Contractors may bring their own customers into the program or may provide services to customers that enter the program through the central call center. The program implementer will provide a customer intake mechanism whereby customers calling into a central call center get scheduled for a tune-up with a participating contractor. The implementer will manage this customer process through to completion of tune-up.

Regarding unit replacement measures, customers can only participate through a participating contractor. The Customer Call Center will answer customer questions and direct a customer to the list of participating contractors.

In general, program implementation and delivery strategies and tactics are subject to change pending the final implementation plan, which will be developed by the Company in conjunction with the selected implementation contractor.

Cash incentives are provided to the customer for those customers that come in through the central customer intake process, and provided to the contractor for those customers the contractor brings into the program.

The program design needs to take into account changing U.S. DOE standards starting on January 1, 2015 for A/C and heat pumps.. The program design will rely upon the tune-up measure to continue to drive a cost-effective program.

Marketing	<p>Marketing to HVAC contractors will involve a variety of strategies and tactics which may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Direct outreach and recruitment by program staff</li> <li>• Outreach through local ACCA chapter and distributors</li> <li>• Direct mail to contractors local offices</li> <li>• Program staff attending local trade shows in New Orleans</li> </ul> <p>Marketing collateral to contractors to support their sale of high efficiency equipment and in-program tune-ups may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Leave behind collateral</li> <li>• Approved logos and links for use on contractor websites</li> <li>• Yard signs</li> <li>• Door hangers</li> </ul> <p>Marketing to homeowners to drive participation into the Customer Call Center may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Bill stuffers</li> <li>• Social media</li> <li>• Local event booths and media signage in New Orleans</li> <li>• Company website videos</li> <li>• Online search engine advertising</li> </ul>
EM&V	<p>The independent evaluation approach will analyze tune-up M&amp;V data to identify meaningful statistical outcomes, and will check the application of deemed savings for equipment replacement installations. Interviews may also be conducted with contractors and customers in a process evaluation to establish the net-to-gross ratio.</p>

	Year 1	Year 2	Year 3
Program Costs	\$ 372,487	\$ 373,812	\$ 390,075
Incentive Costs	\$ 208,538	\$ 197,513	\$ 215,075
Non-Incentive Costs	\$ 163,950	\$ 176,300	\$ 175,000
Gross Annual kWh Savings	943,704	1,038,509	1,142,436
Gross Annual kW Savings	354	408	453
TRC Test	1.12		
PAC Test	1.45		
Participant Test	3.31		
Net to Gross Ratio	0.87		
Utility Levelized Cost \$ / kWh	\$ 0.03		
Utility Levelized Cost \$ / kW	\$ 71.02		
No. of cust. in target group	106,500	106,500	106,500
Cumulative Participants	1,315	2,630	3,945
New Participants	1,315	1,315	1,315
Program Cost per Participant	\$283.26	\$284.27	\$296.63

NPV of Avg. Participant Savings	\$ 453		
Avg. Part. Simple Payback (Yrs)	8.2		
Lifetime Avoided CO2 (Tons)	8,854	9,441	10,386

*Commercial & Industrial Program Descriptions*

Program	Small Commercial Solutions
Program Objective	The Small C&I Solutions program is designed to support small commercial customers with peak demand less than 100 kW in identifying and implementing cost-effective investments in energy efficiency.

Energy Smart will continue to run a program that offers incentives for measures that result in a verifiable electric usage reduction, focusing on prescriptive measures for which deemed savings area available through the New Orleans Deemed Savings, Installation and Efficiency Standards. This program will continue to offer the high levels of technical assistance that are provided with the current Energy Smart Small C&I program and have been effective in removing market barriers for small C&I customers. This includes providing facility assessments and customer education on the value of energy efficiency and form and function of energy efficient products. Incentives for program year 2013 will continue to be paid on a \$/kWh saved basis using program caps as warranted to ensure that program dollars are allocated across a large number of participants. The program will consider adopting prescriptive incentives (\$/lamp, \$/hp, or other \$/unit incentives) for common measures in order to simplify assignment of incentives in 2014 and 2105 program years. The program will continue to offer technical support and also develop and maintain a contractor network to provide additional outreach and customer participation.

The program is designed to minimize market barriers to energy efficiency implementation for small nonresidential customers. These include:

- Lack of energy efficiency information and awareness of energy and non-energy benefits
- The perception that energy efficient technologies have high “first costs”
- Lack of awareness of energy efficient technologies
- Lack of contractor interest in working with small customers
- Lack of tools and capacity to quantify savings
- Lack of access to capital
- Split incentives between owners and tenants in leased spaces

The following new initiatives will be added to the Small Commercial Solutions umbrella:

- Hospitality Initiative: This initiative will target market segments within the hospitality industry, however all small businesses meeting Small Commercial Solutions eligibility of 100 kW or less can participate. This initiative will focus on cost-effective technologies that will move small business customers to adopt non-lighting measures. This will require a market segmented approach, including market segmented collateral and options for direct installation of measures by program staff or contractors. The program will target hospitality and tourism markets such as hotels, motels, and restaurants; however the initiative will also be applicable to grocery and convenience stores.
- Commercial Heating and Cooling Initiative: This initiative will be implemented in conjunction with the Residential Heating & Cooling Program and will be applicable to DX systems 15 tons or less. This initiative will deliver significant energy and demand savings through both HVAC equipment replacements and tune-ups. This is accomplished by either improving the operating efficiency of the HVAC units or replacing them with higher rated efficiency units. The program will work primarily through HVAC contractors and distributors. See the Residential Heating and Cooling Program Summary for more details on this initiative.

At a high level, consistent messaging and participation processes across small business program initiatives will be of the utmost importance, as it is this consistency that will drive general awareness and ease of entry for the program. At the initiative level, the programs will focus on targeted messaging for specific market segments.



Target Market(s)

The target market for the program will be all Commercial, Industrial, and Municipal customers in Entergy New Orleans territory that fall under 100 kW peak demand threshold.

One sub-sector identified for the segmented approach is the hospitality sector which is vitally important to the New Orleans economy. Restaurants, grocery and convenience stores will also be good targets for this initiative.

The Small Commercial Heating and Cooling Initiative will be targeted to owners of buildings that have DX systems 15 tons or less.

NOTE: Eligible Measures and Incentive included in the table below offer representative measures and incentive rates that may be adjusted by the program implementer according to the final program design and objectives. Incentives shown are calculated based on \$/kWh incentives and savings per the New Orleans Deemed Savings, Installation and Efficiency Standards.

Eligible Measures & Incentives	Dual-Sided LED Exit Signs	\$ 20	Sign
	Lighting Controls	\$ 615	10,000 sq. ft.
	CFLs	\$ 20	Per bulb
	LED Screw-In	\$ 32	Per bulb
	Exterior Lighting	\$ 766	Per 10,000 sq. ft. interior
	Duct Sealing	\$ 170	Per tune-up
	Coil Efficiency	\$ 160	Per tune-up
	HE HVAC Equipment	\$ 4,600	Per ton
	Packaged Heat Pump/AC	\$ 285	Per unit
	ECM Motor (Refrigeration)	\$ 80	Per motor
	Door Gaskets	\$ 60	Per door
	Auto-closers for Walk-ins	\$ 120	Per door
	Evaporator Fan Controller	\$ 240	Per unit
	Anti-Sweat Heater Controls	\$ 95	Per unit
	Guest Room Occupancy Sensors	\$ 110	Per unit
	Aerators	\$ 12	Per unit
	Pre-Rinse Spray Valves	\$ 150	Per unit
	Energy Star Ice Machine	\$ 25	Per unit
	Commercial Kitchen Equipment	\$ 1,500	Per unit
	PC Power Management	\$ 12	Per PC and Monitor

As part of the program roll-out, the implementer will investigate the feasibility of offering direct install of free low-cost energy efficiency measures into customer facilities. Measures that will be reviewed as potential direct install measures include CFL and other low-cost lighting measures as well as low flow devices, vending misers, and low-cost refrigeration measures.

#### Hospitality Initiative

The hospitality initiative will include the following program design elements.

- Target marketing of a combination of lighting measures and cost effective, non-lighting measures that are relevant to the hospitality and tourism sectors.
- Program measures include refrigeration measures and HVAC tune-ups that are prevalent in the hospitality, restaurant, grocery and convenience sub-sectors.
- Incentive bonuses may be used to encourage contractors to offer and customers to install non-lighting measures.
- A program tool (on-site contractor channel) will be provided to participating contractors in order to provide on the spot opportunity assessments and project applications to customers, and streamline program participation by participating contractors.
- Incentives will be paid directly to contractors in order to reduce first cost to customer.

#### Commercial Heating and Cooling Initiative

This initiative will include the following program design elements. See the Residential Heating and Cooling Program summary for more details on program implementation and delivery.

- Deliver significant energy and demand savings for both HVAC equipment replacements and tune-ups together in one program cohesive with the Residential Heating and Cooling Program
- Deliver through the qualified contractor market channel. The approach of combining HVAC equipment replacement measures and maintenance tune-ups into one program offers local participating HVAC contractors a strong value proposition.
- Marketing collateral, outreach support, training, field data collection, and rebate application will be integrated for both the equipment replacements and the tune-ups in order to simplify participation and streamline program delivery.
- Program measures include air-conditioning and heat pump DX units replacements and tune-ups. As the A/C Tune-up program and market matures, the program needs to grow accordingly. The implementer will use an M&V savings approach for tune-up measures in order to capture significantly more savings than deemed savings allocated per the TRM.
- Incentives will be paid directly to contractors in order to reduce first cost to customer.

<p>Marketing</p>	<p>The Implementer will market this program to customers primarily through a qualified contractor network. Contractors will identify opportunities, communicate program participation requirements to customers, provide customers with project applications, and help customers enroll in the program to receive rebates, and ensure project completion. The program will reach out to additional upstream market actors and relevant trade associations to market the program. The program will recruit qualified contractors through information workshops, training seminars, participation in trade shows, and engagement with trade and business organizations. ENO's customer service staff will also be trained and available to assist with contractor recruitment and customer outreach. A program website will be used to promote the program as well and will include information for both contractors and customers. In order to promote a seamless set of program offerings, this program will support cross-referrals from other programs where appropriate.</p> <p>Marketing to contractors will involve a variety of strategies and tactics which may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Direct outreach and recruitment by program staff</li> <li>• Outreach through local trade ally associations</li> <li>• Program staff attending local trade shows, events, and association meetings</li> </ul> <p>Marketing collateral to contractors to support their sale of high efficiency equipment and in-program tune-ups may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Program marketing collateral</li> <li>• Attractive project applications produced through the program tool (Hospitality Initiative)</li> <li>• Approved logos and links for use on contractor websites</li> </ul> <p>Marketing to small business customers to drive participation into the Customer Call Center may include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Bill stuffers</li> <li>• Social media</li> <li>• Outreach through local business associations, meetings and events</li> <li>• Program website</li> </ul>
<p>EM &amp; V</p>	<p>The evaluation, measurement, and verification approach for this program should reflect the types of projects completed. To ensure that projects provide the expected savings, the evaluation approach should employ on and off-site verification assessments to confirm the measures are installed and used under conditions specified by the TRM, or any other agreed upon methodology.</p> <p>Evaluation activities should also assess assumed baseline conditions through contractor site assessments. Market and Program assessments should be conducted to establish the program element's efficacy.</p>

Small Commercial Solutions			
	Year 1	Year 2	Year 3
Program Costs	\$674,542	\$775,225	\$824,351
Incentive Costs	\$357,721	\$399,333	\$429,515
Non-Incentive Costs	\$316,822	\$375,893	\$394,836
Gross Annual kWh Savings	2,807,765	3,331,267	3,499,152
Gross Annual kW Savings	857	971	1,023
TRC Test	2.19		
PAC Test	2.65		
Participant Test	6.20		
Net to Gross Ratio	0.80		
Utility Levelized Cost \$ /	\$0.079	\$0.067	\$0.069
Utility Levelized Cost \$ / kW	\$2,829.67	\$2,464.62	\$2,618.78
No. of cust. in target group			
Cumulative Participants	193	386	579
New Participants	193	193	193
Program Cost per Participant	\$1022	\$1022	\$1022
NPV of Avg. Participant	\$16,549	\$21,089	\$24,502
Avg. Part. Simple Payback	2.39	2.22	2.21
Program Avoided CO2 (Tons)	998	1,158	1,269

Program	Large Commercial Solutions
Program Objective	The Large C&I Solutions program is designed to support larger commercial customers with peak demand greater than 100 kW in identifying and implementing cost-effective investments in energy efficiency. The program will promote both custom measures and measures that have savings deemed per the New Orleans Deemed Savings, Installation and Efficiency Standards.

Program  
Description

The program will continue and expand upon the current Large C&I Solutions program. The program will offer incentives for measures that result in a verifiable electric usage reduction as well as technical assistance in identifying and qualifying energy efficiency measures. Incentives will be paid on a \$/kWh saved basis using existing program caps. Incentives may be assigned from the customer to the contractor in order to reduce first cost to the customer. As an additional feature for eligible school and city accounts, the program will offer benchmarking and Energy Master Planning (EMP) services to encourage participation within these sectors. The program will consider expanding benchmarking and EMP services to other C&I customers for program years 2014 and 2015.

The program is designed to minimize market barriers to energy efficiency implementation for large nonresidential customers. These include:

- Lack of energy efficiency information and awareness of energy and non-energy benefits
- The perception that energy efficient technologies have high "first costs"
- Lack of awareness of energy efficient technologies
- Lack of easy access to qualified vendors and installers
- Absence of tools to quantify savings
- Lack of access to capital
- Split incentives between owners and tenants in leased spaces

The Large C&I Solutions program will offer all eligible customers comprehensive audits or studies to assist customers in identifying efficiency opportunities and analyzing associated costs and savings, and offer incentives to install custom measures and measures that are included in the New Orleans Deemed Savings, Installation and Efficiency Standards. The Large C&I program will also include technical assistance components to help customers in comprehensively evaluating energy efficiency opportunities, including retro-commissioning and M&V projects for large commercial and industrial facilities

Schools and Cities Initiative

The program implementer will provide benchmarking and Energy Master Planning (EMP) services for school and city accounts. These services will support school and city accounts in identifying and prioritizing energy improvements and creating a plan to achieve them.

The Schools and Cities Initiative will include technical assistance components to help customers in comprehensively evaluating energy efficiency opportunities, including:

- Benchmarking services and reports that include the collection of building characteristics, EPA Portfolio Manager score, ranking of buildings in portfolio in terms of energy usage and other metrics
- Energy Master Planning Services will be provided to school districts and city government in order to prioritize energy efficiency improvements and create a Energy Master Plan for improved energy management

Custom Initiative

The program implementer will provide pre-approval of measure and customer eligibility, and provide review and approval of claimed savings. Custom projects must be able to show specific and verifiable energy savings and costs and must be cost-effective to obtain program approval. Customer savings claims may be developed by a third-party engineering firm and will be subject to program measurement and verification activities.

Target Market(s)	This program will be available to all commercial, industrial and government customers with a peak demand of 100 kW or greater.
Eligible Measures & Incentives	<p>The program will offer the same stipulated measures as the small commercial program but with lower incentive rates. The program will also offer a Custom Initiative for Large C&amp;I customers interested in pursuing custom projects such as retrocommissioning, process efficiency improvements, and other customer measure installations that produce at least 100,000 kWh in savings.</p> <p>NOTE: Eligible Measures and Incentives included in the table below offer representative measures and incentive rates that may be adjusted by the program implementer according to the final program design and objectives.</p>
Implementation & Delivery	<p>The key elements of the implementation strategy include trade ally recruitment and management, customer recruitment, technical assistance, QA/QC review and training, project verification, and M&amp;V services.</p> <ul style="list-style-type: none"> <li>• Program offerings will be promoted to key trade allies (e.g., engineering firms, energy service providers, contractors) so they can promote participation to their customers. Participating contractors will be required to participate in training sessions regarding program incentives, participation processes and requirements, and eligible measures.</li> <li>• Customers will be recruited primarily through direct outreach activities to trade allies, program marketing and outreach activities, and referrals by ENO managed account representatives.</li> <li>• The program will provide both cost-sharing for facility assessment and engineering support to identify and assess the cost-effectiveness of energy savings opportunities not covered by Energy Smart prescriptive (deemed) incentives. In addition, program staff will guide customers and trade allies through the participation process to minimize confusion and barriers to participation. Incentive applications will be subject to a quality assurance review by program technical staff to ensure accuracy of gross savings and incentive calculations.</li> <li>• ENO reserves the right to site-verify installations prior to project approval and incentive payment. The program will also continue to proactively pursue innovative delivery strategies and new technologies and incentive structures to help keep the program relevant over time.</li> </ul> <p><u>Schools and Cities Initiative</u></p> <p>Program implementer will work with Entergy customer account managers to solicit school and city accounts motivated to improve the efficiency of their facilities to receive benchmarking and EMP services. Schools accounts will need to participate at the district level. This will provide school and city accounts customers with valuable information and insight into how their facilities are currently performing. These services will ensure that institutional customers understand their results and will work with these accounts to develop a plan that identifies the management practices and specific projects that will help them save money by using energy more efficiently among the portfolio of facilities they own and operate.</p> <p><u>Custom Initiative</u></p> <p>The program will encourage Large C&amp;I customers to consider performing custom projects that result in substantial energy savings (minimum 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&amp;V services or review as needed to verify measures savings. The program will provide technical support for large C&amp;I customers to identify energy waste and prioritize energy improvements, and further provide energy assessments, educational resources, and</p>

## Marketing

Customers will be recruited primarily through program marketing and outreach activities, direct outreach activities to trade allies, and referrals by Entergy managed account representatives.

The program will be promoted to key trade allies (e.g., engineering firms, energy service providers, contractors) so they can promote participation to their customers. Participating contractors will be required to participate in training sessions regarding program incentives, participation processes and requirements, and eligible measures.

Contractors will identify opportunities, communicate program participation requirements to customers, and help customers enroll in the program to receive rebates after projects are completed. In addition, other upstream market actors will be utilized to market the program (eg. trade and business groups, vendor organizations). Information workshops training seminars, participation in trade shows, and engagement with trade and business organizations will also be utilized to continue to recruit qualified contractors.

The program will work directly with customers to provide facility assessments and education to help customers understand the benefits of program participation, identify opportunities, and enroll in the program. A clear web presence will be required to promote the program as well and will include information for both contractors and customers.

Program marketing to Large C&I customers to drive participation will include:

- Direct program outreach

- Outreach and presentations through professional associations, meetings and events

- Program website

- Social media

Marketing to contractors will involve a variety of strategies and tactics will include:

- Direct outreach and recruitment by program staff

- Outreach through local trade ally associations

- Program staff attending local trade shows, events, and association meetings

- Providing Participating Contractors with Program Toolkits that include marketing collateral, tools, approved logos and links for use on contractor websites, and other resources for program participation

Marketing to Large C&I customers through Entergy Account Managers will include:

- Working with Entergy Account Managers to identify good program candidates

- Conference calls with customers to introduce them to the program

- Onsite customer meetings and presentations



EM & V

Evaluation should focus on custom projects, in particular, large projects with relatively high savings or greater uncertainty in calculated estimates. A rigorous evaluation protocol that includes pre and post inspection should be used. The use of International Performance Measurement & Verification Protocol (IPMVP) will be applied to selected samples that make up key portions of the program's gross energy savings projections. If IPMVP options are determined to be beyond the budget available or do not make sense given their cost for most projects, a statistically valid sample of projects can be evaluated, or thorough engineering reviews of project documentation and project information will be performed.

Feedback from participants, trade allies, program managers and Energy Account Representatives should be coordinated to evaluate program efficacy and identify recommendations for program improvements.

Large Commercial Solutions			
	Year 1	Year 2	Year 3
Program Costs	\$1,952,564	\$1,675,759	\$1,568,052
Incentive Costs	\$984,547	\$834,195	\$781,440
Non-Incentive Costs	\$968,017	\$841,565	\$786,612
Gross Annual kWh Savings	10,385,494	9,028,838	8,439,274
Gross Annual kW Savings	1,502	1,320	1,250
TRC Test	1.11		
PAC Test	2.6		
Participant Test	3.0		
Net to Gross Ratio	0.8		
Utility Levelized Cost \$ /	\$0.052		
Utility Levelized Cost \$ / kW	\$4,003.62		
No. of cust. in target group			
Cumulative Participants	59	118	177
New Participants	59	59	59
Program Cost per Participant	\$10,844	\$10,844	\$10,844
NPV of Avg. Participant	\$50,158	\$48,789	\$47,079
Avg. Part. Simple Payback	4.62	4.35	4.72
Program Avoided CO2 (Tons)	3,801	3,408	3,216

## Appendix B: Detailed Measure List

Program	Measure Name	#	Savings Character			Cost Character	
			EUL (yr.)	Energy Savings on peak (kWh)	Demand Savings (kW)	Incentive (\$/unit)	Equipment Cost (\$/unit)
Small C&I	Dual-Sided LED Exit Signs	490	16	157	0.019	\$ 19.63	\$ 20.00
Small C&I	Lighting Controls	28	8	4,905	1.168	\$ 613.10	\$ 1,760.00
Small C&I	CFLs	1,550	4	150	0.045	\$ 10.00	\$ 10.00
Small C&I	LED Screw-In	1,950	13	255	0.048	\$ 31.88	\$ 45.00
Small C&I	Exterior Lighting	6	8	6,131	0.000	\$ 766.37	\$ 1,580.55
Small C&I	Duct Sealing	65	15	990	0.901	\$ 168.30	\$ 500.00
Small C&I	Coil Efficiency	65	5	949	0.600	\$ 161.36	\$ 180.00
Small C&I	HE HVAC Equipment	12	15	26,994	7.820	\$ 4,588.98	\$ 5,398.80
Small C&I	Packaged Heat Pump/AC	14	10	1,665	0.975	\$ 283.05	\$ 1,200.00
Small C&I	ECM Motor (Refrigeration)	350	15	474	0.054	\$ 80.58	\$ 154.00
Small C&I	Door Gaskets	290	4	345	0.018	\$ 58.65	\$ 144.15
Small C&I	Auto-closers for Walk-ins	100	8	1,017	0.143	\$ 121.00	\$ 121.00
Small C&I	Evaporator Fan Controller	80	10	1,400	0.152	\$ 238.00	\$ 400.00
Small C&I	Anti Sweat Heater Controls	12	10	1,200	0.020	\$ 95.00	\$ 95.00
Small C&I	Guest Room Occupancy Sensors	6	15	650	0.136	\$ 110.50	\$ 237.00
Small C&I	Aerators	740	10	180	0.039	\$ 12.00	\$ 12.00
Small C&I	PRSVs	150	5	4,932	2.117	\$ 150.00	\$ 150.00
Small C&I	Energy Star Ice Machine	36	8	318	0.000	\$ 25.00	\$ -
Small C&I	Connectionless Steamer	8	12	38,081	6.497	\$ 1,500.00	\$ 1,500.00
Small C&I	PC Power Management	9	4	145	0.000	\$ 12.00	\$ 12.00
Small C&I	Dual-Sided LED Exit Signs	600	16	157	0.016	\$ 19.63	\$ 20.00
Small C&I	Lighting Controls	55	8	4,905	1.024	\$ 613.10	\$ 1,760.00
Small C&I	CFLs	1,950	4	150	0.040	\$ 10.00	\$ 10.00
Small C&I	LED Screw-In	2,295	13	255	0.042	\$ 31.88	\$ 45.00
Small C&I	Exterior Lighting	13	8	6,540	0.000	\$ 817.46	\$ 1,685.92
Small C&I	Duct Sealing	90	15	990	0.890	\$ 168.30	\$ 500.00
Small C&I	Coil Efficiency	90	5	949	0.593	\$ 161.36	\$ 180.00
Small C&I	HE HVAC Equipment	48	15	26,994	7.728	\$ 4,588.98	\$ 5,398.80
Small C&I	Packaged Heat Pump/AC	195	10	1,665	0.963	\$ 283.05	\$ 1,200.00
Small C&I	ECM Motor (Refrigeration)	0	15	474	0.054	\$ 80.58	\$ 154.00
Small C&I	Door Gaskets	3	4	345	0.018	\$ 58.65	\$ 144.15
Small C&I	Auto-closers for Walk-ins	0	8	1,017	0.143	\$ 121.00	\$ 121.00

Small C&I	Evaporator Fan Controller	0	10	1,400	0.152	\$ 238.00	\$ 400.00
Small C&I	Anti Sweat Heater Controls	0	10	1,200	0.020	\$ 95.00	\$ 95.00
Small C&I	Guest Room Occupancy Sensors	195	15	650	0.134	\$ 110.50	\$ 237.00
Small C&I	Aerators	1,100	10	180	0.034	\$ 12.00	\$ 12.00
Small C&I	PRSVs	3	5	4,932	1.855	\$ 150.00	\$ 150.00
Small C&I	Energy Star Ice Machine	6	8	318	0.000	\$ 25.00	\$ -
Small C&I	Connectionless Steamer	0	12	38,081	5.694	\$ 1,500.00	\$ 1,500.00
Small C&I	PC Power Management	150	4	145	0.000	\$ 12.00	\$ 12.00
Small C&I	Dual-Sided LED Exit Signs	510	16	157	0.020	\$ 19.63	\$ 20.00
Small C&I	Lighting Controls	20	8	4,905	1.234	\$ 613.10	\$ 1,760.00
Small C&I	CFLs	1,650	4	150	0.048	\$ 10.00	\$ 10.00
Small C&I	LED Screw-In	2,025	13	255	0.051	\$ 31.88	\$ 45.00
Small C&I	Exterior Lighting	9	8	6,131	0.000	\$ 766.37	\$ 1,580.55
Small C&I	Duct Sealing	135	15	990	0.933	\$ 168.30	\$ 500.00
Small C&I	Coil Efficiency	135	5	949	0.621	\$ 161.36	\$ 180.00
Small C&I	HE HVAC Equipment	24	15	26,994	8.096	\$ 4,588.98	\$ 5,398.80
Small C&I	Packaged Heat Pump/AC	195	10	1,665	1.009	\$ 283.05	\$ 1,200.00
Small C&I	ECM Motor (Refrigeration)	15	15	474	0.054	\$ 80.58	\$ 154.00
Small C&I	Door Gaskets	64	4	345	0.018	\$ 58.65	\$ 144.15
Small C&I	Auto-closers for Walk-ins	40	8	1,017	0.143	\$ 121.00	\$ 121.00
Small C&I	Evaporator Fan Controller	15	10	1,400	0.152	\$ 238.00	\$ 400.00
Small C&I	Anti Sweat Heater Controls	15	10	1,200	0.020	\$ 95.00	\$ 95.00
Small C&I	Guest Room Occupancy Sensors	195	15	650	0.141	\$ 110.50	\$ 237.00
Small C&I	Aerators	1,200	10	180	0.041	\$ 12.00	\$ 12.00
Small C&I	PRSVs	20	5	4,932	2.236	\$ 150.00	\$ 150.00
Small C&I	Energy Star Ice Machine	12	8	318	0.000	\$ 25.00	\$ -
Small C&I	Connectionless Steamer	6	12	38,081	6.862	\$ 1,500.00	\$ 1,500.00
Small C&I	PC Power Management	58	4	145	0.000	\$ 12.00	\$ 12.00
Large C&I	Dual-Sided LED Exit Signs	180	16	157	0.0176	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	1.1025	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,290	16	298	0.0428	\$ 29.78	\$ 100.00
Large C&I	HP T8s	3,429	15	67	0.0212	\$ 6.65	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1520	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	12	8	81,746	0.0000	\$ 8,174.64	\$ 21,073.94
Large C&I	Custom Lighting	4	10	168,916	29.9787	\$ 16,891.60	\$ 100,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	4.7880	\$ 3,391.84	\$ 4,239.80

Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	9	23	51,680	12.6000	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	150	10	1,665	0.9633	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	0	9	147,000	17.6400	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	2	9	147,000	17.6400	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	450	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	13	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	13	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	185	16	157	0.0164	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	54	8	4,905	1.0238	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,290	16	298	0.0398	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	113	0.0240	\$ 11.32	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1412	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	9	8	81,746	0.0000	\$ 8,174.64	\$ 21,073.94
Large C&I	Custom Lighting	7	10	168,916	27.8373	\$ 16,891.60	\$ 100,000.00
Large C&I	HE HVAC Equipment	6	15	21,199	4.7880	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	4	23	51,680	12.6000	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	90	10	1,665	0.9633	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	0	9	147,000	16.3800	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	2	9	147,000	16.3800	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	900	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	13	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	13	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	180	16	157	0.0107	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	0.6694	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,500	16	298	0.0260	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	110	0.0157	\$ 10.98	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.0923	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	11	8	81,746	0.0000	\$ 8,174.64	\$ 21,073.94
Large C&I	Custom Lighting	1	10	168,916	18.2013	\$ 16,891.60	\$ 100,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	4.3890	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	4	23	51,680	11.5500	\$ 8,268.80	\$ 87,500.00

Large C&I	Packaged Heat Pump/AC	240	10	1,665	0.8830	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	0	9	147,000	10.7100	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	6	9	147,000	10.7100	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	45	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	13	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	13	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	60	16	157	0.0197	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	1.2338	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,257	16	298	0.0479	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	152	0.0290	\$ 15.19	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1701	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	6	8	49,048	0.0000	\$ 4,904.78	\$ 12,644.37
Large C&I	Custom Lighting	6	10	101,350	20.1285	\$ 10,134.96	\$ 60,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	5.1300	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	10	23	51,680	13.5000	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	34	10	1,665	1.0321	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	0	9	147,000	19.7400	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	6	9	147,000	19.7400	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	30	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	35	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	30	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	126	16	157	0.0153	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	0.9581	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,257	16	298	0.0372	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	66	0.0225	\$ 6.60	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1321	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	6	8	61,310	0.0000	\$ 6,130.98	\$ 15,805.46
Large C&I	Custom Lighting	3	10	126,687	19.5397	\$ 12,668.70	\$ 75,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	4.0470	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	9	23	51,680	10.6500	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	12	10	1,665	0.8142	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	0	9	147,000	15.3300	\$ 2,205.00	\$ 17,640.00

Large C&I	RCx	0	9	147,000	15.3300	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	2,400	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	13	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	0	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	30	16	157	0.0202	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	1.2600	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	957	16	298	0.0490	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	166	0.0296	\$ 16.56	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1738	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	7	8	81,746	0.0000	\$ 8,174.64	\$ 21,073.94
Large C&I	Custom Lighting	10	10	168,916	34.2613	\$ 16,891.60	\$ 100,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	4.0470	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	3	23	51,680	10.6500	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	15	10	1,665	0.8142	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	2	9	147,000	20.1600	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	2	9	147,000	20.1600	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00
Large C&I	PC Power Management	30	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	0	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	0	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Dual-Sided LED Exit Signs	30	16	157	0.0202	\$ 15.70	\$ 20.00
Large C&I	Lighting Controls	34	8	4,905	1.2600	\$ 490.48	\$ 1,760.00
Large C&I	CFL Hardwired (Modular 36 W)	1,057	16	298	0.0490	\$ 29.78	\$ 100.00
Large C&I	HP T8s	4,500	15	166	0.0296	\$ 16.56	\$ 20.00
Large C&I	LED Traffic Lights	0	10	535	0.1738	\$ 53.50	\$ 60.00
Large C&I	Exterior Lighting	4	8	102,183	0.0000	\$ 10,218.30	\$ 26,342.43
Large C&I	Custom Lighting	5	10	211,145	42.8267	\$ 21,114.50	\$ 125,000.00
Large C&I	HE HVAC Equipment	0	15	21,199	4.0470	\$ 3,391.84	\$ 4,239.80
Large C&I	Centrifugal Chiller (0.51 kW/ton, 500 tons)	4	23	51,680	10.6500	\$ 8,268.80	\$ 87,500.00
Large C&I	Packaged Heat Pump/AC	0	10	1,665	0.8142	\$ 266.40	\$ 1,200.00
Large C&I	Process Improvements	6	9	147,000	20.1600	\$ 2,205.00	\$ 17,640.00
Large C&I	RCx	5	9	147,000	20.1600	\$ 2,205.00	\$ 17,640.00
Large C&I	Server Virtualization	0	4	20,781	2.3700	\$ 3,324.96	\$ 18,750.00

Large C&I	PC Power Management	0	4	145	0.0000	\$ 10.80	\$ 12.00
Large C&I	Evaporator Fan Controller	0	10	1,400	0.1520	\$ 224.00	\$ 400.00
Large C&I	Anti Sweat Heater Controls	0	10	1,200	0.0200	\$ 85.50	\$ 95.00
Large C&I	Exterior Lighting	15	8	122,620	0.0000	\$ 12,261.96	\$ 31,610.92
Large C&I	LED Traffic Lights	550	10	535	0.1285	\$ 53.50	\$ 60.00
HPwES	Air Sealing (900 CFM50 reduction)	1,019	10	455	0.441	\$ 300.00	\$ 350.00
HPwES	Duct Sealing	364	18	1,487	0.981	\$ 400.00	\$ 500.00
HPwES	Celing Insulation R0 to R30	218	20	3,470	0.826	\$ 350.00	\$ 1,370.00
HPwES	Celing Insulation R1-4 to R30	218	20	1,470	0.516	\$ 300.00	\$ 1,187.00
HPwES	Celing Insulation R5-8 to R30	218	20	770	0.252	\$ 200.00	\$ 1,110.00
HPwES	Celing Insulation R9-14 to R30	146	20	420	0.130	\$ 200.00	\$ 860.00
HPwES	Celing Insulation R15-22 to R30	146	20	200	0.063	\$ 175.00	\$ 620.00
HPwES	Wall Insulation to R11	146	20	770	0.571	\$ 250.00	\$ 2,000.00
HPwES	Floor Insulation to R19	146	20	120	0.184	\$ 200.00	\$ 1,480.00
HPwES	Pool Pump, variable speed	29	10	1,637	0.420	\$ 400.00	\$ 885.00
HPwES	Heat Pump Water Heater (2.0 EF)	291	13	1,132	0.130	\$ 600.00	\$ 910.00
HPwES	Solar Screens (E or W 15 sf window)	291	10	74	0.020	\$ 15.00	\$ 50.00
HPwES	Radiant Barrier	3	22	320	-	\$ 200.00	\$ 1,200.00
HPwES	CFL 13W (UNDER EISA 2007- 60 watts reduce in 2014)	18,624	6	27	0.003	\$ 3.00	\$ 3.00
HPwES	Water Heater Insulation (R-6.7 or higher)	0	13	55	0.010	\$ 70.00	\$ 70.00
HPwES	Pipe Insulation	655	13	40	0.004	\$ 15.00	\$ 15.00
HPwES	Faucet Aerator (<= 1.5 GPM)	1,164	10	50	0.004	\$ 6.75	\$ 6.75
HPwES	Low Flow Showerhead (<=2.0 GPM)	146	10	131	0.007	\$ 16.00	\$ 16.00
HPwES	Advanced Power Strip, 12 plug	703	3	121	0.017	\$ 20.00	\$ 20.00
HPwES	Audit	1,200				\$ 150.00	\$ -
Consumer Products	CFLs 15W (14W-18W) ENERGY STAR RATED	30,000	6	16	0.002	\$ 1.25	\$ 2.30
Consumer Products	CFLs 20W (19W-21W) ENERGY STAR RATED	12,000	6	26	0.003	\$ 1.25	\$ 2.30
Consumer Products	CFL 23W (22W-25W) ENERGY STAR RATED	7,000	6	30	0.003	\$ 1.25	\$ 3.30

Consumer Products	CFL 27W (26W-28W) ENERGY STAR RATED	0	6	43	0.004		\$ 3.30
Consumer Products	LEDs ENERGY STAR RATED Downlights	12,000	22	34	0.003	\$ 10.00	\$ 25.00
Consumer Products	LEDs ENERGY STAR RATED Downlights	16,000	22	48	0.004	\$ 10.00	\$ 26.00
Consumer Products	LEDs ENERGY STAR RATED Downlights	14,500	22	55	0.006	\$ 10.00	\$ 32.00
Consumer Products	LEDs ENERGY STAR RATED Downlights	7,400	22	64	0.006	\$ 10.00	\$ 37.00
Consumer Products	LEDs ENERGY STAR RATED A-lamp	6,000	22	18	0.002	\$ 8.00	\$ 18.50
Consumer Products	LEDs ENERGY STAR RATED A-lamp	5,000	22	27	0.002	\$ 8.00	\$ 23.50
Consumer Products	LEDs ENERGY STAR RATED A-lamp	5,000	22	35	0.003	\$ 8.00	\$ 28.50
Consumer Products	LEDs ENERGY STAR RATED A-lamp	5,000	22	48	0.004	\$ 8.00	\$ 38.50
Consumer Products	Room Air Conditioners < 6,000 BTUs ENERGY STAR RATED	0	9	135	0.054	\$ 35.00	\$ 50.00
Consumer Products	Room Air Conditioners 6,000- 7,999 BTUs ENERGY STAR RATED	975	9	158	0.058	\$ 35.00	\$ 50.00
Consumer Products	Room Air Conditioners 8,000 - 13,999 BTUs ENERGY STAR RATED	975	9	248	0.111	\$ 35.00	\$ 50.00
Consumer Products	Room Air Conditioners 14,000 - 19,999 BTUs ENERGY STAR RATED	1,025	9	384	0.150	\$ 50.00	\$ 50.00
Consumer Products	Room Air Conditioners > 20,000 BTUs ENERGY STAR RATED	1,025	9	538	0.257	\$ 50.00	\$ 50.00
Consumer Products	Advanced Power Strips 4 Plug	0	3	49	0.007	\$ 15.00	\$ 15.00
Consumer Products	Advanced Power Strips 7 Plug	0	3	87	0.012	\$ 15.00	\$ 20.00
Consumer Products	Advanced Power Strips 8 Plug	0	3	87	0.012	\$ 15.00	\$ 20.00



Consumer Products	Advanced Power Strips 10 Plug	0	3	87	0.012	\$ 15.00	\$ 20.00
Consumer Products	Advanced Power Strips 12 Plug	0	3	121	0.017	\$ 15.00	\$ 20.00
MF Wx	Air Sealing (500 CFM50 reduction)	1,782	10	253	0.245	\$ 200.00	\$ 200.00
MF Wx	Duct Sealing	445	18	804	0.530	\$ 300.00	\$ 300.00
MF Wx	Celing Insulation R0 to R30	45	20	3,470	0.826	\$ 400.00	\$ 1,370.00
MF Wx	Celing Insulation R1-4 to R30	45	20	1,470	0.516	\$ 400.00	\$ 1,187.00
MF Wx	Celing Insulation R5-8 to R30	45	20	770	0.252	\$ 400.00	\$ 1,110.00
MF Wx	Celing Insulation R9-14 to R30	0	20	420	0.130		\$ 860.00
MF Wx	Celing Insulation R15-22 to R30	0	20	200	0.063		\$ 620.00
MF Wx	CFL 13W (UNDER EISA 2007- 60 watts reduce in 2014)	7,860	6	27	0.003	\$ 5.00	\$ 5.00
MF Wx	Faucet Aerator, 1.0GPM, in unit	2,620	10	60	0.005	\$ 12.00	\$ 12.00
MF Wx	Low Flow Showerhead, 1.75 GPM, in unit	1,310	10	175	0.010	\$ 29.00	\$ 29.00
MF Wx	Advanced Power Strip, 7 plug	0	3	87	0.012	\$ 20.00	\$ 20.00
MF Wx	t12 4' 2 Lamp retrofit to t8 4' 2 lamp with ballast	0	15	70	0.013		\$ 60.00
MF Wx	t12 4' 4 Lamp retrofit to t8 4' 3 lamp with ballast	0	15	295	0.057		\$ 65.00
MF Wx	Occupancy Sensors under 500 W	0					\$ -
MF Wx	Daylight Sensor Controls (\$0.09 per sq ft)	0					\$ -
MF Wx	exterior lighting (70HPS down to 26W LED)	0	22	276	0.000		\$ 220.00
MF Wx	LED Exit Sign	0	15	353		\$ 105.00	\$ -
MF Wx	Beverage Machine Controls	0	5	1,432		\$ 218.00	\$ -
MF Wx	Beverage Machine Controls	0	5	1,801		\$ 225.00	\$ -
MF Wx	Beverage Machine Controls	0	5	1,633		\$ 233.00	\$ -
MF Wx	Beverage Machine Controls	0	5	1,931		\$ 240.00	\$ -
MF Wx	Beverage Machine Controls	0	5	1,526		\$ 248.00	\$ -
LI Audit & Wx	Air Sealing (900 CFM50 reduction)	300	10	455	0.441	\$ 200.00	\$ 200.00
LI Audit & Wx	Duct Sealing	300	18	804	1	\$ 300.00	\$ 300.00

LI Audit & Wx	Ceiling Insulation R0 baseline	75	20	3,470	0.826	\$ 1,370.00	\$ 1,370.00
LI Audit & Wx	Ceiling Insulation R1-4 baseline	75	20	1,470	1	\$ 1,187.00	\$ 1,187.00
LI Audit & Wx	Ceiling Insulation R5-8 baseline	75	20	770	0.252	\$ 1,110.00	\$ 1,110.00
LI Audit & Wx	Ceiling Insulation R914 baseline	30	20	420	0.130	\$ 860.00	\$ 860.00
LI Audit & Wx	Ceiling Insulation R15-22 baseline	30	20	200	0.063	\$ 620.00	\$ 620.00
LI Audit & Wx	Wall Insulation	45	20	770	0.571	\$ 2,000.00	\$ 2,000.00
LI Audit & Wx	Floor Insulation	45	20	120	0.184	\$ 1,480.00	\$ 1,480.00
LI Audit & Wx	Room A/C	60	9	248	0.111	\$ 50.00	\$ 50.00
LI Audit & Wx	CFL 13W (UNDER EISA 2007- 60 watts reduce in 2014)	1,800	6	27	0.003	\$ 3.00	\$ 3.00
LI Audit & Wx	Faucet Aerator	210	10	50	0.004	\$ 6.75	\$ 6.75
LI Audit & Wx	Low Flow Showerhead	105	10	131	0.007	\$ 16.00	\$ 16.00
LI Audit & Wx	Pipe Insulation	105	13	40	0.004	\$ 15.00	\$ 15.00
LI Audit & Wx	Radiant Barrier	0					\$ -
LI Audit & Wx	AC Tune-up, deemed	240	5	503	0.180	\$ 100.00	\$ 100.00
LI Audit & Wx	Audit	300				\$ 300.00	\$ 300.00
School Kits & Education	CFL 13W (UNDER EISA 2007- 60 watts reduce in 2014)	45,360	6	27	0.003	\$ 3.00	\$ 3.00
School Kits & Education	Faucet Aerator	22,680	10	50	0.004	\$ 2.00	\$ 2.00
School Kits & Education	Low Flow Showerhead	11,340	10	131	0.007	\$ 6.00	\$ 6.00
School Kits & Education	Advanced Power Strip, 7 plug	0	3	87	0.012	\$ 18.00	\$ 18.00
School Kits & Education	LED Night Light	22,680	10	4	0.000	\$ 2.00	\$ 2.00
Res Heating & Cooling	CoolSaver modeled tune-up, Res bldg	1,880	5	1,085	0.483	\$ 175.00	\$ 175.00
Res Heating & Cooling	CoolSaver modeled tune-up, small comm bldg	0	5	708	0.350	\$ 175.00	\$ 175.00
Res Heating & Cooling	CoolSaver modeled tune-up, MF	150	5	368	0.200	\$ 100.00	\$ 175.00

Res Heating & Cooling	EC Motor Retrofit Kit w/ Coolsaver tune-up	1	15	480	0.114	\$ 225.00	\$ 300.00
Res Heating & Cooling	Coolsaver modeled tune-up, school???	0	5	458	0.371	\$ -	\$ 160.00
Res Heating & Cooling	AC 15 SEER, ROB 2014	375	15	1,259	0.355	\$ 350.00	\$ 729.00
Res Heating & Cooling	AC 16 SEER, ROB 2014	510	15	1,501	0.475	\$ 425.00	\$ 1,146.00
Res Heating & Cooling	AC 17 SEER, ROB 2014	30	15	2,136	0.645	\$ 575.00	\$ 1,562.00
Res Heating & Cooling	AC 18 SEER, ROB 2014	15	15	2,291	0.665	\$ 625.00	\$ 1,981.00
Res Heating & Cooling	HP 15 SEER, ROB 2014	15	15	1,411	0.398	\$ 400.00	\$ 839.00
Res Heating & Cooling	HP 16 SEER, ROB 2014	15	15	2,046	0.408	\$ 475.00	\$ 1,319.00
Res Heating & Cooling	HP 17 SEER, ROB 2014	6	15	2,246	0.488	\$ 625.00	\$ 1,798.00
Res Heating & Cooling	HP 18 SEER, ROB 2014	6	15	2,610	0.688	\$ 675.00	\$ 2,278.00
Res Heating & Cooling	DHP (18 SEER, 9 HSPF) in 800 sf Addition	9	15	1,213	0.254	\$ 300.00	\$ 800.00
Res Heating & Cooling	DHP (18 SEER, 9 HSPF) in 800 sf Existing space	0	15	1,244	0.276	\$ 300.00	\$ 1,600.00
Res Heating & Cooling	DHP (18 SEER, 9 HSPF) in 800 sf Existing space	0	15	1,614	0.747	\$ 400.00	\$ 3,500.00



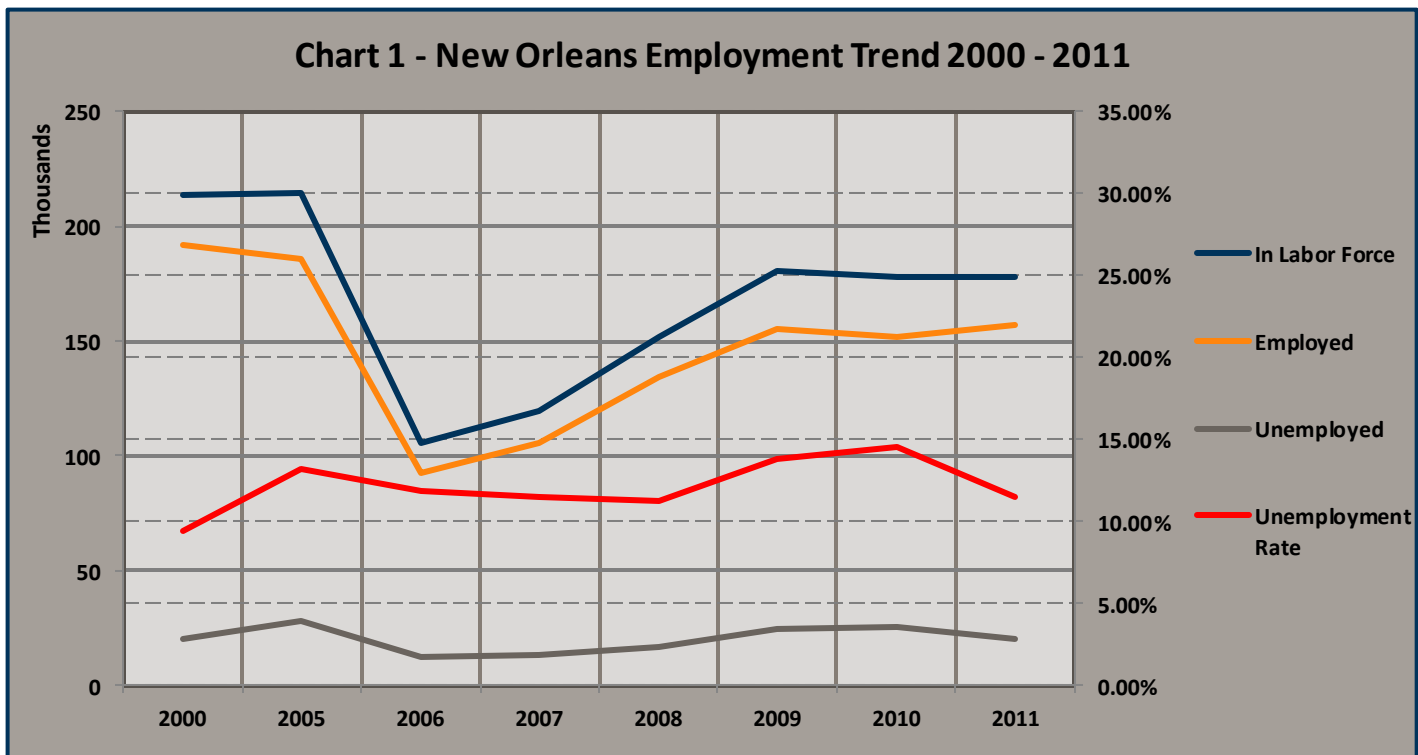
## Entergy New Orleans Market Profile

### Introduction

The market profiles below provide contextual information on Entergy New Orleans service territory for the development of electric efficiency programs. Beginning with an overview of the market as a whole, each sector is then examined individually, concentrating on pre and post-Katrina current customer count and usage data, electric end-use characterization, and regional employment and energy rate trends that may impact program design.

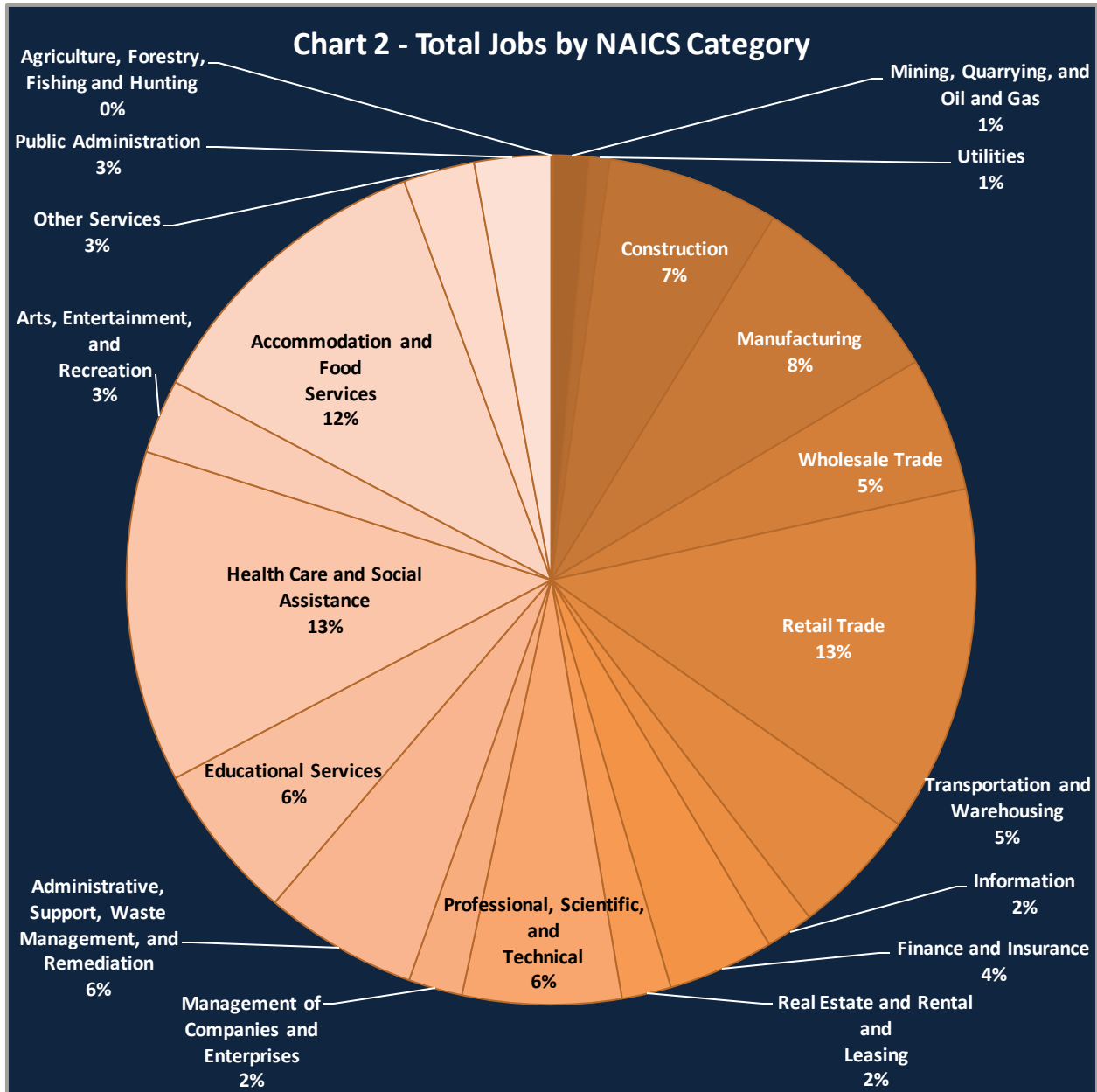
### Regional Employment Trends

Economic data that includes the Entergy New Orleans service territory indicate that the employment trends seem to be improving since Katrina, which is seen below in Chart 1. The chart displays census employment data from 2000 – 2011. Current levels of total labor force, and total employed individuals are still below pre-Katrina levels. New Orleans was experiencing steady growth in labor force from 2006 – 2009. Since 2009 total labor force has remained stagnant but 2011 experienced a significant decline in unemployment rate and therefore a positive growth in total employed.



While these general economic metrics indicate the substantial impact of the recent economic downturn on the metro area, the recent improvements are encouraging. With a stable or gradually improving economy, the current economic climate is not expected to impede the implementation of new efficiency programs.

In Chart 2 below, which was taken from Greater New Orleans Community Data Center (GNOCDC) provides a characterization of the Entergy New Orleans service territory job market by NAICS category. It indicates that the strongest categories are retail trade, health care and food service industries.



## Entergy New Orleans Customer Count & Sales

The following tables show the numbers of customers and annual sales and revenues across the sectors for the span of 2000 to 2011 for the service territory.

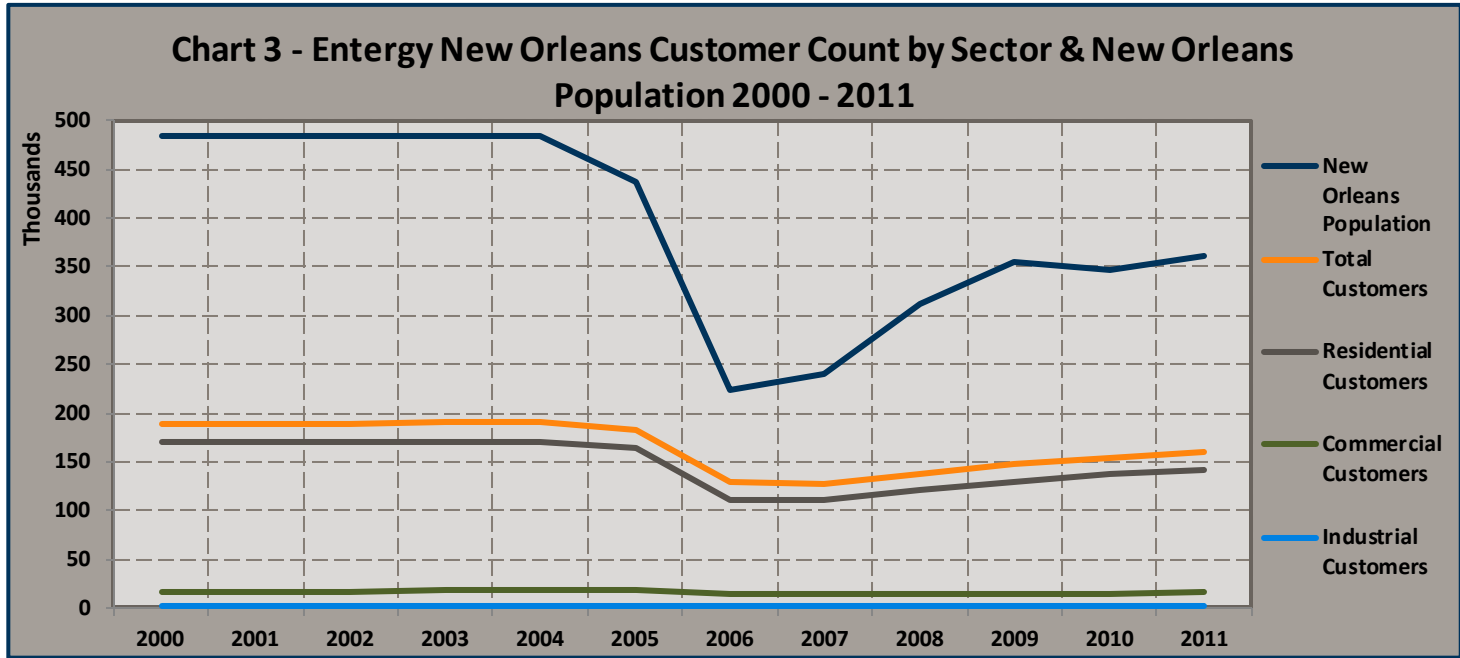


Chart 3 compares customer count data from EIA form 861 and census population levels and indicates that New Orleans population is still well below pre-Katrina levels, however total customer count has recovered 49.9% of the customers lost directly after Katrina, most of which are residential customers.

EIA form 861 revenue and MWH sales data has shown positive trends despite an incomplete recovery in customer base. Chart 4 shows that the residential sector in particular has surpassed pre-Katrina levels in revenue, nearly met the 2000 level and almost recovered completely in MWH sales. The commercial revenue and commercial MWH sales have both increased from 2000 levels as well.

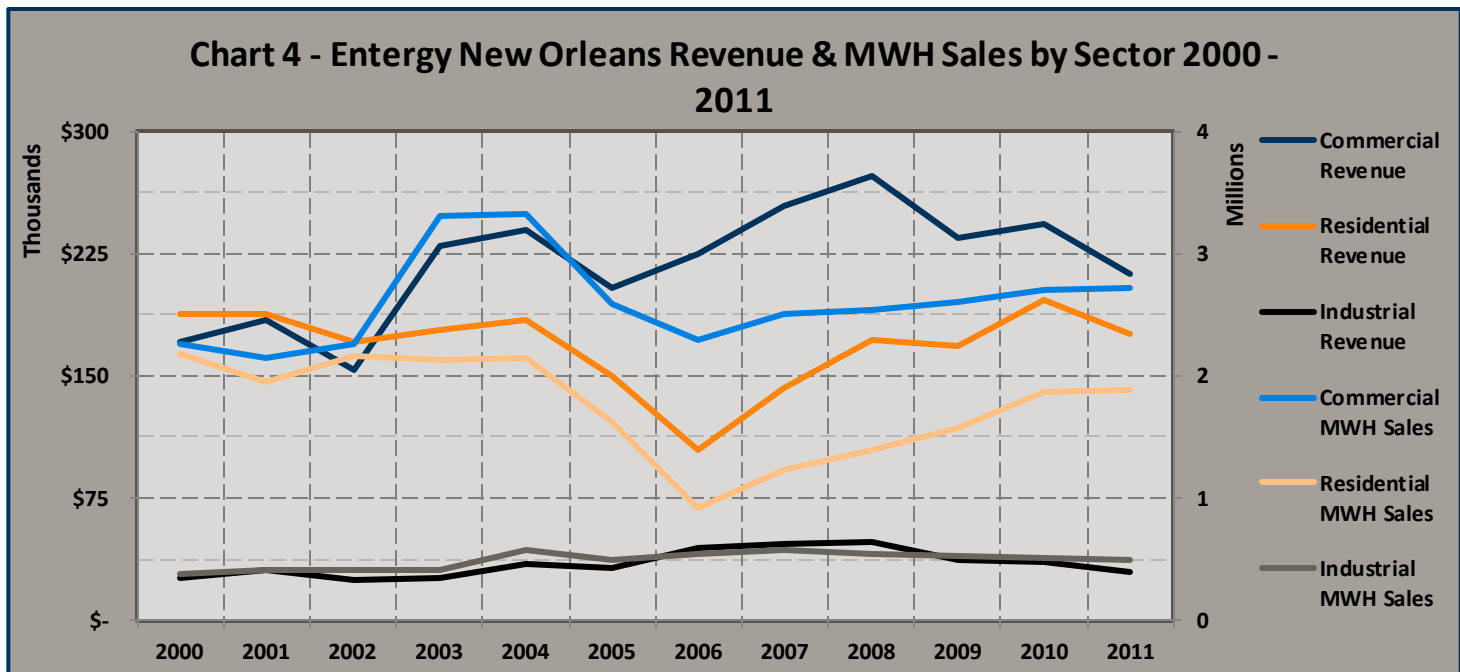
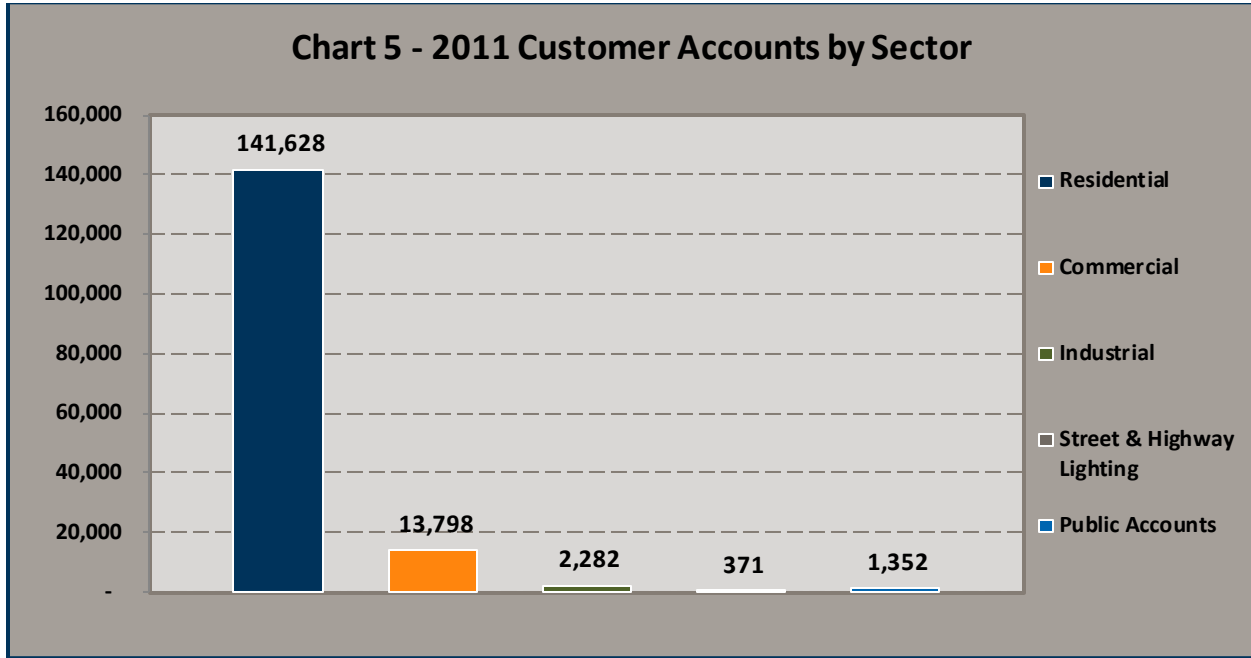


Chart 5 displays 2011 customer accounts by sector, the majority of which are made up of residential customers. The table below indicates that residential customers are 89% of Entergy New Orleans customer base.

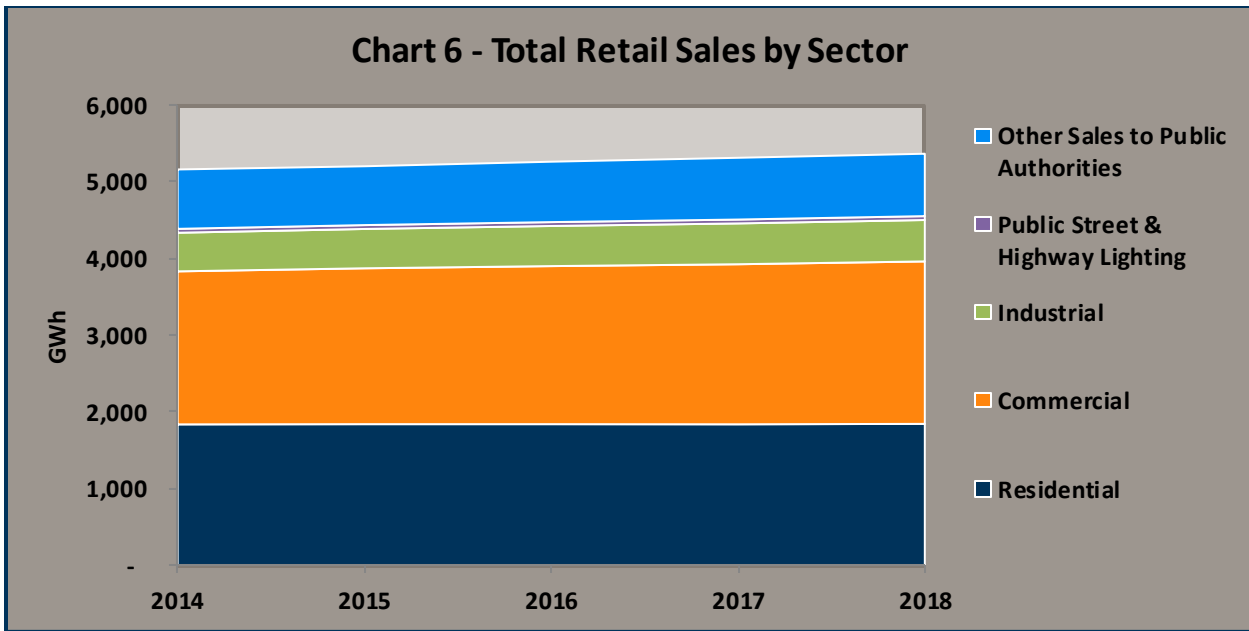


Customer Distribution by Meter Type	% of Customers
Residential	89%
Commercial	9%
Industrial	1%
Public Lighting	0%
Other Sales	1%

## Electric Trends

The following charts show the trend in electric sales. Chart 6 below shows roughly two thirds of sales are in the Commercial & Industrial sectors (including municipal accounts), with the remaining third is in Residential. The sales forecast also shows relatively consistent, but shallow overall growth during the next five years, until 2018.





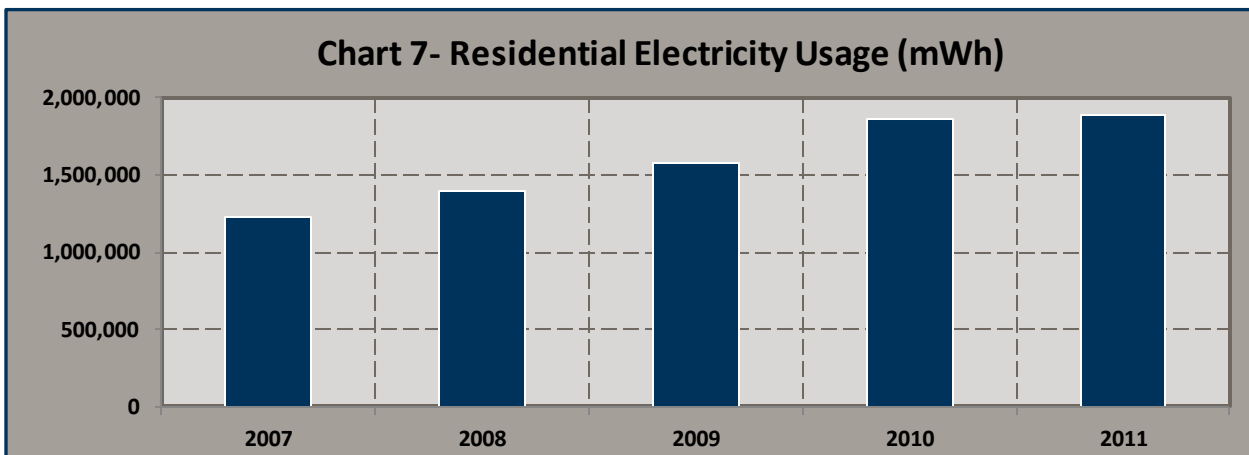
### Customer Counts

While residential accounts make up the overwhelming majority of total accounts, the residential sector accounts for roughly one third of total sales in Entergy New Orleans territory.

Customer Accounts by Sector	
Residential	141,628
Commercial	13,798
Industrial	2,282
Street & Highway Lighting	371
Municipal	1,352

### Residential Market Profile

#### Energy Consumption & Market Segmentation



The residential sector showed steady growth in electricity usage prior to 2010 but grew very little between 2010 and 2011, as shown in chart 7 above. The table to the right shows that the majority of residential meters are standard residential service.

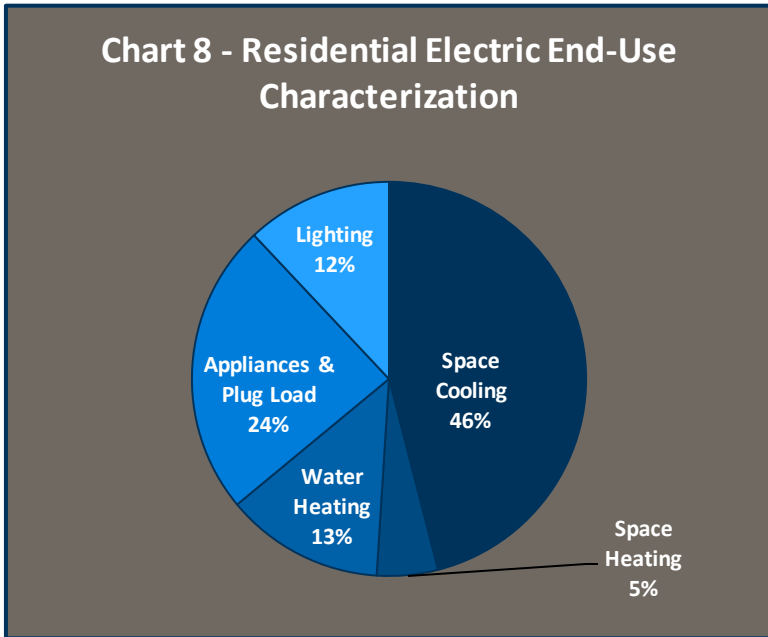


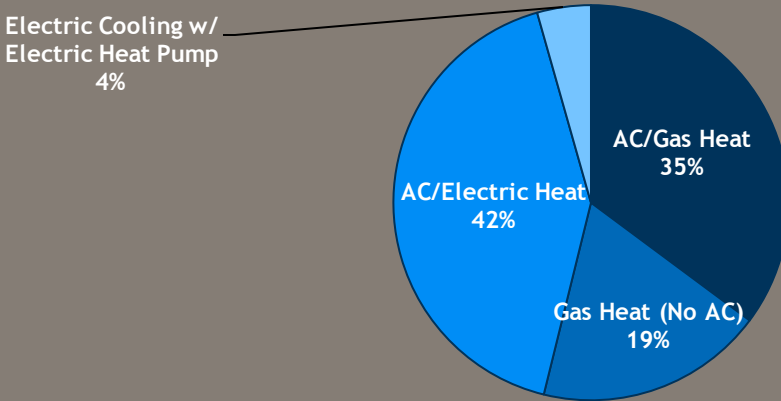
Chart 8 displays residential electric end-use data for the Entergy New Orleans service territory. Appliances and HVAC represent 75% of total energy, with lighting and water heating making up the remaining 15%. Space cooling represents the largest end-use demand with 46% of total energy use.

Residential Customers by Meter Type	
Residential Meter Type	Avg # of Customers
RES- Res Service	141,540
ODSL- Outdoor Direct Sec Light	69
ONW- Outdoor Night watchman	8
HPSV NW - Hi Press Sod Light	6
Miscellaneous	5
<b>TOTAL</b>	<b>141,628</b>

Residential Census Data	
Home Types (2011)	# of Customer
Single Family & Duplex	125,747
Multifamily	17,344
Mobile Home	1,445
<b>Total</b>	<b>144,537</b>

Chart 9 provides greater detail for residential space cooling end-use. 19% of the residential sector does not have AC and relies on gas for heating, in addition to another 35% of residents who do have AC and also use gas to heat their homes. The remaining 46% use electric as their heating/cooling fuel type.

**Chart 9 - Residential Cooling Types**  
*(AC indicates central units only)*



Data from the Census Bureau shows that the residential market is mainly characterized by single family and duplex residents at 87%. The remainder is mostly multi-family residences at 12%.

The table below provides 2011 FERC revenue and energy sales data for the residential sector by market segment. Single family and duplex residences represent the majority, at 87% of total energy consumption, consistent with the market segmentation in chart 11. It appears that the single family & duplex segment uses the most kWh per customer and therefore creates the most revenue, at \$0.08 per kWh sold of any of the market segments.

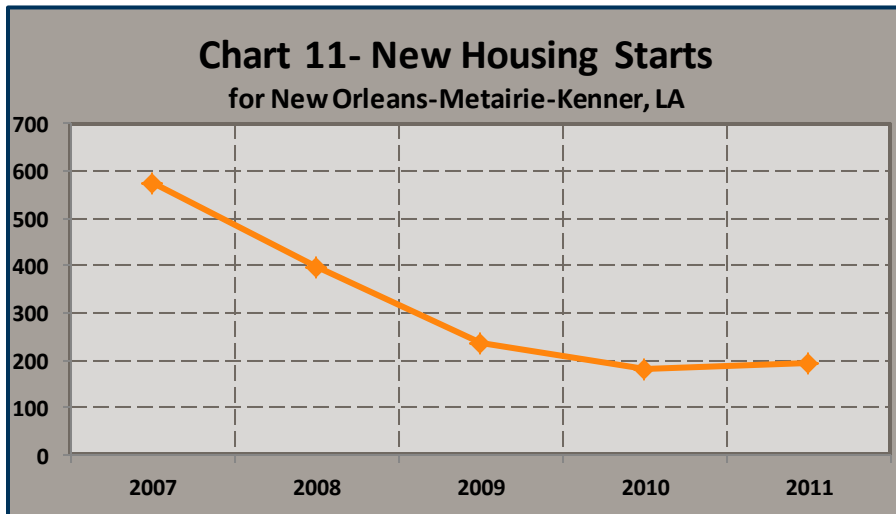
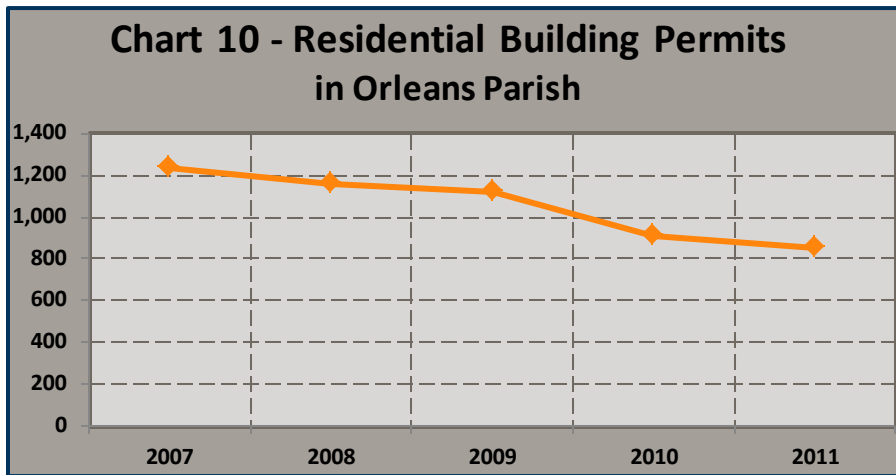
2011 FERC Data					
Market Segment	Total MWh Sold	Total Revenue by Market Segment	Average # of Customers	kWh per Customer	Revenue per kWh Sold
Total Residential Sector	1,866,348	175,699,764	141,540	13,186	\$0.09
Single Family & Duplex	1,623,723	152,858,795	123,140	11,472	\$0.08
Multifamily	223,962	21,083,972	16,985	1,582	\$0.01
Mobile Home	18,663	1,756,998	1,415	132	\$0.00

### Housing Market Growth

New housing starts in the New Orleans/Metairie/Kenner region were steadily declining in 2007-2009, but have begun a positive trend in 2010, as shown in chart 12. The new residential building permits issued in Orleans Parish have declined steadily since 2007 with little sign of slowing, as shown in chart 13.

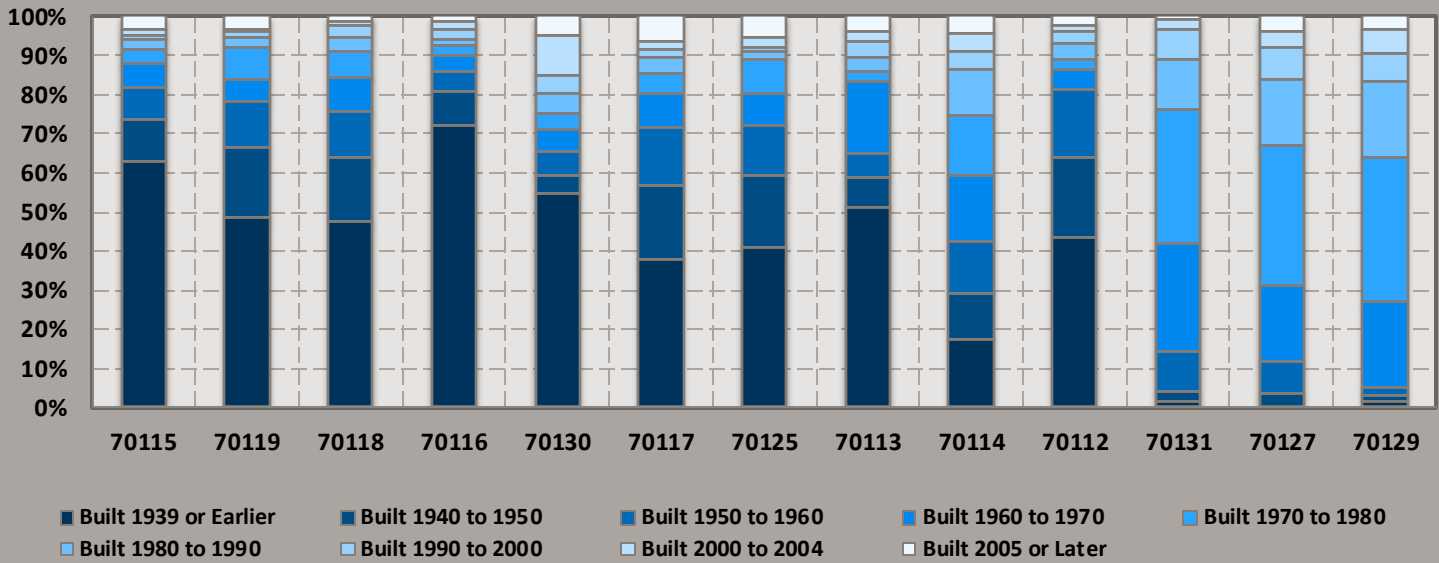
### Building Type Characterization

The two charts below show the heating fuel type and housing age distribution in New Orleans, by zip code. The data appears to show that in zip codes where there are a majority of buildings built before 1940, gas is the primary fuel type, whereas zip codes with many houses built after 1970, there is more electric fuel being used.

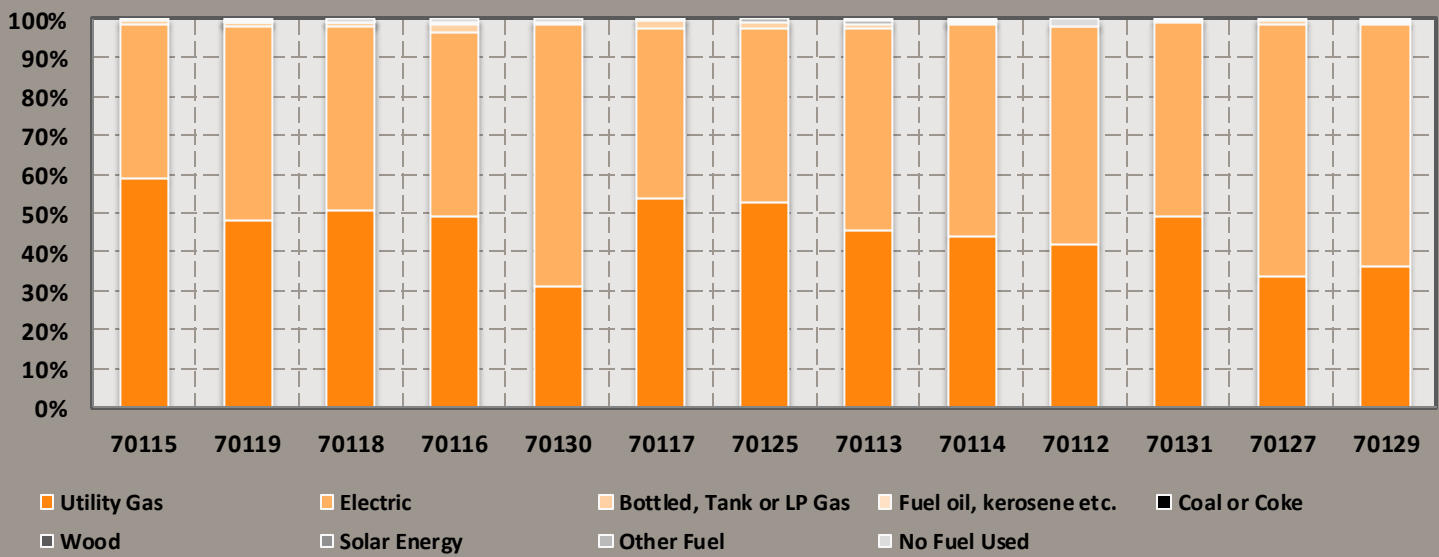


In Chart 12 and 13, CLEAResult pulled Census Bureau data to determine the housing age distribution by zip code. Although it is a fairly comprehensive data set, it is important to note that not all zip codes provided data, and in some cases were null.

### Chart 12 - New Orleans Housing Age Distribution by Zip Code



### Chart 13 - New Orleans Heating Fuel Type Distribution by Zip Code



## Appliance Saturation Rates

In 2009, GCR Associates was contracted by Entergy New Orleans to complete a Residential Appliance Saturation Survey (RASS)<sup>1</sup> as a part of a larger baseline assessment for the residential sector. While the results of this are nearly five years old, it is the most recent published data set for the region.

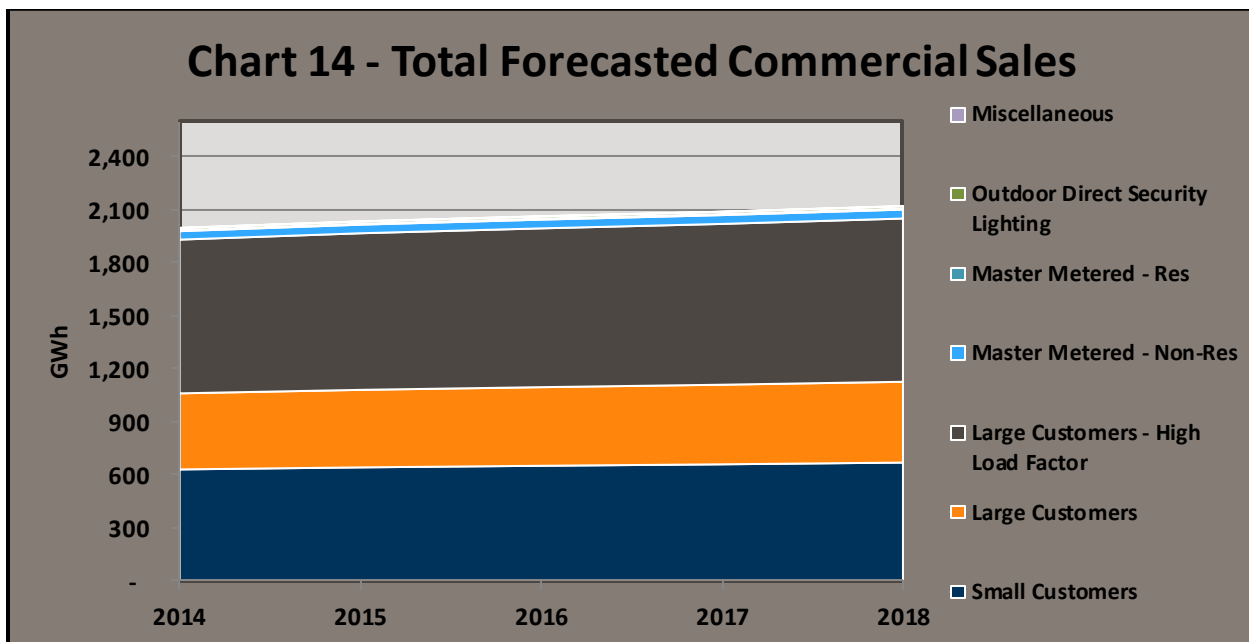
The study found that in the post Katrina period, average household energy use has declined by about 9% when compared to pre-Katrina patterns. The greatest reductions in energy use are recorded in neighborhoods that were heavily flooded. New building codes and the replacement of older appliances with newer more efficient models have resulted in lower levels of energy consumption in the post Katrina era. This implies that the flood spurred a large onset of appliance replacements.

## Commercial and Industrial Market Profile

The following tables show electric sales and customer account data for a five year period beginning in 2014. The C&I Section also include municipal accounts. Accounts are ordered by rate class, the two main categories being small and large, which are separated by those under and over a 100 kW threshold respectively. The remaining rate classes are for high-usage customers, various end-use specific rate classes (e.g. security lighting), master metered spaces, and other miscellaneous categories.

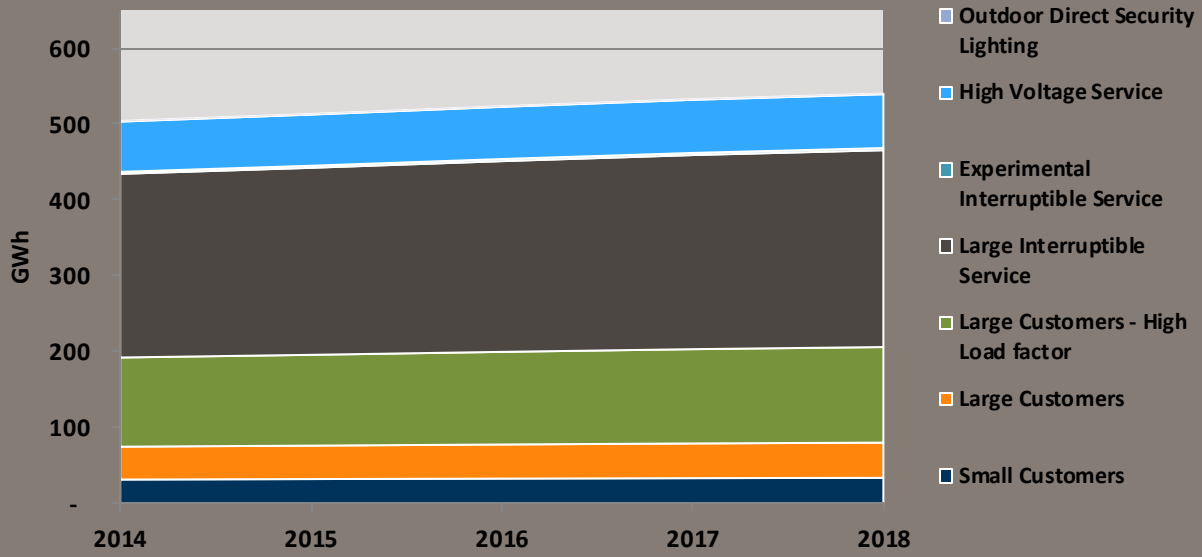
### Forecasted C&I Customer Sales

In all three sectors, large customers account for the majority of sales, and the majority of growth in sales. These forecasts are made absent the effects of DSM. [Source: 2012 ENO IRP and ENO FERC Form 1]

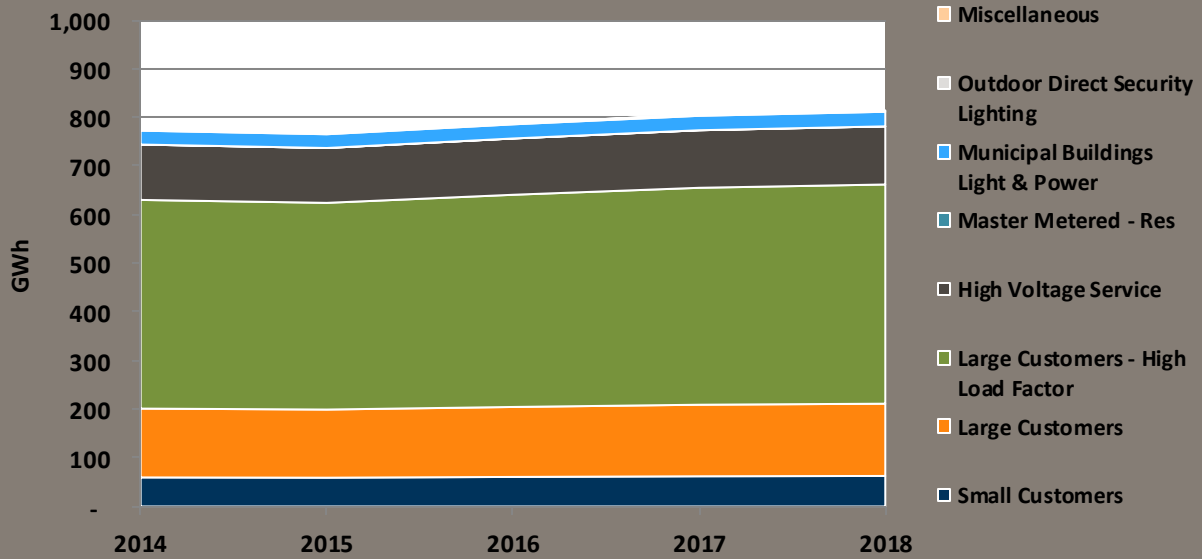


<sup>1</sup> GCR & Associates, Energy Baseline for Entergy New Orleans, Inc.'s Residential Customers, Appendix 1

### Chart 15 - Total Forecasted Industrial Sales



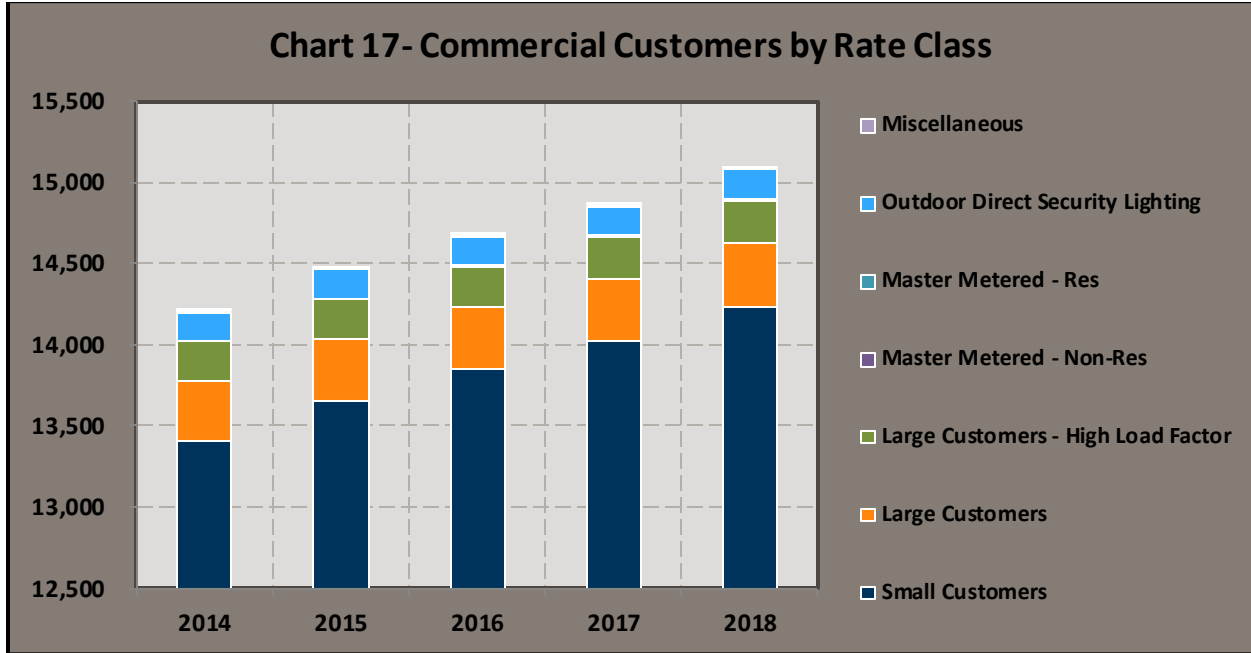
### Chart 16 - Total Forecasted Municipal Sales



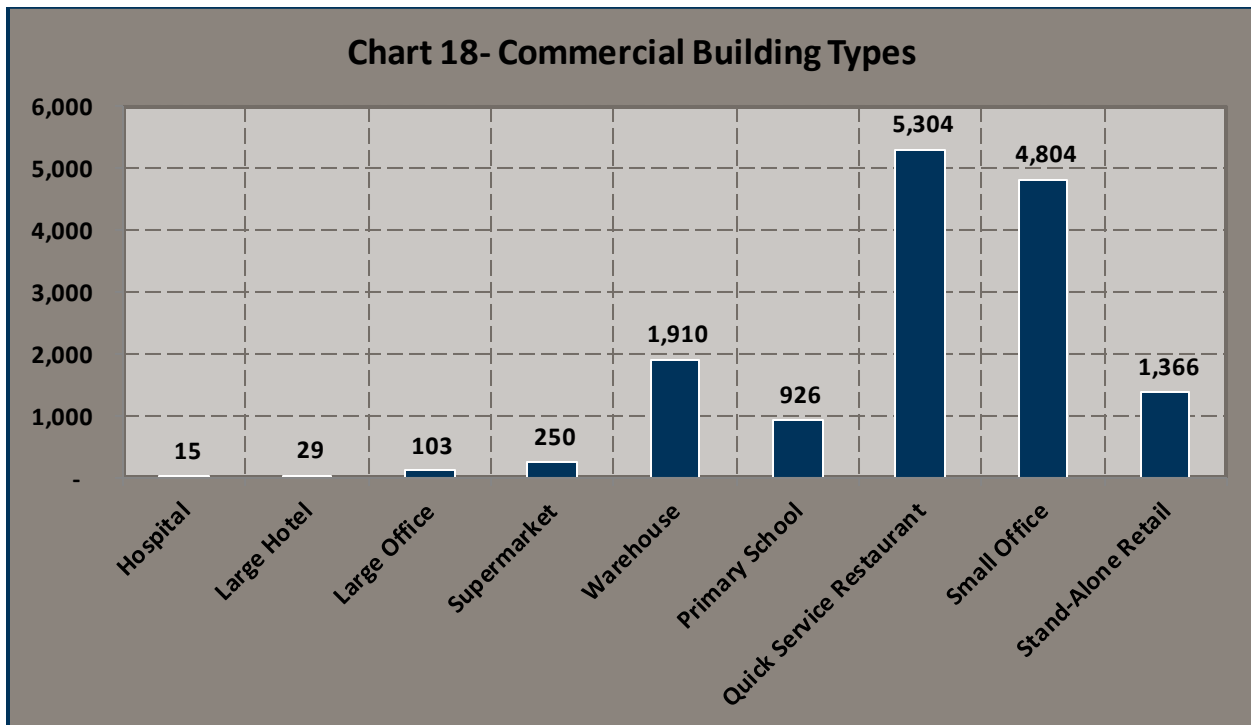
### Building and Account Types

While the majority of sales are accounted for by large customers, the majority of building space is occupied by small customers. Schools and warehouse space are the two largest customer types among the large accounts, while restaurants, office and retail account for the overwhelming majority of small accounts.

## Commercial



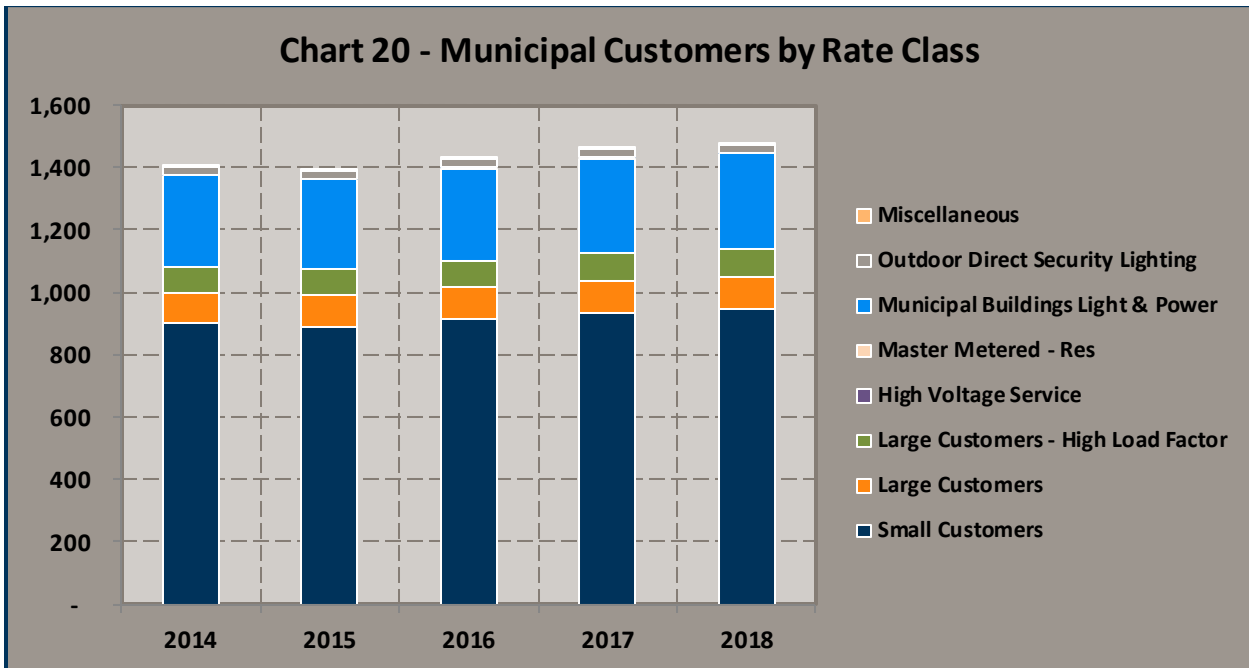
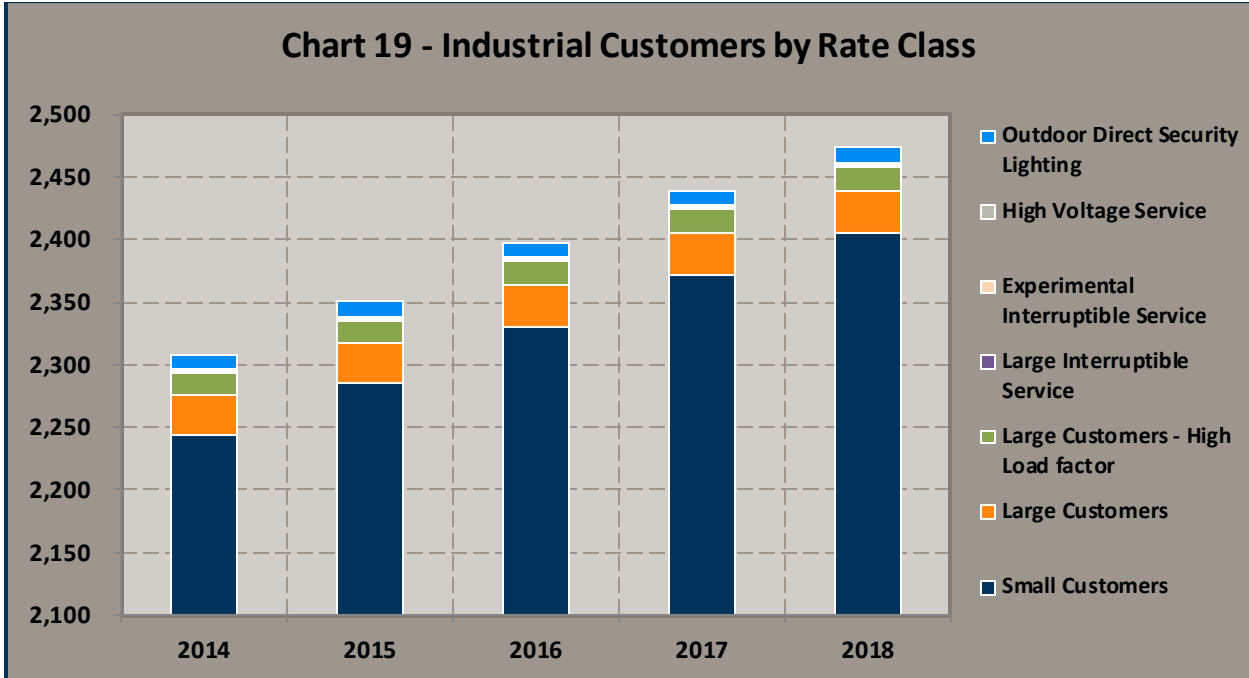
Source: ENO FERC Form 1



Source: Appendix B, 2012 ENO Potential Assessment



## Industrial

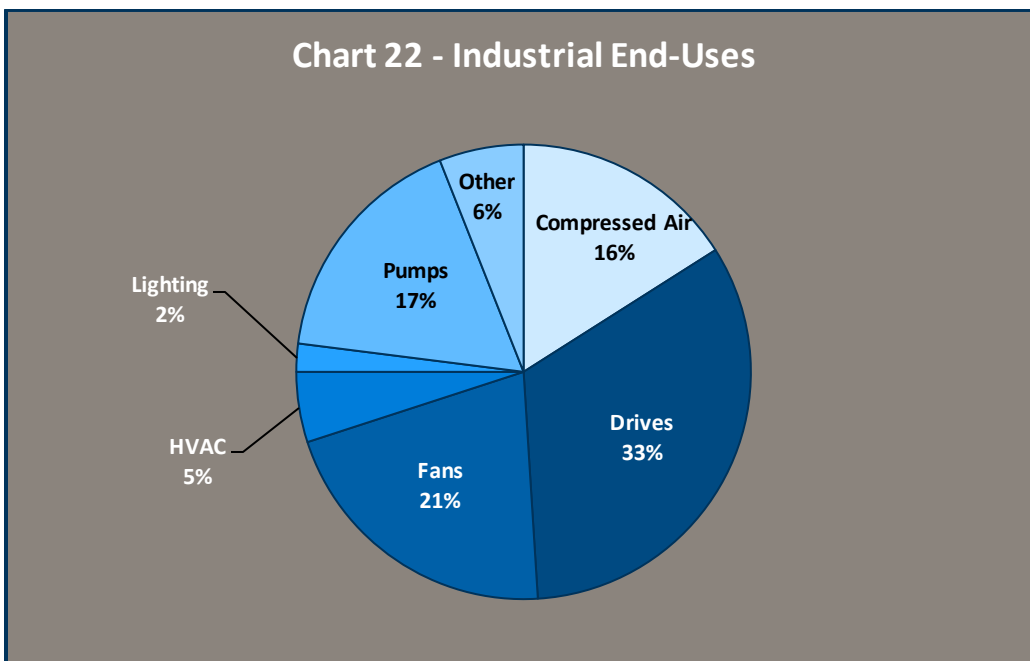
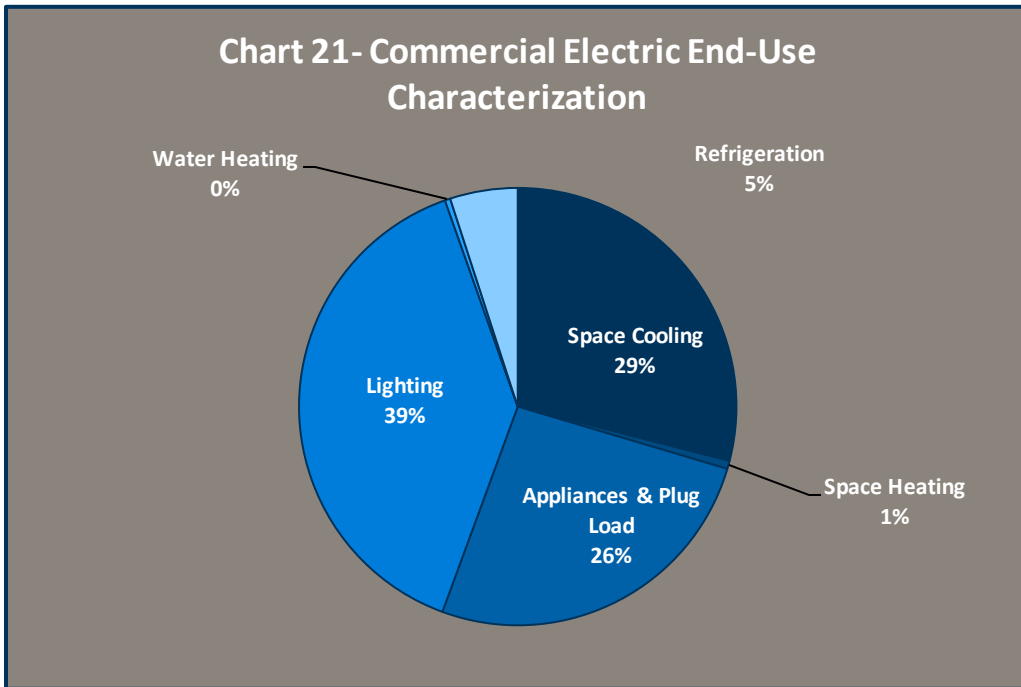


Source: Both charts above were derived from ENO FERC Form 1

## End-Use Characterizations

The following tables show the breakdown of energy sales by end-use energy type. While the majority of energy use in commercial buildings is accounted for by lighting, cooling and appliance & plug load are also significant end-uses. In industrial space, the majority of end-use energy is accounted for by process, and the following chart breaks down process into specific process power types. Drives account

for the majority of end use energy, while fans, pumps, and compressed are also significant end-uses. [Source: Both charts below were derived from the 2012 IRP, Appendix B Potential Study]



## Appendix D: Best Practices Review

To better understand how the Entergy New Orleans DSM Plan compares with other utility DSM portfolios, as well as the industry as a whole, CLEAResult collected data on program portfolio performance and spending for a sample of 12 utilities. The analysis reviewed utilities with comparable customer counts and sales, neighboring utilities for a regional comparison, and additional utilities located in developed energy efficiency markets. The ENO DSM portfolio was compared against these utilities in terms of its economic efficiency (\$/kW, \$/kWh), equitability (\$/customer), and sophistication (program types offered).

The following figures summarize the overall results of this analysis.

**Table 1: Best Practices Review - Utility Sample**

Best Practices Review – Utility Criteria		
Utility	Location	Type
CenterPoint	TX	Regional Comparison
AEP-TCC	TX	Regional Comparison
ConEd	NY	Advanced Market
Connecticut Light & Power	CT	Advanced Market
Duquesne Light Company	PA	Comparable Size
NYSEG	NY	Advanced Market
NYSERDA	NY	Advanced Market
Oncor	TX	Regional Comparison
PG&E	CA	Advanced Market
SDG&E	CA	Advanced Market
United Illuminating Company	CT	Comparable Size

Overall program offerings were benchmarked against the utility sample to assess the extent to which the portfolio offerings matched industry best practices. Our analysis confirmed that the ENO plan offerings are comparable with those offered in more mature markets and in some cases are more comprehensive.

**Table 2: Matrix of Program Benchmarks**

ENO Program Portfolio	PG&E	SDG&E	NYSERDA	Oncor	AEP - TCC	CL&P	United Illuminating	CNP	ConEd	Duquesne Light	NYSEG
Residential Consumer Products	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Residential Heating & Cooling	✓	✓	✓	✓	✓			✓	✓		
Multi-Family Weatherization	✓	✓	✓						✓		
Low Income Audit & Weatherization	✓	✓	✓	✓	✓	✓	✓	✓		✓	

Home Performance With ENERGY STAR	✓	✓	✓	✓		✓	✓	✓			
Energy Efficient New Homes	✓	✓		✓	✓	✓	✓				
Small Commercial Solutions	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Large Commercial solutions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Data on planned spending and savings for the comparable set of planning years (2014 – 2017) is challenging to find as many utilities are currently in the process of developing or refining their DSM plans. For those utilities for which data was available, the following tables outline the overall comparison of the ENO portfolio. The data included in this analysis represents future intended investments for comparable planning period (2014-2017); due to the ENO program year cycle, the charts have represented this data as Yr. 1 (ENO 2014 – 2015), Yr. 1 (ENO 2015 – 2016) and Yr. 3 (ENO 2016-2017)

Chart 1: Residential Forecasted \$/kWh

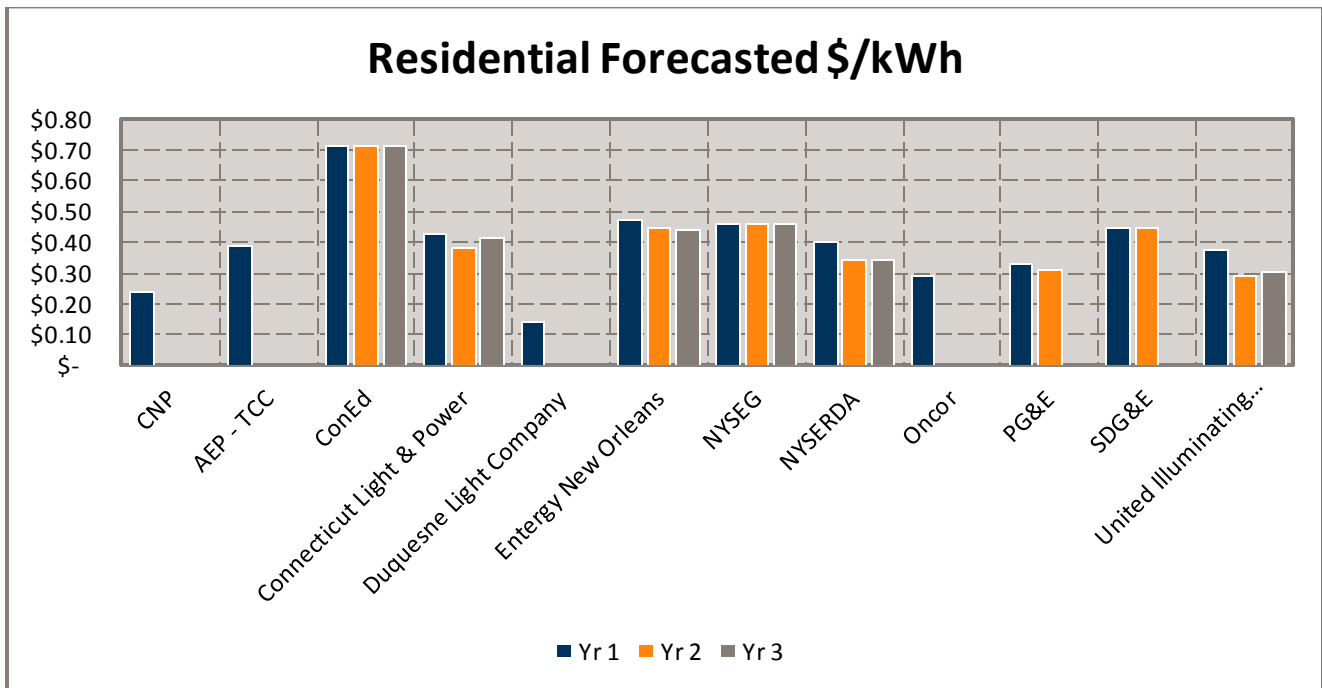


Chart 2: Commercial Forecasted \$/kWh

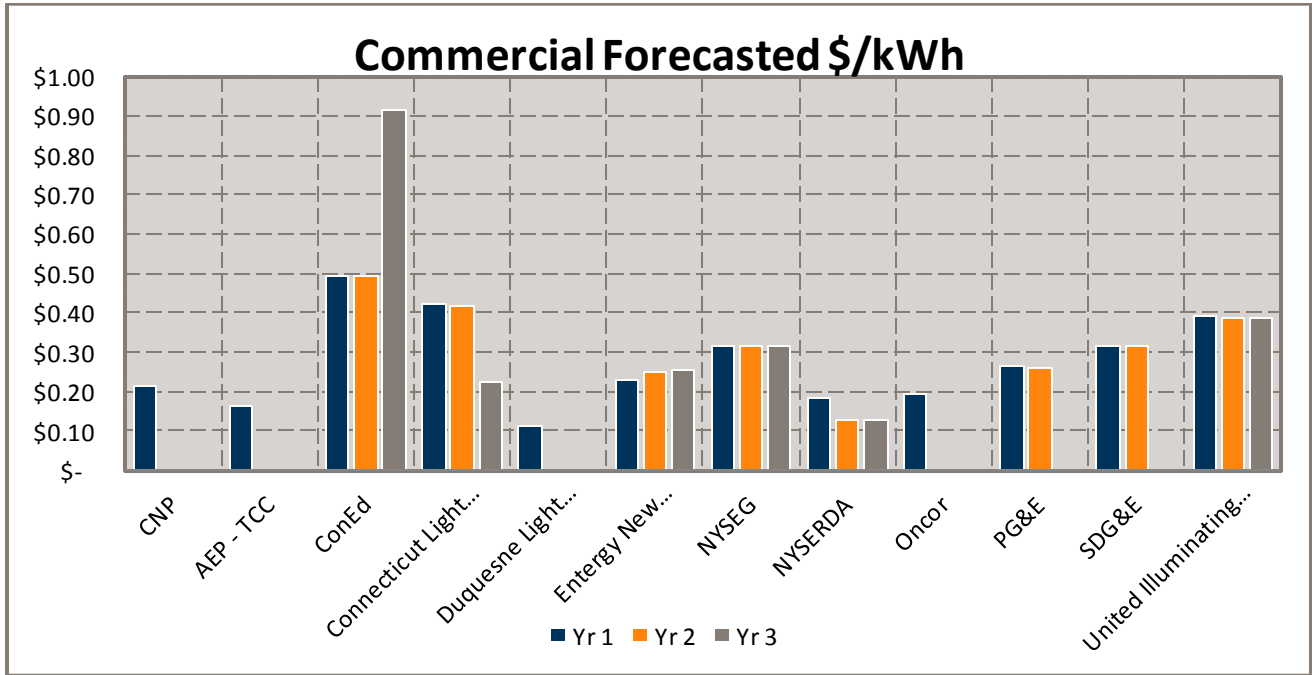


Chart 3: Residential Forecasted \$/kW

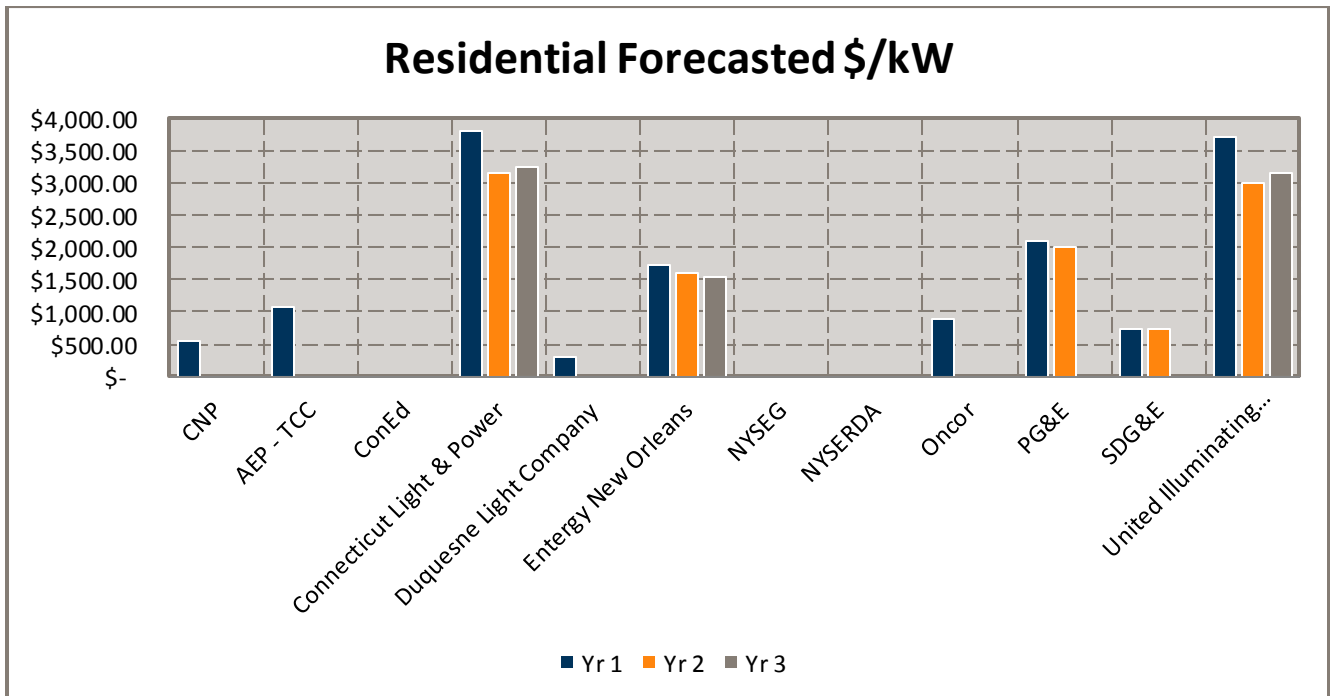


Chart 4: Commercial Forecasted \$/kW

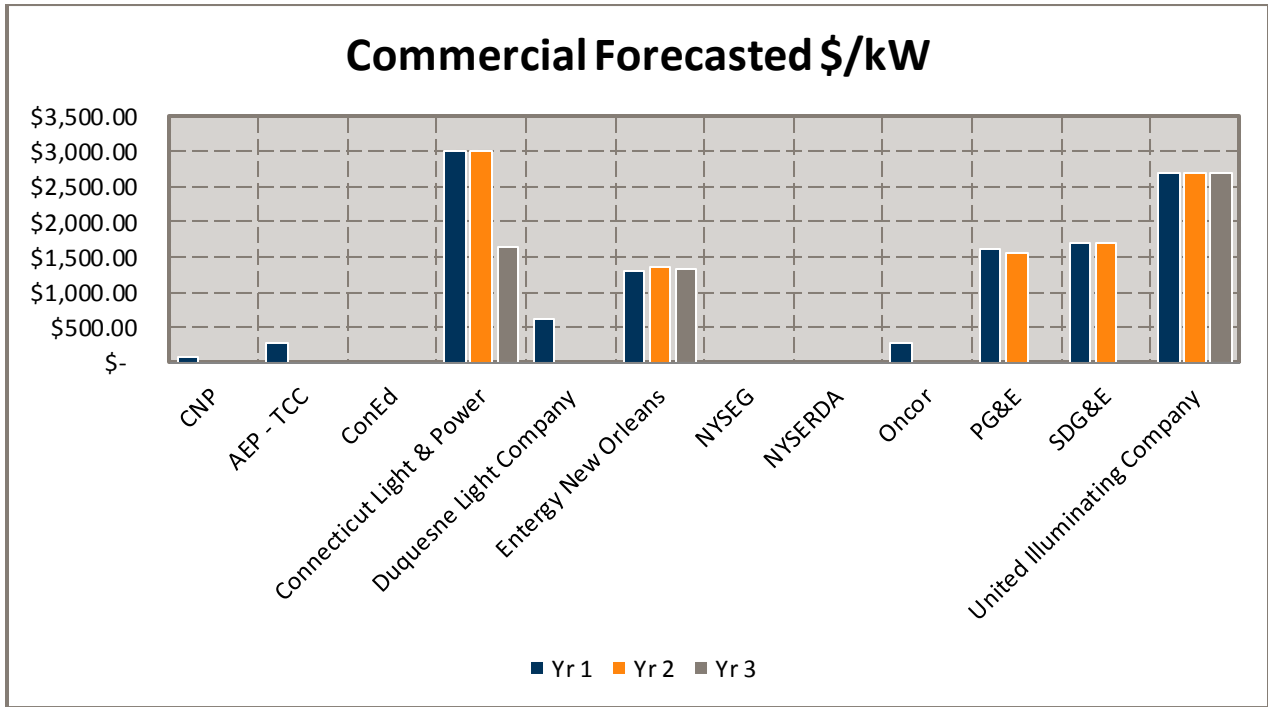


Chart 5: Residential Forecasted \$/Customer

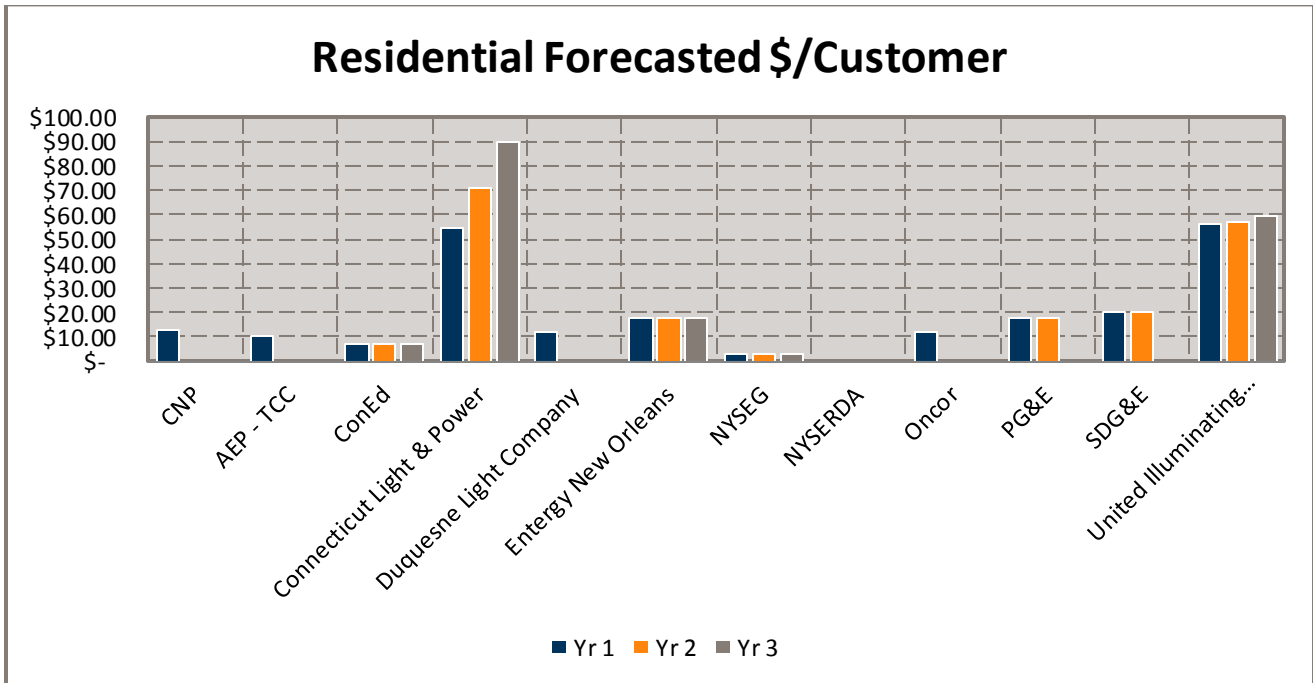


Chart 6: Commercial Forecasted \$/Customer

