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Harry M. Barton
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December 9, 2019

Via Hand Delivery
Lora W. Johnson, CMC, LMMC
Assistant Clerk of Council
Room 1E09, City Hall
1300 Perdido Street
New Orleans, LA 70112

Re: **In Re: 2018 Triennial Integrated Resource Plan of Entergy New Orleans, LLC**
Docket No. UD-17-03

Dear Ms. Johnson:

Entergy New Orleans, LLC ("ENO") hereby submits for your further handling and filing an original and three copies of the Application for Approval of the Implementation Plan for Program Years 10 and 12 of the Energy Smart Program with Exhibits attached thereto. Please file an original and two copies in the record in the above-referenced matter, and return a date-stamped copy to our courier.

Should you have any questions regarding the above matter, please don't hesitate to contact me at 504-576-2984. Thank you for your assistance with this matter.

Sincerely,

Harry M. Barton

HMB/ddm
Enclosures

cc: Official Service List (*via email)*

LLC-4 4U

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: 2018 TRIENNIAL INTEGRATED RESOURCE PLAN FOR ENTERGY NEW ORLEANS, INC.	)	**DOCKET NO. UD-17-03**

ENTERGY NEW ORLEANS, LLC's APPLICATION FOR APPROVAL OF THE IMPLEMENTATION PLAN FOR PROGRAM YEARS 10 THROUGH 12 OF THE ENERGY SMART PROGRAM

Entergy New Orleans LLC. ("Entergy New Orleans" or "ENO") respectfully submits this Application for Approval of the Implementation Plan for Program Years ("PYs," referenced in the singular as "PY") 10 Through 12 (the "Implementation Plan") of the Energy Smart Plan (the "Application"). ENO submits this Application pursuant to Council Resolution No. R-17-430, as modified by the March 26, 2018 Order from the Hearing Officer in Council Docket UD-17-03. In support of this Application, ENO respectfully states as follows:

I.

ENO's Implementation Plan for PYs 10-12 seeks to build on the success of PYs 7-9, as informed by the 2018 Integrated Resource Plan ("IRP") process conducted in this Docket. Prior to the start of PY 7, Council Resolution No. R-15-140 required ENO to issue a Request for Proposals ("RFP") for a Third-Party Administrator ("TPA") for Energy Smart programs for the three-year period from April 1, 2017 through March 31, 2020. In accordance with that Resolution, ENO conducted an RFP and ultimately selected CB&I Environmental and Infrastructure, Inc. (subsequently renamed "APTIM") as the Third-Party Administrator, and ADM Associates ("ADM") as the Third-Party Evaluator ("TPE"). Council Resolution No. R-17-31 approved these

selections. ENO proposes to continue to employ APTIM as the TPA and ADM as the TPE for PYs 10-12, as discussed in the PY 10-12 Implementation Plan Report (the "Report"), attached hereto as Exhibit A and the Implementation Plan, which is attached hereto as Exhibit B.[1] The Report and Implementation Plan also identify other entities that will perform functions for PYs 10-12 of Energy Smart.

II.

Beginning April 1, 2017, pursuant to Council Resolutions No. R-17-176, and R-17-623, and R-18-228, ENO implemented PYs 7-9 of Energy Smart. As of September 30, 2019, PYs 7-9 have achieved the results depicted in the table below:

New Orleans			
	kWh Savings	**kWh Goal**	**% to Goal**
Program Year 7[2]	19,332,111	18,572,876	104.1%
Program Year 8	47,374,464	42,988,811	110.2%
Program Year 9[3]	22,980,148	50,266,105	45.7%

Algiers			
	kWh Savings	**kWh Goal**	**% to Goal**
Program Year 7	901,772	1,375,801	65.5%
Program Year 8	2,942,064	3,110,496	94.6%
Program Year 9	1,622,059	3,628,289	44.7%

ENO intends to provide a timely report to the Council on the results of the 4th Quarter of PY 9 and anticipates meeting or exceeding 100% of the kWh goals that were established by the Council for both New Orleans and Algiers.

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[1] The Implementation Plan attached as Exhibit B is subdivided into 4 components, collectively constituting the Implementation Plan for PYs 10-12. Exhibit B-1 is the Energy Efficiency Implementation Plan, Exhibit B-2 is the Demand Response Implementation Plan, Exhibit B-3 is the Large Commercial and Industrial Demand Response Implementation Plan, and Exhibit B-4 is the Appliance Recycling Pilot Implementation Plan.

[2] Pursuant to a Council directive, PY 7 was nine months in duration.

[3] Savings as of September 30, 2019 and not inclusive of any savings from the Behavioral Program as those savings are calculated based on a post-year billing analysis.

PY 10-12 Program Offerings

III.

Council Resolution R-17-430, issued on August 10, 2017, initiated the 2018 IRP process and provided the procedural schedule for the development of the IRP and consequently the development of the Implementation Plan. During the IRP process, two Demand-Side Management ("DSM") potential studies were developed, one by Navigant Consulting, Inc. ("Navigant") and the other by Optimal Energy, LLC ("Optimal"). As is detailed in the Report and Implementation Plan, these two potential studies were used to estimate the potential for DSM for PYs 10-12, including energy efficiency ("EE") and demand response ("DR") measures. In crafting the Implementation Plan, ENO worked with the TPA and other entities, as well as the Council Advisors and all parties to this Docket, in a series of Technical Meetings to incorporate the DSM measures identified in the Navigant and Optimal potential studies into program offerings for PY 10-12. The proposed EE program offerings are described in detail in the Report and Implementation Plan, and a summary description of the proposed EE offerings is set forth below.

Residential Offerings

- **Home Performance with Energy Star ("HPwES")** – This offering will achieve long term, significantly cost-effective electric savings through the use of local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve efficiency, install low-cost energy-saving measures, and identify and implement more comprehensive home efficiency projects. HPwES will offer three levels of home energy audits. The Level I Assessment will include a "walk-through" inspection and direct installation of low-cost measures, such as LEDs and water conservation measures. To generate additional savings at the time of the audit, demand response enabled smart thermostats have been added as a direct install measure. The Level II and III Assessments are comprehensive home inspections with diagnostic testing, performed by a qualified contractor, targeted to achieve deeper savings within the home.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, APTIM will include all buildings with four or fewer units in the HPwES offering. Structures of this size and construction type often behave more like single-family homes, with owners often occupying one of the units, thus minimizing the split-incentive barrier. Building types with two to four units function more like single-family homes, with no or small amounts of common-area space.

- **Retail Lighting and Appliances** - The objective of the Retail Lighting and Appliances offering is to increase awareness and sales of efficient lighting and appliances to ENO's residential population. The offering will provide customers the opportunity to purchase a variety of discounted products that are ENERGY STAR qualified or better. The two main program activities include (1) retailer recruitment and merchandizing and 2) administration of the incentive process (including program tracking).

- **Multifamily Solutions** - This offering targets multifamily property owners (landlords) and managers, as well as apartment and condo renters. The offering will address these customers' unique needs through a combination of incentives for both direct install and prescriptive measures, and through property owner and tenant education.

- **Income Qualified Weatherization** – The Income-Qualified Weatherization offering is designed to offer qualifying customers free energy efficiency projects ranging from direct install measures, such as LED bulbs and water savings measures, to demand response enabled smart thermostats and comprehensive envelope measures.

- **A/C Solutions** - The A/C Solutions offering, formerly the High Efficiency AC Tune-Up program, will provide residential customers with a more comprehensive set of options to lower the energy consumption and cost associated with keeping their homes cool and comfortable in the summer. Customers with functioning ACs can improve the efficiency of their units with the help of a comprehensive AC tune-up or replacement. The offering will also include DR-enabled smart thermostats. The program will build capacity within the territory's HVAC contractor network to provide value-added services to its customers. These services are eligible to be incentivized because they go above and beyond the standard industry practices and offerings in the marketplace. The A/C Solutions offering

will be cross-promoted with the other residential offerings to encourage more comprehensive energy savings.

- **NOLA Wise School Kits & Education and Community Outreach** – The NOLA Wise School Kit & Education offering will continue to target middle school students in the New Orleans area. The program will work with local schools to enhance energy efficiency lessons and provide students with energy efficiency kits that they will install in their homes. The School Kit & Education offering will continue to provide the students with kits containing energy efficient items and the students will be able to use these items in their homes and track their energy savings.

- **Behavioral** – The program will work with Entergy's new Customer Engagement Platform (CEP) to offer a behavioral program to ENO's residential customers. Through the CEP, residential customers will receive a monthly Home Utility Report that compares them to similar and efficient households, shows their usage over time, provides tips for saving energy, rewards for taking actions and directs them to other program offerings.

- **Rewards** – The Rewards offering is designed to drive engagement in the Behavioral program. It includes a dedicated budget that will be leveraged to reward Behavioral program participants with incentives or prizes for participation.

- **Appliance Recycling and Replacement Pilot** – The Appliance Recycling and Replacement Pilot offering will encourage early recycling of low efficiency appliances, such as refrigerators and freezers, for residential customers. The Pilot will also offer a refrigerator replacement option for income-qualified residential customers. This new offering will go beyond federal recycling requirements using environmentally friendly best practices for recycling all components of each appliance. The pilot is projected to have 1,400-1,800 customer participants annually during this period. Additionally, ENO has included a detailed Pilot Proposal, consistent with the guidelines laid out in Resolutions R-15-140 and R-16-106, as Exhibit B-4 to this Application.

Commercial and Industrial Offerings

- **Small Commercial & Industrial Solutions** - The Small Commercial & Industrial Solutions offering will provide small businesses (100 kW demand or less) and other

qualified non-residential customers the opportunity to achieve electricity savings through strategies designed specifically for this sector. This offering will help small business customers analyze facility energy use and identify energy efficiency improvement projects. Program participants will be advised on applicable offerings through the program as well as financial incentives for eligible efficiency measures that are installed in their facilities by trade allies.

- **Large Commercial & Industrial Solutions** - The primary objective of the Large Commercial and Industrial Solutions offering (Large C&I) is to provide a solution for larger (greater than 100 kW demand) non-residential customers interested in energy efficiency through a prescriptive or custom approach. The Large C&I offering is designed to generate significant energy savings, as well as a longer-term market penetration by nurturing delivery channels, such as design professionals, distributors, installation contractors and Energy Service Companies (ESCOs).

- **Commercial Real Estate** - The primary objective of the new Commercial Real Estate (CRE) offering is to more deeply engage Class A and B office space which represents a major market sector within the large commercial building stock (greater than 100 kW demand) and contains significant energy savings potential. This market has a unique set of needs and decision makers, so a targeted approach is necessary to obtain strong engagement. This offering is only included in the second Budget Scenario (described below).

- **Publicly Funded Institutions** - The Publicly Funded Institutions offering is targeted at local publicly funded institutions. The offering will assist end use customers in overcoming barriers that are specific to publicly funded groups. Through hands-on expertise and consulting, the program benchmarks the institution's energy use and identifies a roadmap to success. Customers will be given guidance throughout their engagement with the program.

- **Commercial & Industrial Construction Solutions** - The new Commercial & Industrial Construction Solutions offering will encourage customers to design and construct higher efficiency facilities than required by building codes or planned designs. This offering will be available to ground-up construction, additions or expansions, building repurposing and

commercial building restorations. The New Construction offering will provide incentives for design assistance, prescriptive measures, and custom upgrades tailored to the customer's building operations.

IV.

In developing the proposed budgets for the EE offerings for PY 10-12, ENO and APTIM considered two Budget Scenarios. One Budget Scenario was designed to comply with the requirement that ENO evaluate the Council's "goal of increasing energy efficiency incremental annual kWh savings by 0.2% of sales per year until such time as incremental annual kWh savings reach 2% of annual sales," as articulated in Resolution No. R-17-430 at Ordering Paragraph 8. The second Budget Scenario was designed to reflect a more aggressive set of savings goals. The tables below show the projected savings and costs associated with the two Budget Scenarios.

Budget Scenario 1

ENERGY SMART - EE PORTFOLIO BUDGETS			
	PY10	**PY11**	**PY12**
Residential Total	**$5,991,328**	**$6,355,987**	**$7,316,889**
Program Costs	$5,609,185	$5,949,988	$6,848,027
EM&V	$382,143	$405,999	$468,862
MWh Savings	*31,061*	*37,332*	*39,648*
C&I Total	**$10,029,867**	**$9,558,971**	**$11,258,469**
Program Costs	$9,373,707	$8,933,618	$10,521,934
EM&V	$656,160	$625,353	$736,535
MWh Savings	*38,827*	*40,822*	*49,877*
EE Programs Total	**$16,021,195**	**$15,914,958**	**$18,575,358**
Program Costs	$14,982,893	$14,883,606	$17,369,961
EM&V	$1,038,302	$1,031,352	$1,205,397
MWh Savings	*69,888*	*78,154*	*89,525*

Budget Scenario 2

ENERGY SMART - EE PORTFOLIO BUDGETS			
	PY10	**PY11**	**PY12**
Residential Total	**$6,513,491**	**$7,089,864**	**$8,074,176**
Program Costs	$6,097,188	$6,635,854	$7,555,772
EM&V	$416,303	$454,010	$518,404
MWh Savings	*33,256*	*40,622*	*43,137*
C&I Total	**$10,260,614**	**$10,620,096**	**$11,873,551**
Program Costs	$9,589,359	$9,925,323	$11,096,777
EM&V	$671,255	$694,773	$776,774
MWh Savings	*40,020*	*46,889*	*53,637*
EE Programs Total	**$16,774,105**	**$17,709,959**	**$19,947,727**
Program Costs	$15,686,547	$16,561,177	$18,652,549
EM&V	$1,087,558	$1,148,782	$1,295,178
MWh Savings	*73,276*	*87,512*	*96,774*

The estimated lost contribution to fixed costs ("LCFC") based on the savings shown in Scenario 1 and 2 are shown below.

Projected LCFC - Scenario 1			
	PY10	**PY11**	**PY12**
Gross kWh savings	69,888,000	78,154,000	89,525,000
2018 ENO Adjusted Gross Margin	$0.05011	$0.05011	$0.05011
Total LCFC	**$3,502,360**	**$3,916,601**	**$4,486,446**

Projected LCFC - Scenario 2			
	PY10	**PY11**	**PY12**
Gross kWh savings	73,276,000	87,512,000	96,774,000
2018 ENO Adjusted Gross Margin	$0.05011	$0.05011	$0.05011
Total LCFC	**$3,672,145**	**$4,385,567**	**$4,849,722**

V.

In addition to the EE offerings listed above, the Implementation Plan includes proposed DR offerings. As discussed in IRP Technical Meetings #5 and #6, ENO issued an RFP for third

parties to assist ENO in developing and implementing additional DR offerings for inclusion with PYs 10-12. The Report and Implementation Plan discuss the RFP process and selections in greater detail. Ultimately, ENO selected APTIM and Honeywell Smart Energy ("HSE") from this RFP. ENO worked with these entities and Stakeholders to develop DR offerings for PY 10-12. The proposed DR offerings are described in detail in the Implementation Plan and Report, and a summary description of the offerings is provided below.

Residential Demand Response Offerings

- **Direct Load Control -** EasyCool, Energy Smart's existing Demand Response program, is designed to manage peak load capacity for ENO through the utilization of a digital cycling unit (DCU) which will control the operation of air conditioning compressors on conventional residential split systems, package units and heat pumps. DCU controls will be activated on the hottest summer days when many customers are running their air conditioners frequently and on high settings. The DCU receives a radio frequency (RF) paging signal from the utility and cycles the appliance on and off for defined intervals as directed. The program is strictly voluntary and only qualifying property owners can participate.
- **Bring Your Own Thermostat -** EnergyHub will deploy a Bring Your Own Thermostat ("BYOT") demand response program, in which residential customers purchase and install qualifying connected thermostats from device manufacturers on their own, and voluntarily enroll those devices in the BYOT offering. This offering will leverage EnergyHub's Mercury Distributed Energy Resource Management System ("DERMS"), which enables enrollment, monitoring, and load control of connected devices from the leading thermostat manufacturers and connected-home security providers. The BYOT and EasyCool switch program will coordinate marketing activities and DR dispatch of the DLC switch population alongside recruitment and DR dispatch for the BYOT program.

Commercial and Industrial Demand Response Offerings

- **Small Commercial and Industrial ("C&I") Offering -** The Small C&I DR offering will provide the opportunity for Entergy New Orleans' small business customers to assist ENO

with its broader load curtailment strategy. Under a BYOT framework, small businesses will be able to participate by installing a qualifying connected thermostat (or enlisting a trade ally for professional installation), and then enrolling in the program through the web-based Mercury DERMS platform. Peak demand events will take place on days when heating or cooling needs may strain ENO's generating and transmission capacity. Through Mercury, peak events called by ENO will trigger minor thermostat set-back adjustments among the population of enrolled small businesses.

- **Large Commercial and Industrial Offering –** The Large C&I DR offering will be implemented by HSE. The objective of the program is to secure curtailable capacity from large commercial and industrial facilities. HSE, in coordination with Entergy New Orleans (ENO), will recruit, enroll, conduct DR Surveys, and install control equipment at customer sites to provide a turn-key solution for ENO Commercial customers. Specific load control shed measures are tailored to the individual customer facility and their operations. HSE will be deploying an advanced software platform for dispatch, control, and optimization of all DR resources enrolled in the offering. This software platform, Concerto, will be provided by Honeywell's partner, Enbala Power Networks.

The table on the next page shows the projected kW targets and costs associated with the DR offerings.

DR Budget Scenario

ENERGY SMART - DR PORTFOLIO BUDGETS			
	PY10	**PY11**	**PY12**
Residential - BYOT	**$280,823**	**$301,528**	**$347,718**
Program Costs	$262,569	$281,928	$325,116
EM&V	$18,254	$19,600	$22,602
kW Target	*2,066*	*2,871*	*3,494*
Residential - DLC	**$370,713**	**$325,556**	**$304,063**
Program Costs	$346,616	$304,394	$284,299
EM&V	$24,097	$21,162	$19,764
kW Target	*764*	*623*	*538*
Small C&I DR	**$89,414**	**$90,211**	**$121,478**
Program Costs	$83,602	$84,347	$113,582
EM&V	$5,812	$5,864	$7,896
kW Target	*130*	*400*	*910*
Large C&I DR	**$1,138,258**	**$905,193**	**$1,084,003**
Program Costs	$1,064,270	$846,354	$1,013,542
EM&V	$73,988	$58,839	$70,461
kW Target	*2,239*	*5,597*	*9,328*
DR Programs Total	**$1,879,207**	**$1,622,488**	**$1,857,262**
Program Costs	$1,758,335	$1,517,023	$1,736,539
EM&V	$122,240	$105,465	$120,723
kW Target	*5,199*	*9,491*	*14,270*

Cost Recovery and Utility Performance Incentives

VI.

In Council Resolution No. R-17-176, the Council directed that until "a universal funding mechanism is approved by the Council for both [ENO Legacy and Algiers customers], the Algiers Energy Smart programs will continue to be funded through the Algiers Fuel Adjustment Clause."[4] In Council Resolution R-17-623, the Council also directed, subject to conditions concerning possible alternative funding sources, ENO to implement an interim Energy Efficiency Cost Recovery Rider ("EECR") to recover the costs of Energy Smart for Legacy customers

[4] *See* Resolution No. R-17-176 at Ordering Paragraph 2.

"commencing with the first billing cycle in July 2018 until such time as new rates are implemented and an appropriate alternate cost recovery mechanism and treatment on monthly customer bills is ordered in the Combined Rate Case."[5]

Following the 2018 Combined Rate Case, conducted in Council Docket No. UD-18-07, Council Resolution No. R-19-457 approved a permanent EECR Rider as the means of recovering the costs of Energy Smart from all of ENO's customers. However, on December 6, 2019, ENO filed an appeal and request for judicial review of Resolution No. R-19-457 with the Civil District Court for the Parish of Orleans, which appeal also requested a stay of, or injunctive relief from, Resolution No. R-19-457 during the pendency of ENO's appeal. Should ENO's request be granted, it is possible that a universal funding mechanism for Energy Smart may not be in place at the start of PY 10. In that scenario, in order to ensure the uninterrupted continuation of the Energy Smart programs, ENO intends to recover the costs of implementing PY 10 through the mechanisms approved in Council Resolutions R-17-176 and R-17-623, absent Council instruction to the contrary.

Contemporaneous with the submittal of this Application, ENO has also submitted a Compliance Filing Subject to Injunctive Relief and Pending Judicial Review of Resolution R-19-457. That filing seeks to, subject to a full reservation of ENO's right to seek judicial review of R-19-457, facilitate further consideration by the Council that may enable implementation of rates as contemplated by R-19-457. ENO seeks to continue working toward an amicable resolution to the issues raised in ENO's appeal and the Compliance Filing, including the potential implementation of Rider EECR as described in R-19-457. As such, it may not become necessary for ENO to utilize the cost recovery mechanisms previously approved in Resolutions R-17-176 and R-17-623.

[5] *See* Resolution No. R-17-623 at Ordering Paragraph 4.

VII.

In addition to the costs associated with PY 10-12, ENO is also owed recovery of approximately $4.1 million in implementation costs for PY 9. ENO raised this issue with the Council via a letter submitted on September 13, 2019. In a response dated October 4, 2019, the Council President directed that ENO should recover these costs by amortizing them (with carrying costs) over the three-year period covering PYs10-12 and including the costs in the revenue requirement for the mechanisms approved in the Combined Rate Case. Recognizing, however and as noted above, that Rider EECR may not be implemented by the time ENO begins recovering the costs of implementing PY 10, ENO intends to being recovering the remaining PY 9 costs, over the three-year period described by the Council President, through the mechanisms described above and previously approved in Council Resolutions R-17-176 and R-17-623. ENO has provided typical billing impact estimates[6] associated with such cost recovery for unrecovered PY 9 costs and both Budget Scenarios for PY 10 in conjunction with this filing and is contemporaneously submitting a public notice pursuant to Section 158-92 of the Code of Ordinances for the City of New Orleans describing this Application and the typical bill impact estimates.

VIII.

ENO is also proposing that the Council adopt a simple formula for calculating the Utility Performance Incentive ("UPI") for PYs 10-12. Industry experts, DSM advocates, the Council's Advisors, and the Council itself have recognized that UPIs are necessary for the successful, fair, and complete integration of DSM offerings into a utility's portfolio of options for meeting its customers' needs. UPIs are also necessary to place demand- and supply-side investments on an

[6] These billing estimates are based on the base rates calculated and reflected in ENO's December 9, 2019 Compliance Filing on behalf of Entergy New Orleans, LLC Subject to Injunctive Relief and pending Judicial Review of Resolution R-19-457, Council Docket No. UD-18-07.

equal financial footing. Recently, ENO submitted voluminous amounts of testimony, information, and reports confirming these well-recognized facts in conjunction with the 2018 Combined Rate Case. However, in that proceeding the Council's Advisors stated that it would be more appropriate to consider the necessary UPI for PYs 10-12 in conjunction with this proceeding, once the budgets and savings targets were known to the Council. As such, ENO has requested that the Council address and implement an adequate UPI that reflects the increasingly aggressive kWh savings targets associated with the "2%" goal described above.

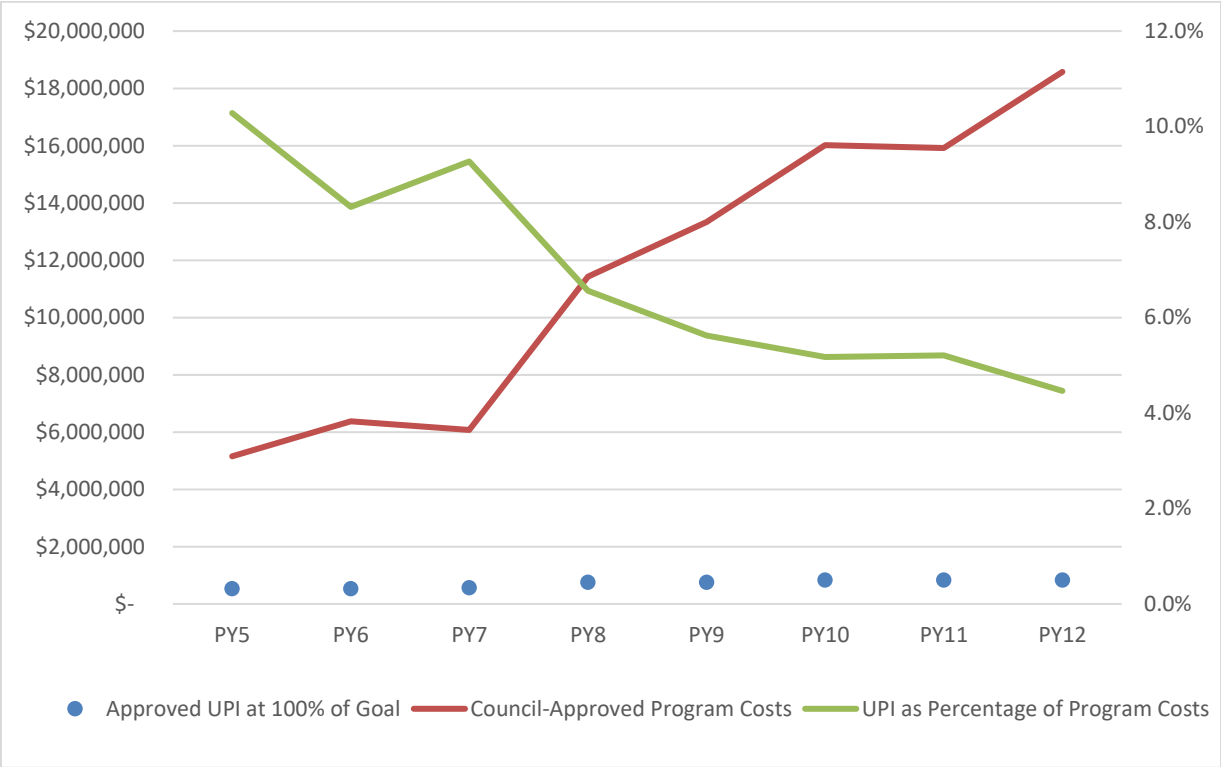
It is imperative that the Council address and correct a trend that has presented itself in recent Energy Smart PYs: as savings targets have increased, the UPI as a percentage of the money ENO spends to achieve those targets has decreased. As shown in the table below, in PY5, the UPI for achieving 100% of the Council's savings targets was approximately 10% of Council-approved program costs. However, in subsequent PYs, the fixed dollar amounts set for the UPI that did not correspond or adjust to either Council-approved program costs or the increasingly aggressive savings targets ENO was required to achieve.

	Approved UPI at 100% of Goal	Council-Approved Program Costs	UPI as Percentage of Program Costs
PY5	$530,000	$5,154,003	10.3%
PY6	$530,000	$6,373,059	8.3%
PY7	$562,500	$6,069,881	9.3%
PY8	$750,000	$11,430,500	6.6%
PY9	$750,000	$13,340,182	5.6%
PY10	$829,000	$16,021,195	5.2%
PY11	$829,000	$15,914,958	5.2%
PY12	$829,000	$18,575,358	4.5%

**PYs1-5 illustrate ENO Legacy only. PYs10-12 are projections for combined ENO Legacy and Algiers

Under this past framework, as ENO was required to work harder, think more creatively, and invest more of its capital to achieve increasingly difficult goals, the returns for ENO's

investments were diminishing. The figure below illustrates this fact. If the Council wishes to signal strong support for DSM as a resource and place demand- and supply-side resource on equal financial footing, the dynamic illustrated below needs to change – beginning with PY 10.



To address this issue, ENO proposes a simple formula that would adjust UPI to reflect increased savings targets and budgets, while still holding ENO accountable to achieving the Council's goals for Energy Smart. ENO proposes that the UPI for achieving 100% of the kWh savings goals be 10% of Council-approved program costs, which approximates what the Council approved for PY 5.[7] Under ENO's proposal, the UPI multiplier would increase or decrease by 0.1% based on ENO's under or over achievement of the 100% target mark. The minimum threshold for ENO to earn any UPI would be achieving 95% of kWh goals, for which ENO would

[7] It is important to note that the Council thoroughly reviews proposed budgets for Energy Smart and holds ENO accountable to achieving goals within budgets. That review, approval, and monitoring process should address any concerns that may arise about the potential for tying the UPI to program costs leading to unnecessary increases to costs.

earn 9.5% of Council-approved program costs. If ENO achieved 110% of the kWh savings targets, it would earn a UPI of 11% of Council-approved program costs; for achieving 120% of the kWh goals, ENO would earn a UPI of 12% of Council-approved program costs. However, the UPI would be capped at 12% of Council-approved program costs if ENO achieved any level of savings greater than 120% of kWh savings.

ENO believes this proposal can correct the disproportionate treatment that the past use of fixed-dollar amounts for UPIs has created. It also provides a transparent mechanism for letting all parties and members of the public know how the UPI is determined, while also holding ENO accountable for achieving the Council's goals.

IX.

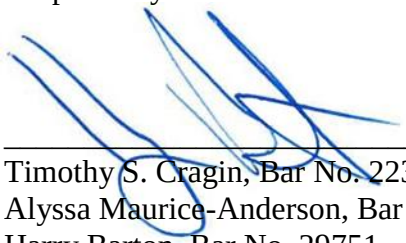
In support of the requests set forth herein, ENO submits this application for Approval of the Implementation Plan for Program Years 10 Through 12 of Energy Smart and the accompanying proposed budgets.

WHEREFORE, ENO respectfully requests that this Council issue a Resolution:

1. Approving APTIM as Third-Party Administrator for energy efficiency programs, APTIM and Honeywell Smart Energy as Third-Party Administrators for demand response programs, and ADM Associates as Third-Party Evaluator for both energy efficiency and demand response programs for Program Years 10-12;
2. Approving ENO's proposal for the implementation of the EE program offerings under the Scenario selected by the Council as set forth herein through December 31, 2022;
3. Approving ENO's proposal for the implementation of the DR program offerings under the Scenario selected by the Council as set forth herein through December 31, 2022;

4. Approving ENO's proposal for the Appliance Recycling Pilot as set forth herein through December 31, 2020;
5. Approving the level of funding and associated kWh savings recommended for the program offerings under the Scenario selected by the Council;
6. Approving the proposed UPI mechanism;
7. Approving recovery of the costs associated with the Scenario selected by the Council through the appropriate Council-approved cost recovery mechanisms in effect at the start of Program Year 10;
8. Granting the opportunity to amend the implementation plan should material changes to expectations arise; and
9. Granting all other general and equitable relief that the law and the nature of this proceeding may permit or require.

Respectfully submitted:

BY: 

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BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

***EX PARTE: IN RE*: 2018 TRIENNIAL INTEGRATED RESOURCE PLAN OF ENTERGY NEW ORLEANS, LLC**	**)** **)** **)**	**DOCKET NO. UD-17-03**

EXHIBIT A

Entergy New Orleans, LLC
Energy Smart Implementation Plan Report

DECEMBER 2019

ENERGY SMART IMPLEMENTATION PLAN REPORT

FOR PROGRAM YEARS 10 THROUGH 12

I. Introduction

The purpose of this report is to provide a summary description of the proposed programs and associated costs for the extension of the Energy Smart Plan of Entergy New Orleans, Inc. ("ENO") in the legacy ENO area and Algiers through December 31, 2022. Resolution R-17-430 requires ENO to submit a detailed Implementation Plan for the Council for the City of New Orleans's ("Council") consideration. The procedural schedule was later amended in an order from Administrative Judge Gulin.

II. Overview of the Energy Smart Implementation Plan

a. Historical Performance

The Energy Smart Program has performed very well throughout its history. Despite increasingly demanding goals set by the Council for the City of New Orleans ("Council"), the program has consistently come close to or surpassed its kWh savings targets. The historical performance of the program relative to the Council's approved goals is illustrated in the table below.

ENO Legacy			
Program Year	kWh Goal	kWh Savings Achieved	%
PY1	14,238,801	15,812,954	111.1%
PY2	16,581,090	20,572,422	124.1%
PY3	16,581,090	16,007,993	96.5%
PY4	17,138,155	16,449,016	96.0%
PY5	16,457,612	20,594,424	125.1%
PY6	18,455,541	24,764,680	134.2%
PY7	18,572,876	19,332,111	104.1%
PY8	42,988,811	47,374,464	110.2%
ENO Algiers			
Program Year	kWh Goal	kWh Savings Achieved	%
PY3	3,113,278	3,207,488	103.0%
PY4	2,070,333	2,020,644	97.6%
PY5	1,380,971	1,463,108	105.9%
PY6	1,398,536	1,197,768	85.6%
PY7	1,375,801	901,772	65.5%
PY8	3,110,496	2,942,064	94.6%

b. Third Party Administrators ("TPA") and Third Party Evaluator ("TPE") Selection

Energy Efficiency

Given the success of the Energy Smart program during program years ("PY") 7-9, ENO proposes to continue with the current TPAs for the Energy Efficiency programs. As is illustrated in the table above, APTIM has performed well through the transition to TPA. ENO believes that, given APTIM's success in PY7, PY8, and to date in PY9, APTIM should continue as the TPA for the energy efficiency programs for PY10-PY12.

Evaluation, Measurement and Verification ("EM&V")

ADM Associates has performed well as Third Party Evaluator of the Energy Smart program since PY5. During that time ADM has effectively performed rigorous field testing on projects, conducted annual impact and process evaluations, created and regularly updated the New Orleans Technical Resource Manual ("NOTRM"), provided ad hoc analysis for continuous improvement of the programs and hosted TRM stakeholder meetings. Given their strong performance and exemplary work products, ENO proposes that ADM remain the Third Party Evaluator for PY10-PY12.

Demand Response ("DR")

Starting in PY10, ENO is proposing to expand Energy Smart's DR programs. Since PY6, ENO has had a Direct Load Control ("DLC") DR pilot program. This program offers customers an incentive for allowing ENO to place a switch on their air conditioning unit in order to control the unit during times of peak load. ENO is proposing to continue with APTIM as the TPA implementing this program. In conjunction with the DLC switches, ENO is proposing to implement a Bring Your Own Thermostat ("BYOT") demand response program. To implement the BYOT offering, ENO has chosen proven implementer EnergyHub based upon their experience in rolling out BYOT programs as well as the capabilities of their platform. More discussion on the BYOT program is included in the Implementation Plan.

In preparation for beginning to offer commercial DR programs, ENO issued a Request for Proposals ("RFP") for Small Commercial and Large Commercial DR program vendors. Five respondents submitted proposals for one or both programs. In selecting the winning bidders, ENO relied upon several factors including, but not limited to, the proposed cost, bidder's experience in running DR programs, bidder's familiarity with the New Orleans market, and the capabilities of the bidder's software. For the small commercial DR program, ENO selected the APTIM/EnergyHub team. APTIM will handle the customer engagement and marketing while EnergyHub will provide the platform that will control the DR events.

Since the Small Commercial DR program will be smart thermostat-based, similar to the Residential BYOT program, it makes sense to have APTIM/EnergyHub implement both. APTIM will handle the customer engagement and marketing while EnergyHub will provide the platform that will control the DR events. Please see the Implementation Plan for more information on the proposed Residential and Small Commercial DR programs.

For Large Commercial DR program, ENO selected the Honeywell Smart Energy ("Honeywell")/Enbala team as implementers. Honeywell has extensive DR program implementation experience that will be useful in initiating and ramping up the Energy Smart Large Commercial DR program. Please see the Implementation Plan for more information on the proposed Large Commercial DR program.

The table below shows the timeline for the DR RFP.

RFP Issued	July 24, 2019
Bids Submitted	August 21, 2019
Oral Presentations	September 17-19, 2019
Winners Notified	October 1, 2019

The table below lists the proposed program categories and corresponding proposed implementers.

Type of Program	Proposed Implementers
Energy Efficiency	APTIM
Residential Demand Response	APTIM/EnergyHub
Small Commercial Demand Response	APTIM/EnergyHub
Large Commercial Demand Response	Honeywell/Enbala
Evaluation, Measurement and Verification	ADM Associates

c. Summary of the Implementation Plan

Energy Efficiency

In developing the Plan for PY 10-12, the Energy Smart team relied on historical results and experience as well as results of separate potential studies produced by Optimal and Navigant for the ENO 2018 IRP ("Potential Studies"). The team designed a suite of programs under two Scenarios:

Scenario 1—Plan to Save 2% of Annual Sales

The first Scenario was designed to achieve the Council's goal of annually increasing kWh savings targets by 0.2% (relative to total annual kWh sales) until such time as the kWh savings target is equal to 2.0% of total annual kWh sales. The table below shows the 0.2% annual increases for PY10-PY12.

	PY10	PY11	PY12
Targeted % of Total Annual sales	1.14%	1.34%	1.54%
Targeted MWh	65,649	77,167	88,684

Scenario 2--Plan for More Aggressive Energy Savings Achievement

For the second Scenario, ENO asked the third party implementer to provide a design that would achieve more aggressive savings growth than the Council's 2.0% Goal.

The Scenario designs yielded the following offerings:

Home Performance with Energy Star
Retail Lighting and Appliances
Multifamily Solutions
Income Qualified Weatherization
A/C Solutions
Appliance Recycling& Replacement Pilot
NOLA Wise School Kits & Education and Community
Behavioral
Rewards
Small C&I Solutions
Large C&I Solutions
Publicly Funded Institutions
C&I Construction Solutions
Commercial Real Estate (Only in Scenario 2)

The proposed budgets and associated MWh savings goals for the EE offerings are listed in the tables below.

	Scenario 1	
	Proposed Budget	Proposed MWh Savings
PY10	$ 16,021,195	69,888
PY11	$ 15,914,958	78,154
PY12	$ 18,575,358	89,525
Total	$ 50,511,511	237,567

	Scenario 2	
	Proposed Budget	Proposed MWh Savings
PY10	$ 16,774,105	73,276
PY11	$ 17,709,959	87,512
PY12	$ 19,947,727	96,773
Total	$ 54,431,791	257,561

Both scenarios present cost-effective portfolios with 3-year Total Resource Cost ("TRC") Test scores of 1.22. For detailed descriptions of the offerings; and budgets, MWh savings, and TRC scores by program, please see the Implementation Plan.

Demand Response

In developing the DR offerings, the Energy Smart team again consulted the Potential Studies. The team

used the results of the Potential Studies as a beginning point then applied their own expertise to determine how to "ramp up" the offerings over the three year period.

	Demand Response	
	Proposed Budget	Proposed kW Reduction
PY10	$ 1,879,207	5,199
PY11	$ 1,622,488	9,491
PY12	$ 1,857,263	14,270
Total	$ 5,358,958	14,270

For more detail on the proposed DR offerings, please see the Implementation Plan.

EE and DR Combined

The proposed budgets for EE and DR programs combined are in the tables below.

Scenario 1			
	PY10	PY11	PY12
Residential EE	$ 5,991,328	$ 6,355,987	$ 7,316,889
Small Commercial EE	$ 2,157,607	$ 2,071,098	$ 2,193,426
Lg Commercial EE	$ 7,872,259	$ 7,487,873	$ 9,065,043
EE Total	$ 16,021,194	$ 15,914,958	$ 18,575,358
Residential DR	$ 651,535	$ 627,084	$ 651,782
Small Commercial DR	$ 89,414	$ 90,211	$ 121,478
Lg Commercial DR	$ 1,138,258	$ 905,193	$ 1,084,003
DR Total	$ 1,879,207	$ 1,622,488	$ 1,857,263
Total Costs	$ 17,900,401	$ 17,537,446	$ 20,432,621

Scenario 2			
	PY10	PY11	PY12
Residential EE	$ 6,513,492	$ 7,089,864	$ 8,074,176
Small Commercial EE	$ 2,157,607	$ 2,071,098	$ 2,193,426
Lg Commercial EE	$ 8,103,006	$ 8,548,997	$ 9,680,125
EE Total	$ 16,774,105	$ 17,709,959	$ 19,947,727
Residential DR	$ 651,535	$ 627,084	$ 651,782
Small Commercial DR	$ 89,414	$ 90,211	$ 121,478
Lg Commercial DR	$ 1,138,258	$ 905,193	$ 1,084,003
DR Total	$ 1,879,207	$ 1,622,488	$ 1,857,263
Total Costs	$ 18,653,312	$ 19,332,447	$ 21,804,990

d. Green Light New Orleans

Green Light New Orleans ("Green Light"), a program that utilizes volunteer assistance to install light bulbs in customers' residences, has been a partner of the Energy Smart program since the inception of the program in 2011. To date, Green Light has installed over 300,000 light bulbs (predominantly Compact Fluorescent Lights ("CFLs") in the homes of Orleans Parish residents. The table below lists the number of light bulbs Green Light has installed through the Energy Smart program by year.

Program Year	Number of Bulbs Installed
PY1	90,254
PY2	61,984
PY3	68,428
PY4	46,277
PY5	35,877
PY6	8,178
PY7	4,770
PY8	3,341
PY9 (through 10/31/19)	830

In 2015 (PY5), Council Resolution R-15-525 provided the budget and directive for the continued inclusion of Green Light in the Energy Smart program. Since that time, as is illustrated in the table above, the number of bulbs distributed through the Green Light program in Energy Smart has fallen significantly. Therefore, ENO proposes to work with the Council and stakeholders on determining the best path forward with the remaining Green Light budget of $76,781 (as of October 31, 2019).

III. EM&V

EM&V is an integral part of determining the overall benefit of energy efficiency programs. In a series of resolutions, the Council has set and reaffirmed the budget for EM&V at 6.5% of program costs. This level of EM&V allowed for annual process and impact evaluations of the vast majority of program offerings, development of the New Orleans Technical Resource Manual ("NOTRM"), rigorous field monitoring and other ad hoc requests to the Third Party Evaluator ("TPE"). This Implementation Plan contains budgets that include EM&V at 6.5% of program costs.

IV. Utility Performance Incentive ("UPI") and Lost Contribution to Fixed Costs ("LCFC")

a. UPI

Industry experts, DSM advocates, the Council's Advisors, and the Council itself have recognized that UPIs are necessary for the successful, fair, and complete integration of DSM offerings into a utility's portfolio of options for meeting its customers' needs. UPIs are also necessary to place demand- and supply-side investments on an equal financial footing. Since program inception, the Council has provided ENO the opportunity to achieve an incentive based upon performance of the Energy Smart program. Council Resolution R-15-140 (as adjusted by R-17-673) provided the current mechanism for determining the UPI earned annually through Energy Smart. The current mechanism sets the performance incentive at a fixed

dollar amount for both ENO Legacy ($750,000) and ENO Algiers ($79,000). The table below compares the current mechanism with the approved/proposed budget.

	Approved UPI at 100% of Goal	Approved/Proposed Program Costs	UPI/Approved Program Costs
PY5	$ 530,000	$ 5,154,003	10.3%
PY6	$ 530,000	$ 6,373,059	8.3%
PY7	$ 562,500	$ 6,069,881	9.3%
PY8	$ 750,000	$ 11,430,500	6.6%
PY9	$ 750,000	$ 13,340,182	5.6%
PY10	$ 829,000	$ 16,021,195	5.2%
PY11	$ 829,000	$ 15,914,958	5.2%
PY12	$ 829,000	$ 18,575,358	4.5%

*This table represents the Eastbank only for PY1-PY9; a combined Eastbank and Algiers for PY10-PY12. The PY10-PY12 figures reflect proposed Scenario 1 program costs.

Under this framework, as ENO was required to work harder, think more creatively, and invest more of its capital to achieve increasingly difficult goals, the returns for ENO's investments were diminishing. If the Council wishes to signal strong support for DSM as a resource and place demand- and supply-side resource on equal financial footing, the dynamic of diminishing returns on investments in DSM needs to change – beginning with PY 10.

To address this issue, ENO proposes a simple formula that would adjust UPI to reflect increased savings targets and budgets, while still holding ENO accountable to achieving the Council's goals for Energy Smart. ENO proposes that the UPI for achieving 100% of the kWh savings goals be 10% of Council-approved program costs, which approximates what the Council approved for PY 5. It is important to note that the Council thoroughly reviews proposed budgets for Energy Smart and holds ENO accountable to achieving goals within budgets. That review, approval, and monitoring process should address any concerns that may arise about the potential for tying the UPI to program costs leading to unnecessary increases to costs. Under ENO's proposal, the UPI multiplier would increase or decrease by 0.1% based on ENO's under or over achievement of the 100% target mark. The minimum threshold for ENO to earn any UPI would be achieving 95% of kWh goals, for which ENO would earn 9.5% of Council-approved program costs. If ENO achieved 110% of the kWh savings targets, it would earn a UPI of 11% of Council-approved program costs; for achieving 120% of the kWh goals, ENO would earn a UPI of 12% of Council-approved program costs. However, the UPI would be capped at 12% of Council-approved program costs if ENO achieved any level of savings greater than 120% of kWh savings.

Proposed Mechanism at 100% of kWh Savings			
PY10	$ 1,602,120	16,021,195	10.0%
PY11	$ 1,591,496	15,914,958	10.0%
PY12	$ 1,857,536	18,575,358	10.0%

ENO believes this proposal can correct the disproportionate treatment that the past use of fixed-dollar amounts for UPIs has created. It also provides a transparent mechanism for letting all parties and members of the public know how the UPI is determined, while also holding ENO accountable for achieving the Council's goals. Additional discussion on UPI is can be found in the attached Application.

b. LCFC

The estimated LCFC was calculated by multiplying the projected kWh savings each program year by the Adjusted Gross Margin ("AGM") as of December 31, 2018. The projected amounts are shown in the table below.

Projected LCFC - Scenario 1				
		2020 LCFC	2021 LCFC	2022 LCFC
A	Gross kWh savings	69,888,000	78,154,000	89,525,000
B	Total ENO Adjusted Gross Margin	0.0501	0.0501	0.0501
	Calculation of LCFC (AxB)	$3,502,360	$3,916,601	$4,486,446

Projected LCFC - Scenario 2				
		2020 LCFC	2021 LCFC	2022 LCFC
A	Gross kWh savings	73,276,000	87,512,000	96,774,000
B	Total ENO Adjusted Gross Margin	0.0501	0.0501	0.0501
	Calculation of LCFC (AxB)	$3,672,145	$4,385,567	$4,849,722

V. Cost Recovery

In Council Resolution No. R-17-176, the Council directed that until "a universal funding mechanism is approved by the Council for both [ENO Legacy and Algiers customers], the Algiers Energy Smart programs will continue to be funded through the Algiers Fuel Adjustment Clause." In Council Resolution R-17-623, the Council also directed, subject to conditions concerning possible alternative funding sources, ENO to implement an interim Energy Efficiency Cost Recovery Rider ("EECR") to recover the costs of Energy Smart for Legacy customers "commencing with the first billing cycle in July 2018 until such time as new rates are implemented and an appropriate alternate cost recovery mechanism and treatment on monthly customer bills is ordered in the Combined Rate Case."

Following the 2018 Combined Rate Case, conducted in Council Docket No. UD-18-07, Council Resolution No. R-19-457 approved a permanent EECR Rider as the means of recovering the costs of Energy Smart from all of ENO's customers. However, on December 6, 2019, ENO filed an appeal and request for judicial review of Resolution No. R-19-457 with the Civil District Court for the Parish of Orleans, which appeal also

requested a stay of, or injunctive relief from, Resolution No. R-19-457 during the pendency of ENO's appeal. Should ENO's request be granted, it is possible that a universal funding mechanism for Energy Smart may not be in place at the start of PY 10. In that scenario, in order to ensure the uninterrupted continuation of the Energy Smart programs, ENO intends to recover the costs of implementing PY 10 through the mechanisms approved in Council Resolutions R-17-176 and R-17-623, absent Council instruction to the contrary.

Contemporaneous with the submittal of this Application, ENO has also submitted a Compliance Filing Subject to Injunctive Relief and Pending Judicial Review of Resolution R-19-457. That filing seeks to, subject to a full reservation of ENO's right to seek judicial review of R-19-457, facilitate further consideration by the Council that may enable implementation of rates as contemplated by R-19-457. ENO seeks to continue working toward an amicable resolution to the issues raised in ENO's appeal and the Compliance Filing, including the potential implementation of Rider EECR as described in R-19-457. As such, it may not become necessary for ENO to utilize the cost recovery mechanisms previously approved in Resolutions R-17-176 and R-17-623.

In addition to the costs associated with PY 10-12, ENO is also owed recovery of approximately $4.1 million in implementation costs for PY 9. ENO raised this issue with the Council via a letter submitted on September 13, 2019. In a response dated October 4, 2019, the Council President directed that ENO should recover these costs by amortizing them (with carrying costs) over the three-year period covering PYs10-12 and including the costs in the revenue requirement for the mechanisms approved in the Combined Rate Case. Recognizing, however and as noted above, that Rider EECR may not be implemented by the time ENO begins recovering the costs of implementing PY 10, ENO intends to being recovering the remaining PY 9 costs, over the three-year period described by the Council President, through the mechanisms described above and previously approved in Council Resolutions R-17-176 and R-17-623. ENO has provided typical billing impact estimates[1] associated with such cost recovery for unrecovered PY 9 costs and both Budget Scenarios for PY 10 in conjunction with this filing and is contemporaneously submitting a public notice pursuant to Section 158-92 of the Code of Ordinances for the City of New Orleans describing this Application and the typical bill impact estimates.

ENO Legacy Typical Monthly Bill Impacts

	Scenario 1	**Scenario 2**
Typical Bill Impact (1,000 kWh residential customer)	$3.23	$3.45
Typical Bill Impact (9,125 kWh commercial customer)	$32.69	$32.95
Typical Bill Impact (91,250 kWh industrial customer)	$418.82	$428.75

Algiers Typical Monthly Bill Impacts

	Scenario 1	**Scenario 2**
Typical Bill Impact (1,000 kWh residential customer)	$3.39	$3.52
Typical Bill Impact (9,125 kWh commercial customer)	$30.94	$32.08
Typical Bill Impact (91,250 kWh industrial customer)	$309.37	$320.84

[1] These billing estimates are based on the base rates calculated and reflected in ENO's December 9, 2019 Compliance Filing on behalf of Entergy New Orleans, LLC Subject to Injunctive Relief and pending Judicial Review of Resolution R-19-457, Council Docket No. UD-18-07.

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EXHIBIT B

Entergy New Orleans, LLC
Energy Smart Implementation Plan

DECEMBER 2019

January 1, 2020 – December 31, 2022
Program Years 10, 11 and 12
Energy Smart Energy Efficiency Demand Side Management Plan

12/09/2019

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Summary

Entergy New Orleans, LLC (ENO) selected Aptim Environmental & Infrastructure, LLC (APTIM) as the Third-Party Administrator (TPA) to deliver the Energy Smart portfolio of demand side management programs for the period of January 1, 2020 to December 31, 2022. APTIM will be retained by ENO to implement, deliver, administer and conduct Quality Control/Quality Assurance (QC/QA) and some measurement and evaluation of the energy conservation and demand side management programs as approved by the Council for the City of New Orleans. (Council). The Energy Efficiency (EE) plan outlined in this document details the proposed design, budgets, and savings targets for the Energy Smart portfolio in Program Years 10, 11 and 12 which are projected to run from January 1, 2020 to December 31, 2022.

The APTIM team completed the analysis and recommendations detailed in this Implementation Plan utilizing historical Energy Smart participation results and the two DSM market potential studies prepared by Navigant Consulting and Optimal Energy in connection with the ENO 2018 Integrated Resource Plan. In addition, the team incorporated best practices of energy efficiency programs to provide aggressive, yet achievable program savings targets that provide significant benefits to ENO's customers.

APTIM has outlined program designs that will be aligned with ENO's Energy Smart programs discussed in the 2018 IRP Demand Side Management Potential Studies performed by Navigant and Optimal. The following table shows the legacy program offerings from Program Years 7-9 relative to the proposed new offerings for Program Years 10-12, with more details on each offering included within this plan.

PORTFOLIO	PY 7-9 PROGRAM OFFERINGS	PY 10-12 PROGRAM OFFERINGS
RESIDENTIAL	Home Performance with Energy Star ("HPwES")	Home Performance with Energy Star ("HPwES")
	Residential Lighting and Appliances	Retail Lighting and Appliances
	Energy Smart for Multifamily	Multifamily Solutions
	Low Income Program	Income Qualified Weatherization
	High Efficiency A/C Tune Up Program	A/C Solutions
	N/A	Appliance Recycling & Replacement Pilot
	NOLA Wise School Kit and Community Outreach Program	NOLA Wise School Kits & Education and Community Outreach
	Behavioral Program	Behavioral
	N/A	Rewards
COMMERCIAL & INDUSTRIAL	Small Business	Small Commercial & Industrial Solutions
	Large Commercial & Industrial Solutions	Large Commercial & Industrial Solutions
	Publicly Funded Institutions	Publicly Funded Institutions
	N/A	Commercial & Industrial Construction Solutions
	N/A	Commercial Real Estate

During implementation of the program offerings listed above, APTIM will continue to work with ENO, the Council and its Advisors, as well as other stakeholders to identify innovative, impactful program

enhancements. Final programs approved by the Council, will be implemented during Program Years 10-12.

Enhancements will take the form of process improvements and introduction of innovative approaches, aimed at improving cost-effectiveness, enhancing participant satisfaction, driving increased participation and energy savings and further expanding the value of Energy Smart beyond energy efficiency alone for the benefit of customers and stakeholders.

Throughout the implementation of the approved program enhancements, APTIM will continue to collaborate with ENO and stakeholders, to identify, evaluate and, implement further program and portfolio enhancement opportunities, in order to move Energy Smart programs in the direction of being nationally recognized as best-in-class.

The following Implementation Plan provides additional detail on the program designs, savings targets, budgets, and innovative enhancements of the Energy Smart program.

1. Residential Offerings

The proposed programs included within APTIM's Residential portfolio are included with information on innovations and enhancements for consideration during implementation of the 2020-2022 Energy Smart EE portfolio. The program designs align with those discussed in the 2018 IRP Demand Side Management Potential Studies performed by Navigant and Optimal. For all offerings, APTIM will facilitate brainstorming sessions involving ENO, trade allies and other stakeholders to identify and evaluate innovative options for program enhancement throughout the PY 10-12 cycle.

Within the Residential portfolio, ENO plans to introduce additional and more comprehensive offerings, relative to the PY7-9 cycle, to reach all customer segments and capture deeper energy savings. The APTIM team will expand measure offerings, launch new tactics and introduce a dedicated trade ally training program to develop energy efficiency skills and expertise.

Home Performance with Energy Star ("HPwES") – This offering will achieve long term, significantly cost-effective electric savings through the use of local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve efficiency, to install low-cost energy-saving measures, and to identify and implement more comprehensive home efficiency projects. HPwES will offer three levels of home energy audits. The Level I Assessment will include a "walk-through" inspection and direct installation of low-cost measures, such as LEDs and water conservation measures. To generate additional savings at the time of the audit, demand response enabled smart thermostats have been added as a direct install measure. The Level II and III Assessments are comprehensive home inspections with diagnostic testing, performed by a qualified contractor, targeted to achieve deeper savings within the home.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, APTIM will include all buildings with four or fewer units in the HPwES offering. Structures of this size and construction type often behave more like single-family homes, with owners often occupying one of the units, thus minimizing the split-incentive barrier. Building types with two to four units function more like single-family homes, with no or small amounts of

common-area space.

The APTIM team will leverage our knowledge to identify and introduce innovative, value added approaches. We will work in collaboration with ENO and stakeholders to identify and evaluate program enhancements.

Proposed ideas for continuations, enhancements and expansions to the HPwES offering include:

- Continuing to provide comprehensive energy assistance to residential customers on available program offerings to maximize use of programs and encourage comprehensive project retrofits.
- Enhancing and optimizing marketing and application screening to lower non-incentive costs and improve audit-to-install closure rates, thereby enhancing program cost-effectiveness.
- Expanding measure offerings for gas-heated homes, such as attic insulation, air sealing and smart thermostats.
- Additional focus on domestic hot water conservation measures, including the addition of Thermostatic valve (TSV) shower starter valves installed in conjunction with low-flow showerheads to further conserve hot water.
- Leveraging Home Energy Kits as an entry-point for customers and to target hard-to-reach customer segments.
- Introducing incentives for new construction and major homes renovations.

Retail Lighting and Appliances - The objective of the Retail Lighting and Appliances offering is to increase awareness and sales of efficient lighting and appliances to ENO's residential population. The offering will provide customers the opportunity to purchase a variety of discounted products that are ENERGY STAR qualified or better. The two main program activities include (1) retailer recruitment and merchandizing and 2) administration of the incentive process (including program tracking).

The APTIM team will work to expand the retail network, as well as increase the number of available products. Recruitment will also include the development of a marketing strategy that leverages the ENERGY STAR brand, development of point-of-purchase (POP) materials, and ongoing retailer training. The incentive process will include both midstream and upstream approaches. Energy Smart will continue its in-store/instant coupon-based approach and contractors with retailers and manufacturers to buy-down the cost of program-qualified products.

Proposed ideas for continuations, enhancements and expansions for the Retail Lighting and Appliances offering include:

- Launching a custom Entergy New Orleans-Energy Smart branded online store that would be integrated seamlessly into Entergy New Orleans' existing website.
- Offering more specialty LED lighting products.
- Introducing additional product offerings such as smart thermostats, smart power strips (Tier 1 and Tier 2), and ENERGY STAR ceiling fans and dehumidifiers.

Multifamily Solutions - This offering targets multifamily property owners (landlords) and managers, as well as apartment and condo renters. The offerings will address their unique needs through a combination of incentives for both direct install and prescriptive measures, and through property owner and tenant education.

A property must have a minimum of five units to qualify for Multifamily Solutions. This allows for the Multifamily Solutions offering to be more focused on the unique needs of owners, managers and renters of larger buildings.

Proposed ideas for continuations, enhancements and expansions for the Multifamily Solutions offering include:

- Working with Building Owners and Managers Association International (BOMA) and other local organizations like the Greater New Orleans Housing Alliance (GNOHA) and the Apartment Association to identify property owners with large portfolios of residential singles, doubles and triples in addition to the traditional large complexes targeted by previous efforts. Also focus communications to determine unique challenges and corresponding program solutions for New Orleans property owners.
- Coordinating services and incentives with Louisiana Housing Corporation (LHC) and Housing Authority of New Orleans (HANO) to reach affordable housing more effectively.
- Assessing multifamily complexes where direct installations were previously performed to determine if they are candidates for additional measure offerings.
- Exploring program designs to better serve multifamily properties with low income tenants.
- Enhancing and optimizing marketing and application screening to lower non-incentive costs and improve audit-to-install closure rates, thereby enhancing program cost-effectiveness.
- Expanding measure offerings to include smart thermostats, water conservation devices and Tier 2 power strips; including the addition of TSV shower starter valves, installed in conjunction with low-flow showerheads to further conserve hot water.
- Engaging with property owners to install smart thermostats for tenants.

Income-Qualified Weatherization – The Income-Qualified Weatherization offering is designed to offer qualifying customers free energy efficiency projects ranging from direct install measures, such as LED bulbs and water savings measures, to demand response enabled smart thermostats and comprehensive envelope measures. APTIM will work with ENO to identify and qualify customers for participation.

Proposed ideas for continuation, enhancements and expansions for the Income-Qualified Weatherization offering include:

- Continuing to assess low income properties where direct installations were previously performed to determine if expanded energy efficiency opportunities exist and if they are candidates for remarketing of new offerings.
- Enhancing and optimizing marketing and application screening to lower non-incentive costs

and improve audit-to-install closure rates, thereby enhancing program cost-effectiveness.

- Continuing to coordinate with Total Community Action and other community action agencies to cross promote and drive utilization of Low-Income Home Energy Assistance Program (LIHEAP) and Weatherization Assistance Program (WAP).
- Qualifying and training trade allies to implement air sealing measures, to expand opportunities for trade allies and streamline delivery for customers.
- Additional focus on domestic hot water conservation measures, including the addition of TSV shower starter valves, installed in conjunction with low-flow showerheads to further conserve hot water.

A/C Solutions - The A/C Solutions offering, formerly the High Efficiency AC Tune-Up program, will provide residential customers with a more comprehensive set of options to help lower the energy consumption associated with keeping their homes cool and comfortable in the summer. Customers with functioning ACs can improve the efficiency of their units with the help of a comprehensive AC tune-up or replacement. The offering will also include Demand Response (DR)-enabled smart thermostats. The program will enhance the ability within the territory's HVAC contractor network to provide value-added services to its customers. These services are eligible to be incentivized because they surpass the standard industry practices and offerings in the marketplace. The A/C Solutions offering will be cross-promoted with the other residential offerings to encourage more comprehensive energy savings.

Proposed ideas for continuations, enhancements and expansions to the A/C Solutions offering include:

- Cross-marketing the Demand Response offerings to participants in A/C Solutions through participating HVAC contractors.
- Continuing to provide a comprehensive HVAC program including high efficiency air conditioners, heat pumps and electronically commutated motors (ECM).
- Revising certain HVAC replacement incentives to cover a greater portion of the project cost for end of life replacements when upgrading to a high efficiency unit.
- Introducing incentives for early retirement and replacement with a high efficiency unit.
- Introducing incentives for the installation of a DR-enabled smart thermostat.

NOLA Wise School Kits & Education and Community Outreach – The NOLA Wise School Kit & Education offering will continue to target middle school students in the New Orleans area. The APTIM team will work with local schools to enhance energy efficiency lessons and provide students with energy efficiency kits that they will install in their homes.

The School Kit & Education offering will continue to provide the students with kits containing energy efficient items that the students will be able to use to garner and track energy savings in their homes. Under community outreach, the APTIM team will continue to conduct outreach to customers regarding the Energy Smart program and generate customer leads.

Proposed ideas for continuations and enhancements for the School Kits & Education and Community Outreach program include:

- Including private voucher schools to expand the potential number of students who can be reached by the program.
- Creating an additional outreach effort for older students (11th graders) to drive awareness and behavior while at home prior to moving out on their own.
- Maximizing PR opportunities through attendance of representatives from ENO and the City Council offices at trainings, to the extent feasible.
- Continuing to offer incentives – Including student-, teacher- and school-level incentives for achieving participation goals.
- Coordinating school building energy management activities with in-school education to encourage enhanced energy efficiency education and to achieve significant energy savings for the Energy Smart portfolio.
- Considering a kit redesign that includes advanced power strips and hot water restrictor valves.

Behavioral – The Behavioral offering will provide customers a Home Utility Report/Scorecard (HURs) through ENO's new Customer Engagement Portal (CEP). Residential customers will receive a monthly HUR that compares them to similar and efficient households, shows their usage over time, provides tips for saving energy, rewards them for taking actions and directs them to other program offerings. All residential customers that have provided email addresses will automatically be opted into the offering and can opt-out at their discretion.

Cohort Design and Requirements

Energy Smart will establish customer cohorts that will enable the program to make customized HURs that are more relevant for the individual customer. The cohort designs will be unique to the New Orleans market and unique customer home types. The following processes will be carried out in execution of the program:

1. Analyze current HURs recipients and create a "matched" residential cohort of approximately 20,000 like-households to serve as a comparison control group.
2. Select a new (households not included in email treatment or new control groups noted above) treatment cohort of 10,000 residential households for which we do not have email addresses to receive printed HURs reports.
3. Create a new matched comparison control group of 2,000 like-households to use as a comparison group for the new print HURs treatment households.

Reporting Frequency and Format

Energy Smart will email HURs on a monthly basis to customers with email addresses on file and printed reports will be mailed quarterly to 10,000 targeted customers who do not have emails on file. Additionally, the CEP will contain a report widget on participant dashboards where customers can download a copy of their report at any time.

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Estimated Budget and Savings

ENO BUDGET SCENARIOS	POTENTIAL POPULATION	PARTICIPATION	QUANTITY	PRICE	ANNUAL TOTAL	TOTAL PER MONTH	PROJECTED SAVINGS (KWH)*
EMAIL PARTICIPANTS	110,000	110,000	1,320,000	$0.16	$211,200	$17,600	14,951,020
POTENTIAL PRINT	67,000	10,000	40,000	$1.31	$52,400	$4,367	1,359,184
TOTAL	**177,000**	**120,000**			**$263,600**	**$21,967**	**16,310,204**
					Cost per kWh		**$0.0162**

***BASED ON THE ORLANDO UTILITY COMMISSION (OUC) EVALUATION REPORT RESULTS FOR EMAIL/PRINT AND ENO BASELINE USAGE FROM PY8 BEHAVIORAL PILOT REPORT**

Rewards - The new Opt-In Rewards offering will enable residential customers to sign-up for Rewards through the CEP. Participants can receive eGift cards from their choice of available retailers for accumulating points for taking specific actions, such as:

- First-time CEP access
- Completing an online home assessment in the CEP
- Overall kWh energy savings
- Comparative level of participation in peak demand response events (available for AMI households-only)

Energy Smart predicts an 8.5% participation rate in the Rewards program, equating to approximately 15,300 customers. Customers are not required to be enrolled in the HURs offering to participate in the Rewards offering.

Notifications and Reward Redemption

Participants will be able to opt-in for the monthly Rewards program email, text or voice alerts that will keep them notified of their Rewards points status and alert them when they have earned enough points to redeem an eGift card.

Interactive Effects

There will be a Rewards widget on customer CEP dashboards and Rewards content will be present on the HURs reports. There could be interactive effects that might impact HURs offering performance, which will be tracked to differentiate between HURs participants enrolled in Rewards versus those not enrolled in Rewards in order to report overall behavioral impact.

Rewards Budget & Participation Projections

Rewards are earned at $0.005 per point ($1 for every 200 points). The table below shows the activity-based reward schedule and total estimated rewards disbursement. Data from similar programs shows that approximately 50% of earned points are redeemed.

Reward System and User Estimates

REWARD POINTS	PER TRIGGER	YEARLY MINIMUM PER USER	YEARLY MAXIMUM PER USER	AVERAGE USER POINTS EST.	OVER-ACHIEVER POINTS EST.	NOT ENGAGED POINTS EST.
SIGNUP (FIRST TIME LOGIN)	500	500	500	500	500	500
COMPLETE HOME ASSESSMENT	1,000	1,000	1,000	1,000	1,000	0
ENERGY SAVINGS POINTS (2 PT/KWH)	0 to 350	0	4,200	2,100	4,200	0
BEHAVIORAL DR PARTICIPATION	50 or 100	0	1,000	500	1,000	0
TOTAL			**6,700**	**4,100**	**6,700**	**500**

Reward Point System and Redemption Estimates

	%	# PARTICIPANTS
TOTAL AUDIENCE	100%	180,000
1ST YEAR REGISTRATION & PARTICIPATION EST.	8.5%	15,300

POINTS ESTIMATION	%	# PARTICIPANTS	AVG POINTS PER PARTICIPANT	TOTAL POINTS
OVERACHIEVER USER	20%	3,060	6,700	20,502,000
AVERAGE USER	60%	9,180	4,100	37,638,000
NOT ENGAGED	20%	3,060	500	1,530,000
TOTAL POINTS AWARDED				*59,670,000*
REDEMPTION ESTIMATE	**50%**			**29,835,000**

Rewards Incentive Budget

	TOTAL BUDGET
REWARDS	$150,000
TOTAL BUDGET	$150,000

Appliance Recycling & Replacement Pilot – The appliance Recycling Pilot is more fully detailed in a separate document being submitted contemporaneously with this Plan.

2. Commercial & Industrial Offerings

The proposed offerings included within APTIM's Commercial and Industrial portfolio are provided below along with information on innovations and enhancements for consideration during implementation of the 2020-2022 Energy Smart EE portfolio. The program designs align with the programs discussed in the Navigant and Optimal 2018 IRP Demand Side Management Potential Studies. The C&I portfolio will offer more prescriptive offerings, making it easier for customers and trade allies to participate, and increasing cost-effectiveness. Incentives and savings for prescriptive measures are expected to be based primarily on measures in the New Orleans Technical Reference Manual (TRM v.3) For all offerings, APTIM will facilitate brainstorming sessions involving ENO, members of our Stakeholder Advisory Panel, trade allies, and other stakeholders to identify and evaluate innovative options for program enhancement throughout the PY 10-12 cycle.

Within the Commercial and Industrial portfolio, ENO plans to introduce additional offerings that are more comprehensive and reach all customer segments in order to capture deeper energy savings. The APTIM team will expand measure offerings, launch new tactics and introduce a dedicated trade ally training program to develop energy efficiency skills and expertise.

Small Commercial & Industrial Solutions - The Small Commercial & Industrial Solutions offering will provide small businesses (100 kW demand or less) and other qualified non-residential customers the opportunity to achieve electricity savings through strategies designed specifically for this sector. This offering will help small business customers analyze facility energy use and identify energy efficiency improvement projects. Program participants will be advised on applicable offerings through the program as well as financial incentives for eligible efficiency measures that are installed in their facilities by trade allies.

Proposed ideas for continuations, enhancements and expansions to the Small Commercial and Industrial Solutions offering include:

- Offering more prescriptive incentives to make it easier for customers and trade allies to participate.
- Focusing on market segmentation for vertical-specific marketing efforts and program design initiatives, including targeted measure bundles for specific customer types. An example would include incorporating a hospitality offering or program features for hotels, motels and guest houses) and restaurants/bars, which, which comprise a very significant portion of New Orleans' small business segment in terms of numbers of customers and energy usage.
- Promoting trade ally service providers to deliver the Small Business Direct Install Lighting offering that provides higher incentives to cover a greater portion of project costs in order to encourage participation.

- Increasing the cost-effectiveness of program delivery. This may include a focus on non-lighting measures such as refrigeration, cooking equipment and HVAC upgrades.
- Better leveraging of trade allies through enhanced training.
- Working with community leadership and organizations to establish lines of communication and support. Leveraging and establishing relationships in the community prior to individual outreach will help establish and extend credibility in the marketplace.
- Introducing a kit-based offering as an easy entry-point for businesses that also allows for targeted customer engagement.
- Offering a trade ally bonus in PY10 to accelerate engagement.
- Introducing an offering for the early retirement of rooftop units (RTUs), coupled with the installation of a smart thermostat.
- Introducing an incentive offering for smart thermostats.

Large Commercial & Industrial Solutions - The primary objective of the Large Commercial and Industrial Solutions offering (Large C&I) is to provide a solution for larger (greater than 100 kW demand) non-residential customers interested in energy efficiency through a prescriptive or custom approach. The Large C&I offering is designed to generate significant energy savings, as well as a longer-term market penetration by nurturing delivery channels, such as design professionals, distributors, installation contractors and Energy Service Companies (ESCOs).

Proposed ideas for continuations, enhancements and expansions for the Large Commercial & Industrial Solutions offering include:

- Offering more prescriptive incentives to make it easier for customers and trade allies to participate.
- Continuing to encourage more comprehensive large commercial and industrial projects in order to obtain the greatest energy savings possible and position the program for long term success. This will involve exploring bundling of non-lighting and lighting measures to encourage participation of non-lighting measures and innovative incentive offerings and program designs to achieve whole building commercial and industrial energy savings.
- Promoting the Retro-commissioning (RCx) offering throughout New Orleans. This will include streamlining and improving the RCx offering in order to capture savings associated with improving functionality of building management systems and central systems.
- Improving market segmentation for marketing efforts and program design initiatives, including target measure bundles for specific customer types.
- Enhancing building and facility manager training programs to foster persistence of savings at commercial and industrial facilities and to encourage and utilize building benchmarking strategies.
- Continuing to offer Energy Advisory support for large facilities that includes benchmarking analysis, measure opportunity identification and application assistance.
- Better leveraging of trade allies through enhanced trade ally training and skills development.
- Offering a trade ally bonus in PY10 to accelerate engagement.

- Increasing the number of prescriptive offerings to ease participation for customers and trade allies.
- Introducing an offering for the early retirement of rooftop units (RTUs), coupled with the installation of a smart thermostat.
- Introducing a stand-alone incentive offering for smart thermostats.

Commercial Real Estate - The primary objective of the new Commercial Real Estate (CRE) offering is to more deeply engage Class A and B office space which represents a major market sector within the large commercial building stock (greater than 100 kW demand) and contains significant energy savings potential. This market has a unique set of needs and decision makers, so a targeted approach is necessary to obtain strong engagement. This offering is only included in the second scenario discussed below.

Publicly Funded Institutions - The Publicly Funded Institutions offering is targeted at local publicly funded institutions. The offering will assist end use customers in overcoming barriers that are specific to publicly funded groups. Through hands-on expertise and consulting, the program benchmarks the institution's energy use and identifies a roadmap to success. Customers will be given guidance throughout their engagement with the program.

Proposed ideas for continuations, enhancements and expansions for the Publicly Funded Institutions offering include:

- Offering more prescriptive incentives to make it easier for customers and trade allies to participate.
- Expanding and focusing on the Retro-commissioning (RCx) offering to encourage RCx upgrades for publicly funded institutions facilities. This will include streamlined RCx offerings that will capture savings associated with improving functionality of building management systems and central systems.
- Offering a trade ally bonus in PY10 to accelerate production.
- Introducing an offering for the early retirement of rooftop units (RTUs), coupled with the installation of a smart thermostat.
- Introducing a stand-alone incentive offering for smart thermostats.

Commercial & Industrial Construction Solutions - The new Commercial & Industrial Construction Solutions offering will encourage customers to design and construct higher efficiency facilities than building code or planned designs. This offering will be available to ground-up construction, additions or expansions, building repurposing and commercial building restorations. The New Construction offering will provide incentives for design assistance, prescriptive measures and custom upgrades tailored to the customer's building operations.

Background and Overview

The following sections provide additional detail on the approach and background of the proposed

program designs, budgets, and savings targets included in this Implementation Plan.

1. *Scenario Analysis*
   Two budget and savings scenarios are proposed within the Implementation Plan to provide the Council with an understanding of costs and savings associated with varying levels of program funding.

The two scenarios are as follows:

- *Scenario 1 – Plan to Save 2% of Annual Sales*
  - This scenario includes energy savings and budget forecasts that align with the Council's recommendation in Resolution R-17-30 that ENO provide a scenario that would increase kWh savings by .2% annually until a goal of 2% annual kWh savings is achieved.
  - A three-year average of ENO's annual sales for calendar years 2013-2015[1] was utilized to determine the baseline for tracking achievement of the .2% annual energy savings increases. Program Year 6 MWh savings totaled 19,336 MWh, which represented .34% of the baseline sales. Using this information as the starting point, the targets below were identified[2].

PLAN TO SAVE 2% OF ANNUAL SALES	PROGRAM YEAR 10 (GROSS MWH)	PROGRAM YEAR 11 (GROSS MWH)	PROGRAM YEAR 12 (GROSS MWH)
ENERGY SAVINGS TARGET	65,649	77,167	88,684
PERCENT OF BASELINE NET SALES	1.14%	1.34%	1.54%

- *Scenario 2 – Plan for More Aggressive Savings Achievement*
  - This scenario includes savings and budget forecasts that align with expanded Residential and C&I offerings. Within the Residential portfolio, the Retail Lighting and Appliance offering would be expanded to include additional products and the Multifamily Solutions offering would be expanded to target more multifamily properties, particularly large complexes. The Commercial and Industrial portfolio would introduce the new Commercial Real Estate (CRE) offering described above, aimed at the large Class A and B office sector.

2. *TRM Development and Evaluation Coordination*
   The planning inputs used to derive the savings and budget estimates within this Implementation Plan were created using national energy efficiency best practices, past participation, potential studies and through coordination with the existing Evaluation, Measurement and Verification (EM&V) consultant for the Energy Smart programs. The savings are based on assumptions from

[1] Based on ENO's FERC Form 1 filings for those years.
[2] Appendices 3, 4, and 5 includes detail on calculation to determine energy savings targets for Scenario 2 – Plan to Save 2% of Annual Savings

the New Orleans Technical Reference Manual (TRM) v.3 and modified assumptions from the Arkansas TRM v.7, in areas where data was not available in the New Orleans TRM.

The APTIM team will continue to coordinate with the EM&V consultant during the planning phase and throughout the Program Years 10-12 program cycle. The team will make ongoing updates to savings methodologies and tools to comply with the New Orleans TRM updates, and ensure that energy savings can be claimed for new measures where sufficient supporting documentation can be provided.

3. *Evaluation Measurement and Verification (EM&V) Budget*
The budgets outlined within this plan include an allocation toward EM&V, which totals 6.5% of the annual budget for the relevant offerings.

4. *Budget Flexibility*
The APTIM Team's experience has shown that program implementation often occurs at different rates for different programs, and that these implementation rates can vary significantly from predictions in program applications that formed the basis for program approval. For this reason, it is important that there continue to be budget flexibility within each rate class.

Additionally, with the incorporation of new offerings and design elements, APTIM requests a process to request approval for budget flexibility between program years for the identified programs based on success of programs and design changes within the market.

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Energy Efficiency Portfolio – Scenario 1 – Plan to Save 2% of Annual Sales

1. *Portfolio Total Budgets and Savings*

The APTIM team developed the following budgets and savings estimates detailed in this Implementation Plan utilizing available historical results and through incorporating best practices of energy efficiency programs to provide aggressive, yet achievable program savings targets that provide significant benefits to ENO's customers. Two different budget scenarios were created to show a range of costs and savings achievable by the Energy Smart portfolio in Program Years 10-12. The following tables represent totals from Scenario 1.

ENERGY SMART - EE PORTFOLIO BUDGETS			
	Year 10	**Year 11**	**Year 12**
RESIDENTIAL TOTAL	**$5,991,328**	**$6,355,987**	**$7,316,889**
EM&V	*$382,143*	*$405,999*	*$468,862*
PROGRAM COSTS	*$5,609,185*	*$5,949,988*	*$6,848,027*
C&I TOTAL	**$10,029,867**	**$9,558,971**	**$11,258,470**
EM&V	*$656,160*	*$625,353*	*$736,535*
PROGRAM COSTS	*$9,373,707*	*$8,933,618*	*$10,521,934*
ENERGY SMART TOTAL	**$16,021,195**	**$15,914,958**	**$18,575,358**
EM&V	*$1,038,302*	*$1,031,352*	*$1,205,397*
PROGRAM COSTS	*$14,982,893*	*$14,883,606*	*$17,369,961*

ENERGY SMART - EE PORTFOLIO SAVINGS			
	PY10	**PY11**	**PY12**
RESIDENTIAL TOTAL			
PARTICIPATION	230,792	241,314	260,152
GROSS ENERGY SAVINGS (MWH)	31,061	37,332	39,648
GROSS DEMAND SAVINGS (MW)	3.63	3.85	4.28
C&I TOTAL			
PARTICIPATION	302	326	386
GROSS ENERGY SAVINGS (MWH)	38,827	40,822	49,877
GROSS DEMAND SAVINGS (MW)	5.72	6.29	8.34
EE PROGRAMS TOTAL			
PARTICIPATION	231,094	241,640	260,537
GROSS ENERGY SAVINGS (MWH)	69,888	78,154	89,525
GROSS DEMAND SAVINGS (MW)	9.35	10.14	12.62

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2. Net Benefits and Cost Effectiveness Analysis

The program design for Scenario 1 was screened for cost-effectiveness using an industry accepted, best practice energy efficiency cost efficiency modeling tool. The modeling tool 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 capacity. 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). The screening tool relies on the most recent avoided costs determined through calculations that are consistent with the methodology that was implemented in the Entergy New Orleans 2018 IRP. The only offerings (excluding pilots) that fail to achieve a positive cost-benefit ratio are the Income Qualified Weatherization and the NOLA Wise School Kit and Community Outreach offerings. This is due to the outreach and community engagement costs included within the program's budget, which, however, lead to increased energy savings benefits for the entire portfolio.

EE PORTFOLIO COST EFFECTIVENESS ANALYSIS	TRC BENEFITS ($)	TRC RATIO	UCT RATIO
SMALL C&I SOLUTIONS	$10,166,753	1.00	1.58
LARGE C&I SOLUTIONS	$35,026,465	1.32	1.84
PUBLICLY FUNDED INSTITUTIONS	$3,973,305	1.19	1.32
C&I CONSTRUCTION SOLUTIONS	$3,435,417	1.08	1.46
HOME PERFORMANCE WITH ENERGY STAR ("HPWES")	$8,264,334	1.44	1.57
RETAIL LIGHTING AND APPLIANCES	$5,642,252	1.46	1.97
MULTIFAMILY SOLUTIONS	$1,629,500	2.05	1.44
INCOME QUALIFIED WEATHERIZATION	$3,594,689	0.93	0.84
A/C SOLUTIONS	$3,174,915	1.20	1.56
APPLIANCE RECYCLING & REPLACEMENT PILOT	$1,120,329	0.66	0.94
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$694,114	0.43	0.43
BEHAVIORAL	$1,807,992	2.14	2.14
REWARDS	$0	N/A	N/A
TOTAL	**$78,530,065**	**1.22**	**1.44**

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Program Portfolio – Scenario 1 – Plan to Save 2% of Annual Sales

1. Portfolio Annual Budgets and Savings

The following tables represent the annual budget and savings totals for the program portfolio for Scenario 1.

2020 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 1 – PLAN TO SAVE 2% OF ANNUAL SALES						
OFFERING	**EM&V**	**Program Costs**	**Total**	**Participation**	**Gross Energy Savings (MWh)**	**Gross Demand Savings (MW)**
SMALL C&I SOLUTIONS	$141,152	$2,016,455	$2,157,607	137	7,577	1.52
LARGE C&I SOLUTIONS	$417,416	$5,963,089	$6,380,505	136	27,136	3.61
PUBLICLY FUNDED INSTITUTIONS	$66,748	$953,537	$1,020,284	21	3,346	0.44
C&I CONSTRUCTION SOLUTIONS	$30,844	$440,626	$471,470	8	768	0.15
HOME PERFORMANCE WITH ENERGY STAR ("HPWES")	$105,959	$1,513,697	$1,619,656	1,423	4,028	1.23
RETAIL LIGHTING AND APPLIANCES	$53,463	$763,761	$817,224	103,163	4,127	0.75
MULTIFAMILY SOLUTIONS	$23,318	$333,119	$356,437	466	843	0.28
INCOME QUALIFIED WEATHERIZATION	$84,880	$1,212,578	$1,297,458	566	1,569	0.53
A/C SOLUTIONS	$39,342	$562,029	$601,372	672	2,022	0.58
APPLIANCE RECYCLING & REPLACEMENT PILOT	$22,619	$323,125	$345,744	1,400	1,482	0.18
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$34,109	$487,277	$521,386	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	16,310	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,038,302**	**$14,982,893**	**$16,021,195**	**231,094**	**69,888**	**9.35**

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2021 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 1 – PLAN TO SAVE 2% OF ANNUAL SALES						
OFFERING	**EM&V**	**Program Costs**	**Total**	**Participation**	**Gross Energy Savings (MWh)**	**Gross Demand Savings (MW)**
SMALL C&I SOLUTIONS	$135,492	$1,935,605	$2,071,098	147	8,120	1.72
LARGE C&I SOLUTIONS	$375,604	$5,365,773	$5,741,377	136	27,103	3.69
PUBLICLY FUNDED INSTITUTIONS	$63,680	$909,712	$973,392	21	3,385	0.45
C&I CONSTRUCTION SOLUTIONS	$50,577	$722,527	$773,104	22	2,214	0.43
HOME PERFORMANCE WITH ENERGY STAR (“HPWES”)	$106,571	$1,522,446	$1,629,018	1,423	4,028	1.23
RETAIL LIGHTING AND APPLIANCES	$61,821	$883,155	$944,976	113,529	4,541	0.81
MULTIFAMILY SOLUTIONS	$23,707	$338,668	$362,374	466	843	0.28
INCOME QUALIFIED WEATHERIZATION	$92,286	$1,318,370	$1,410,656	603	1,669	0.58
A/C SOLUTIONS	$45,632	$651,891	$697,523	794	2,389	0.69
APPLIANCE RECYCLING & REPLACEMENT PILOT	$22,619	$323,125	$345,744	1,400	1,482	0.18
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$34,911	$498,733	$533,644	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	21,700	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,031,352**	**$14,883,606**	**$15,914,958**	**241,640**	**78,154**	**10.14**

2022 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 1 – PLAN TO SAVE 2% OF ANNUAL SALES						
OFFERING	EM&V	Program Costs	Total	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)
SMALL C&I SOLUTIONS	$143,495	$2,049,931	$2,193,426	159	8,830	1.95
LARGE C&I SOLUTIONS	$453,898	$6,484,252	$6,938,149	172	34,282	5.29
PUBLICLY FUNDED INSTITUTIONS	$66,204	$945,772	$1,011,976	23	3,593	0.50
C&I CONSTRUCTION SOLUTIONS	$72,939	$1,041,979	$1,114,918	32	3,172	0.60
HOME PERFORMANCE WITH ENERGY STAR (“HPWES”)	$132,183	$1,888,325	$2,020,508	1,721	4,870	1.38
RETAIL LIGHTING AND APPLIANCES	$72,541	$1,036,300	$1,108,841	131,517	5,261	0.94
MULTIFAMILY SOLUTIONS	$27,028	$386,112	$413,140	552	998	0.34
INCOME QUALIFIED WEATHERIZATION	$102,829	$1,468,992	$1,571,822	668	1,851	0.62
A/C SOLUTIONS	$47,760	$682,289	$730,050	794	2,389	0.69
APPLIANCE RECYCLING & REPLACEMENT PILOT	$32,331	$461,875	$494,206	1,800	1,898	0.23
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$35,737	$510,533	$546,270	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	21,700	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,205,397**	**$17,369,961**	**$18,575,358**	**260,537**	**89,525**	**12.62**

Energy Efficiency Portfolio – Scenario 2 – Plan for More Aggressive Energy Savings Achievement

1. Portfolio Total Budgets and Savings

The APTIM team developed the following budgets and savings estimates detailed in this Implementation Plan utilizing available historical results and through incorporating best practices of energy efficiency programs to provide aggressive, yet achievable program savings targets that provide significant benefits to ENO's customers. Two different budget scenarios were created to show a range of costs and savings achievable by the Energy Smart portfolio in Program Years 10-12. The following tables represent totals from Scenario 2.

ENERGY SMART - EE PORTFOLIO BUDGETS			
	Year 10	**Year 11**	**Year 12**
RESIDENTIAL TOTAL	**$6,513,492**	**$7,089,864**	**$8,074,176**
EM&V	*$416,303*	*$454,010*	*$518,404*
PROGRAM COSTS	*$6,097,188*	*$6,635,854*	*$7,555,772*
C&I TOTAL	**$10,260,614**	**$10,620,095**	**$11,873,551**
EM&V	*$671,255*	*$694,773*	*$776,774*
PROGRAM COSTS	*$9,589,359*	*$9,925,323*	*$11,096,777*
ENERGY SMART TOTAL	**$16,774,105**	**$17,709,959**	**$19,947,727**
EM&V	*$1,087,558*	*$1,148,782*	*$1,295,178*
PROGRAM COSTS	*$15,686,547*	*$16,561,177*	*$18,652,549*

ENERGY SMART - EE PORTFOLIO SAVINGS			
	PY10	**PY11**	**PY12**
RESIDENTIAL TOTAL			
PARTICIPATION	282,751	312,650	332,266
GROSS ENERGY SAVINGS (MWH)	33,256	40,622	43,137
GROSS DEMAND SAVINGS (MW)	3.83	4.17	4.58
C&I TOTAL			
PARTICIPATION	308	356	404
GROSS ENERGY SAVINGS (MWH)	40,020	46,889	53,637
GROSS DEMAND SAVINGS (MW)	5.99	7.43	9.10
ENERGY SMART TOTAL			
PARTICIPATION	283,058	313,006	332,671
GROSS ENERGY SAVINGS (MWH)	73,276	87,512	96,774
GROSS DEMAND SAVINGS (MW)	9.82	11.60	13.68

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2. *EE Net Benefits and Cost Effectiveness Analysis*

The program design for Scenario 2 was screened for cost-effectiveness using an industry accepted, best practice energy efficiency cost efficiency modeling tool. The modeling tool 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 capacity. 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). The screening tool relies on the most recent avoided costs determined through calculations that are consistent with the methodology that was implemented in the Entergy New Orleans IRP. The only offerings (except pilots) that fail to achieve a positive cost-benefit ratio are the Income Qualified Weatherization and the NOLA Wise School Kit and Community Outreach offerings. This is due to the outreach and community engagement costs included within the program's budget, which, however, lead to increased energy savings benefits for the entire portfolio.

EE PORTFOLIO COST EFFECTIVENESS ANALYSIS	TRC BENEFITS ($)	TRC RATIO	UCT RATIO
SMALL C&I SOLUTIONS	$10,166,753	1.00	1.58
LARGE C&I SOLUTIONS	$36,885,434	1.32	1.84
COMMERCIAL REAL ESTATE	$2,550,700	1.18	2.66
PUBLICLY FUNDED INSTITUTIONS	$3,973,305	1.19	1.32
C&I CONSTRUCTION SOLUTIONS	$3,435,417	1.08	1.46
HOME PERFORMANCE WITH ENERGY STAR ("HPWES")	$8,264,334	1.44	1.57
RETAIL LIGHTING AND APPLIANCES	$8,196,947	1.31	1.85
MULTIFAMILY SOLUTIONS	$2,136,973	1.66	1.35
INCOME QUALIFIED WEATHERIZATION	$3,594,689	0.93	0.84
A/C SOLUTIONS	$3,174,915	1.20	1.56
APPLIANCE RECYCLING & REPLACEMENT PILOT	$1,120,329	0.66	0.94
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$694,114	0.43	0.43
BEHAVIORAL	$1,807,992	2.14	2.14
REWARDS	$0	N/A	N/A
TOTAL	**$86,001,902**	1.22	**1.58**

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Program Portfolio – Scenario 2 – Plan for More Aggressive Energy Savings Achievement

1. *Portfolio Annual Budgets and Savings*

The following tables represent the annual budget and savings totals for the program portfolio for Scenario 2.

2020 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 2 – PLAN FOR MORE AGGRESSIVE ENERGY SAVINGS ACHIEVEMENT						
OFFERING	**EM&V**	**Program Costs**	**Total**	**Participation**	**Gross Energy Savings (MWh)**	**Gross Demand Savings (MW)**
SMALL C&I SOLUTIONS	$141,152	$2,016,455	$2,157,607	137	7,577	1.52
LARGE C&I SOLUTIONS	$417,416	$5,963,089	$6,380,505	136	27,136	3.61
COMMERCIAL REAL ESTATE	$15,096	$215,651	$230,747	6	1,193	0.28
PUBLICLY FUNDED INSTITUTIONS	$66,748	$953,537	$1,020,284	21	3,346	0.44
C&I CONSTRUCTION SOLUTIONS	$30,844	$440,626	$471,470	8	768	0.15
HOME PERFORMANCE WITH ENERGY STAR (“HPWES”)	$105,959	$1,513,697	$1,619,656	1,423	4,028	1.23
RETAIL LIGHTING AND APPLIANCES	$81,025	$1,157,500	$1,238,525	155,058	6,202	0.96
MULTIFAMILY SOLUTIONS	$29,917	$427,383	$457,300	531	962	0.27
INCOME QUALIFIED WEATHERIZATION	$84,880	$1,212,578	$1,297,458	566	1,569	0.53
A/C SOLUTIONS	$39,342	$562,029	$601,372	672	2,022	0.58
APPLIANCE RECYCLING & REPLACEMENT PILOT	$22,619	$323,125	$345,744	1,400	1,482	0.18
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$34,109	$487,277	$521,386	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	16,310	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,087,558**	**$15,686,547**	**$16,774,105**	**283,058**	**73,276**	**9.82**

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2021 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 2 – PLAN FOR MORE AGGRESSIVE ENERGY SAVINGS ACHIEVEMENT						
OFFERING	EM&V	Program Costs	Total	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)
SMALL C&I SOLUTIONS	$135,492	$1,935,605	$2,071,098	147	8,120	1.72
LARGE C&I SOLUTIONS	$422,314	$6,033,051	$6,455,365	154	30,774	4.28
COMMERCIAL REAL ESTATE	$22,710	$324,426	$347,136	12	2,395	0.56
PUBLICLY FUNDED INSTITUTIONS	$63,680	$909,712	$973,392	21	3,385	0.45
C&I CONSTRUCTION SOLUTIONS	$50,577	$722,527	$773,104	22	2,214	0.43
HOME PERFORMANCE WITH ENERGY STAR (“HPWES”)	$106,571	$1,522,446	$1,629,018	1,423	4,028	1.23
RETAIL LIGHTING AND APPLIANCES	$98,124	$1,401,764	$1,499,888	184,618	7,385	1.06
MULTIFAMILY SOLUTIONS	$35,415	$505,925	$541,340	712	1,289	0.35
INCOME QUALIFIED WEATHERIZATION	$92,286	$1,318,370	$1,410,656	603	1,669	0.58
A/C SOLUTIONS	$45,632	$651,891	$697,523	794	2,389	0.69
APPLIANCE RECYCLING & REPLACEMENT PILOT	$22,619	$323,125	$345,744	1,400	1,482	0.18
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$34,911	$498,733	$533,644	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	21,700	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,148,782**	**$16,561,177**	**$17,709,959**	**313,006**	**87,512**	**11.60**

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2022 - ENERGY SMART EE PORTFOLIO BUDGET AND SAVINGS SCENARIO 2 – PLAN FOR MORE AGGRESSIVE ENERGY SAVINGS ACHIEVEMENT						
OFFERING	EM&V	Program Costs	Total	Participation	Gross Energy Savings (MWh)	Gross Demand Savings (MW)
SMALL C&I SOLUTIONS	$143,495	$2,049,931	$2,193,426	159	8,830	1.95
LARGE C&I SOLUTIONS	$469,182	$6,702,602	$7,171,784	177	35,290	5.41
COMMERCIAL REAL ESTATE	$24,954	$356,492	$381,447	14	2,751	0.64
PUBLICLY FUNDED INSTITUTIONS	$66,204	$945,772	$1,011,976	23	3,593	0.50
C&I CONSTRUCTION SOLUTIONS	$72,939	$1,041,979	$1,114,918	32	3,172	0.60
HOME PERFORMANCE WITH ENERGY STAR (“HPWES”)	$132,183	$1,888,325	$2,020,508	1,721	4,870	1.38
RETAIL LIGHTING AND APPLIANCES	$110,630	$1,580,431	$1,691,061	203,291	8,132	1.10
MULTIFAMILY SOLUTIONS	$38,481	$549,726	$588,207	893	1,616	0.47
INCOME QUALIFIED WEATHERIZATION	$102,829	$1,468,992	$1,571,822	668	1,851	0.62
A/C SOLUTIONS	$47,760	$682,289	$730,050	794	2,389	0.69
APPLIANCE RECYCLING & REPLACEMENT PILOT	$32,331	$461,875	$494,206	1,800	1,898	0.23
NOLA WISE SCHOOL KITS & EDUCATION AND COMMUNITY OUTREACH	$35,737	$510,533	$546,270	3,100	681	0.08
BEHAVIORAL	$18,452	$263,600	$282,052	120,000	21,700	-
REWARDS	$0	$150,000	$150,000	-	-	-
TOTAL	**$1,295,178**	**$18,652,549**	**$19,947,727**	**332,671**	**96,774**	**13.68**

January 1, 2020 – December 31, 2022
Program Years 10-12
Energy Smart
Residential and Small C&I Demand Response Plan

12/09/2019

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Summary

Entergy New Orleans, LLC (ENO) selected Aptim Environmental & Infrastructure, LLC (APTIM) as the Third-Party Administrator (TPA) to deliver the Energy Smart portfolio of demand side management programs for the period of January 1, 2020 to December 31, 2022. APTIM will be retained by ENO to implement, deliver, administer and conduct Quality Control/Quality Assurance (QC/QA) and some measurement and evaluation of the energy conservation and demand side management programs as approved by the Council for the City of New Orleans (Council). The Demand Response (DR) plan outlined in this document details the proposed design, budgets, and savings targets for the Energy Smart portfolio in Program Years 10, 11 and 12 which is projected to run from January 1, 2020 to December 31, 2022.

Demand Response (DR) offerings provide utilities with customer-centric tools to manage generation and transmission capacity challenges during periods of high energy demand. Peak load curtailment through DR programs is typically achieved by offering customers the option to reduce their heating and cooling loads during peak demand events through temperature set-back adjustments of HVAC equipment. For their contribution, customers are offered incentives during initial enrollment and/or following their participation in peak demand events.

ENO has pursued peak load management through a residential Direct Load Control (DLC) demand response pilot for residential customers since 2016. In recognition of the need for a broader range of demand response solutions, ENO has solicited implementation contractors to propose new demand response offerings for both its Residential and Commercial & Industrial customers.

Following these planning and procurement efforts, ENO has developed a portfolio of demand response offerings meant to provide any ENO customer with opportunities to participate. Aside from incentives for participation, ENO customers on a tariff containing peak demand charges may see utility bill savings. The introduction of energy efficiency incentives on connected thermostats in 2020 will entice customers to pursue the energy efficiency benefits of qualifying devices, while making participation in Bring Your Own Thermostat (BYOT) DR offerings possible.

For ENO, the DR program suite offers the opportunity to better manage capacity challenges by deploying peak demand events during times when the grid is stressed. The programs described by this plan acknowledge the market potential and future growth opportunity for demand response over time.

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1. Residential Offerings

Direct Load Control – EasyCool, Energy Smart's existing Demand Response program, is designed to manage peak load capacity for ENO through the utilization of a digital cycling unit (DCU) which controls the operation of air conditioning compressors on conventional residential split systems, package units and heat pumps. DCU controls are activated on the hottest summer days when many customers are running their air conditioners frequently and on high settings. The cost to produce the energy to meet this peak demand can be significant, and the intent of the offering is to manage/reduce electricity demand on ENO's electrical grid during peak load periods. The DCU receives a radio frequency (RF) paging signal from the utility and cycles the appliance on and off for defined intervals as directed. The program is strictly voluntary and only qualifying property owners can participate. The program pays an enrollment incentive of $25 to new customers who participate via a DCU and an annual incentive is distributed to those customers that qualify per the rules of the program.

BYOT - EnergyHub will deploy a Bring Your Own Thermostat demand response program, in which residential customers purchase and install qualifying connected thermostats from device manufacturers on their own, and voluntarily enroll those devices in the BYOT offering. This offering will leverage EnergyHub's Mercury Distributed Energy Resource Management System (DERMS), which enables enrollment, monitoring, and load control of connected devices from the leading thermostat manufacturers and connected-home security providers. EnergyHub's program services include vendor management, marketing coordination, enrollment and DR event support, customer support, and other day-to-day program management activities.

EnergyHub will work with APTIM and its DLC switch subcontractor (Franklin Energy) to coordinate marketing activities and DR dispatch of the EasyCool DLC switch population alongside recruitment and DR dispatch for the BYOT program. EnergyHub will also work with APTIM and Franklin Energy to enable the enrollment, management and control of ENO's Energy Smart connected thermostat population from the Mercury DERMS, where applicable (i.e., Home Performance program thermostats).

2. Small Commercial & Industrial Offering

The Small C&I DR offering will provide the opportunity for Entergy New Orleans' small businesses customers (up to 100 kW peak demand) to assist ENO with its broader load curtailment strategy. Under a BYOT framework, small businesses will be able to participate by installing a qualifying connected thermostat (or enlisting a trade ally for professional installation), and then enrolling in the program through the web-based Mercury DERMS platform.

Peak demand events will take place on days when heating or cooling needs may strain ENO's generating and transmission capacity. Through Mercury, peak events called by ENO will trigger minor thermostat set-back adjustments among the population of enrolled small businesses. The load curtailment delivered through the Small C&I and other demand response offerings will collectively drive down peak demand and potentially assist ENO in managing capacity.

Participating small businesses will receive an incentive upon enrollment and have the ability to claim a participation incentive annually as their involvement continues. Following enrollment, customer participation in demand response events is managed through an entirely automatic process, with the Mercury DERMS adjusting thermostat settings remotely without customer intervention. Participating businesses have the option to override thermostat temperature settings if they wish. The load curtailment delivered by the Small C&I DR offering will be captured at the customer level and aggregated in Mercury. This platform has the ability to manage participation and participant contributions, forecast demand curves, and report out on program results in near real time.

Residential Demand Response

1. Overview & Objectives

Direct Load Control

The Direct Load Control offering is a load management program, designed to reduce peak demand. Enrolled customers will receive a DCU that can receive a radio signal from Entergy New Orleans during times of peak demand. This device is installed on a customer's air conditioning compressor to cycle off the unit during times of peak demand. The device can be installed on central AC units and heat pumps. This program has been offered to Entergy customers since 2016.

- The program will be continuing the DCU offering as a joint demand control option with smart thermostats. Franklin Energy will continue to maintain, install, and remove DCUs along with the promotion of smart thermostats for both energy efficiency and demand response purposes.
- The program will market the smart thermostat program and provide the DCU option as an alternative. The program will offer the DCU option to customers that do not have WiFi or elect to participate but do not want a smart thermostat controlled in their home.

Bring Your Own Thermostat

- The residential BYOT DR offering taps into the existing installed base of connected thermostats in the ENO territory. Through technical integrations with the leading thermostat manufacturers in the industry, ENO will have the ability to enroll, monitor, and control connected thermostats and leverage the enrolled aggregation as a capacity resource for peak demand reduction. When a DR event is dispatched, targeted devices will experience a temperature adjustment (an “offset” or “setback”) that will in turn curtail HVAC usage during the peak period. Customers participating in the program will receive an incentive upon enrollment, as well as an ongoing annual incentive for continued participation in the program.

2. Implementation Process

Marketing & Outreach

Direct Load Control

- APTIM’s marketing efforts for Energy Smart will direct customers without a connected

thermostat to purchase a qualifying, incentive-eligible device through Energy Smart energy efficiency programs. If those customers wish to participate in Energy Smart DR but don't have a Wi-Fi connection, APTIM marketing and the EnergyHub microsite can direct those customers to Franklin to participate in DR events using a DLC switch.

BYOT

- EnergyHub will coordinate a BYOT DR marketing campaign leveraging device partner communication channels (email, web and mobile applications). Device partner marketing collateral will feature both the device partner and utility branding and will direct customers with existing qualifying thermostats to enroll their devices in the DR program through the device partner web or mobile application experience.
- APTIM will coordinate a corporate marketing campaign focused on raising awareness of the residential BYOT DR program. All program materials and information will be approved by ENO prior to distribution. APTIM-led marketing will direct customers to an EnergyHub-powered "microsite" that in turn directs customers to purchase a qualifying thermostat from an online store or to enroll their existing device in the residential DR program through the device partner web or mobile application experience.
- APTIM's marketing materials will focus on raising program awareness, educating residential consumers on program details, generating interest, and presenting a clear call-to-action for potential participants.

Customer Enrollment

Direct Load Control

- Customer outreach will be sent to all current participants that have DCUs and be given the option to convert to a smart thermostat. If the customers choose to convert to the smart thermostat, Franklin Energy will remove the DCU and install the smart thermostat unless the customer makes other arrangements for installation.

BYOT

- ENO residential customers will be directed from outbound marketing to enrollment pages for each device manufacturer where they will provide basic information (e.g., name, address, and email) to apply to the residential BYOT DR program. Customers will not be required to enter their utility account number during the enrollment process to minimize barriers to participation.
- ENO and APTIM will process BYOT DR applications using the Mercury DERMS enrollment tool.
- EnergyHub will implement its Automated Enrollment Verification (AEV) feature to match customer applications with valid customer records from Entergy's Customer Care System (CCS). AEV streamlines enrollment processing and will allow ENO to distinguish between residential and small business customers as part of the enrollment process.
- Once accepted by ENO and APTIM, residential customers are automatically available for DR dispatch within the Mercury DERMS.

Participation Guidelines

Direct Load Control

- Participation is open to Residential customers who are active electric customers of Entergy New Orleans. Homes with a central air conditioner or heat pump system are eligible. Customer must accept the Terms and Conditions of the offering to participate.
- Renters are eligible to participate in the offering but must have a signed Landlord authorization indicating they have permission from the landlord to install the DCU at the address.
- Central Air Conditioner or heat pump system must be accessible from on or near the ground level.

BYOT

- ENO residential customers in good standing with active electric service, working central air conditioning, and a connected thermostat supported by the Mercury DERMS platform can participate in the BYOT DR program.
- Customers must provide basic information (name, address, email) and accept the program terms and conditions (T&Cs) to apply to the BYOT DR program. The customer T&Cs set forth the program eligibility requirements and other relevant program information.
- The Mercury DERMS enables ENO to configure and schedule DR events on devices enrolled in the BYOT program. Events can be configured on an ad hoc basis (one-time) or as a part of a previously configured program strategy that can be dispatched repeatedly. ENO can dispatch all devices in the program for a given DR event, or group devices for targeted dispatch.
- Participating customers will experience a temperature adjustment when a DR event is dispatched from the Mercury DERMS. The Mercury DERMS supports the dispatch of event notifications which can inform customers of upcoming DR events with details about the event date, time and duration. Specific DR event parameters, such as whether ENO will send event notifications, will be agreed upon by ENO, APTIM, and EnergyHub as part of the program launch process. Event communication channels and functionality varies across device partners.
- Customers will be able to opt out of a DR event, if desired.
- Customers will be able to contact ENO, APTIM or EnergyHub to un-enroll from the BYOT program, if desired.
- Customers who frequently opt out of DR events can be removed from the BYOT program at APTIM and ENO's discretion.

Trade Ally Recruitment & Training

Direct Load Control

- Trade Ally participation is not part of the DLC design.

BYOT

- A primary benefit of the BYOT model is that it gives ENO the ability to tap into the existing base of connected thermostats that customers have already purchased and installed. Also, central to the BYOT model is that device manufacturers act as the "Tier 1" customer contact for technical device-related support. These factors alleviate the need to contract with trade allies for hardware installation and maintenance. This program results in significant savings relative to traditional direct install DR programs.
- EnergyHub trains its device partner support personnel on the specifics of every BYOT program and will work with APTIM to establish routing protocols to ensure that customers are connected with the appropriate support team.

Device Installations

Direct Load Control

- To drive participation in the BYOT offering, Franklin Energy will provide an option for the approximately 2,000 existing participants to migrate from a DCU to a smart thermostat.
- The customer can elect to participate in the program without installing a smart thermostat. Customers who do not have WiFi or would prefer the DCU will have that option.

BYOT

- Initial program participation will be driven from the current base of approximately 14,000 connected thermostats already online in ENO's service territory.
- New connected thermostats will be installed in customer homes through ENO's portfolio of residential energy efficiency programs, such as the Residential Home Performance with ENERGY STAR program. APTIM will coordinate with EnergyHub to facilitate the enrollment of these thermostats into the BYOT DR program, where applicable.

Data Collection

Direct Load Control

- All data collection activities will occur within the Franklin Energy work order management system, Efficiency Manager 2.0, which is a cloud-based Salesforce tracking system that can track customer information, work order details, thermostat installs, and DCUs installs/ removals.
- ADM installs data loggers on a percentage of DCUs in the field to collect data during cycling events.

BYOT

- The Mercury DERMS platform collects data through technical integrations with each of its device partners and provides near real-time access to device data such as connectivity status, operating mode, temperature setpoint, indoor/outdoor temperature, and runtime interval data.
- Data available to ENO (e.g., connectivity, mode, runtime intervals) depends on device data fed to Mercury DERMS through its integrations with device partners; some manufacturers might provide only a subset of this device data.
- Customers will authorize their device partner to share their application information (name, address, email) and device data with ENO and its contractors (APTIM and EnergyHub) as part of T&Cs acceptance during the enrollment process. Enrollment and device information is available in the Mercury DERMS on demand.

Data Management & Tracking

Direct Load Control

- Participation and enrollment will be tracked in Efficiency Manager 2.0, including at a minimum: work orders, processing, incentives, customer interaction, QA tracking, demand reduction (kW), and initiation bonuses. Data will be transferred routinely and upon request to APTracks (the data tracking system already in use for Energy Smart energy efficiency programs).

BYOT

- The Mercury DERMS dashboard provides the operator with a portfolio-level view of the DR aggregation, including near real-time information on the devices under management (operating mode, connectivity status, current and forecasted HVAC load).
- The Mercury DERMS provides DR event reports that the operator can view during and after the completion of a DR event for M&V and analysis. DR event reporting (participation statistics, load and load shed interval data) is available for download from the DERMS on demand following the completion of an event.
- The Mercury DERMS operator can view customer enrollment data, such as enrollment status (e.g., Accepted, Rejected, Unenrolled) in the Mercury DERMS enrollment tool. Enrollment and device reports are available for download on demand from the DERMS.

Inventory Management

Direct Load Control

- DCUs are ordered and programmed specifically for the ENO EasyCool offering. EasyCool has 1,400 DCU's in stock for distribution in 2020 and beyond. Inventory is tracked and managed within Efficiency Manager 2.0.

BYOT

- Device data is viewable and downloadable on demand through the Devices tab in Mercury DERMS.

Evaluation, Measurement & Verification (EM&V)

Direct Load Control

- All work order data described above will be made available for Measurement and Verification purposes
- Franklin Energy utilizes Yukon Software that allows communication with devices in the field in order to control the devices during events. ADM installs data loggers at a percentage of the total installs to record data during the demand response events.

BYOT

- Mercury DERMS performs measurement and verification of performance following load control events. Mercury generates a DR baseline for each interval of the DR event based on the historical usage of targeted devices. The baseline is compared to actual runtime usage of targeted devices in a given interval to determine event performance. Mercury supports multiple DR baseline methodologies.
- Mercury DERMS provides DR event reports that the operator can view during and after the completion of a DR event for M&V and analysis. DR event reports (e.g., participation statistics, load and load shed interval data) are available for download from DERMS on demand following the completion of an event.
- ENO or APTIM can export M&V reports for offline analysis or to provide to ENO's program evaluator.

Small C&I Demand Response

1. Overview & Objectives

The following sections provide additional detail on the implementation efforts supporting the Small Commercial Demand Response offering. The Small C&I DR offering is a Bring Your Own Thermostat (BYOT) demand response offering that leverages the built-in capabilities of many connected thermostats to slightly adjust the HVAC temperature set-backs of enrolled customers' thermostats. In response to a peak load event called in advance by ENO, participants' thermostats will be adjusted during the peak event, and in the aggregate will shave load peaks during periods where generation and transmission capacity is stressed. Small businesses participating in the offering will receive an incentive upon enrollment, as well as an additional annual incentive upon confirmation of ongoing involvement.

2. Implementation Process

Marketing & Outreach

a. APTIM will develop marketing materials for the Small C&I DR offering. All program materials and information will receive approval from Entergy New Orleans prior to

distribution.

b. Marketing materials supporting the Small C&I DR offering will focus on raising program awareness, generating interest, educating consumers on program details, and presenting a clear call to action for potential participants.

c. The tactics envisioned to drive awareness and interest include direct mail, bill inserts, leave-behind collateral, and digital marketing.

d. Customer segments that will be targeted as prime opportunities include convenience stores, eating/drinking establishments, automotive/auto repair, retail trade, houses of worship, grocery stores, and commercial office spaces.

e. Program representatives and trade allies engaging with small business customers will be informed of the details of the Small C&I DR offering, including eligibility and participation details, the enrollment process, and the value proposition to the customer.

f. Energy efficiency and demand response have some common benefits and areas of overlap, and one can be used as a participation driver and lead generator for the other. Where suitable, Energy Smart energy efficiency opportunities will be marketed to drive participation to the Small C&I DR offering.

g. APTIM will track the results of marketing efforts, using web visits, email click-throughs, Google analytics, social media interaction, and call center volume. The resulting metrics will be used to assess the effectiveness of marketing efforts and inform strategies for future campaigns and initiatives.

h. Call center staff at both ENO and APTIM will be provided training on the program to respond to customer inquiries and will be updated with information on upcoming marketing campaigns, program changes, and guidance on frequently asked questions.

Customer Enrollment

a. Small business customers already in possession of a qualifying connected thermostat may receive digital marketing (e.g., email, web, mobile) from their thermostat manufacturer notifying them of the Small C&I DR offering or may receive outbound marketing from Aptim, as noted above. Customers will be directed from this outbound marketing to an enrollment page specific to their device manufacturer where they will provide basic information (e.g., name, address, and email) to apply to the Small C&I DR offering. Outbound marketing will direct customers to the program microsite if the manufacturer is unknown.

b. Small businesses receiving a professional installation of a qualifying connected thermostat will be offered the option of on-site enrollment by participating trade allies, as a best practice for trade ally delivery.

c. APTIM will process BYOT applications using the Mercury DERMS enrollment tool.

d. Upon acceptance of a customer's enrollment by program staff, an enrollment incentive will be issued directly to the customer. Participating small business customers will also earn an ongoing annual incentive each year they participate in the program.

e. EnergyHub will implement its Automated Enrollment Verification (AEV) feature to match small business customer applications with valid customer records from Entergy's Customer Care System (CCS). AEV streamlines enrollment processing and will allow ENO to distinguish between residential and small business customers as part of the enrollment process.

f. Once approved by ENO and APTIM, customers are automatically available for DR dispatch within the Mercury DERMS.

Participation Guidelines

a. In order to participate in the Small C&I DR offering, a customer must be a current customer of ENO on a commercial tariff, with peak demand up to 100 kW.
b. Eligible customers must have an installed qualifying connected thermostat in order to enroll in the Small C&I DR offering.
c. Small business customers may pursue an incentive on a qualifying installed connected thermostat as an energy efficiency measure, as a separate incentive from demand response incentives available through the Small C&I DR offering.
d. Through the enrollment process, participating customers will understand their thermostat temperature setpoint may be adjusted during periods of peak demand. Other program terms and conditions will be apparent during enrollment.
e. Customers will always have the option to opt out of specific demand response events and may un-enroll from the program entirely at any point.
f. Customers who consistently opt out of peak demand curtailment events may be un-enrolled from the program. Un-enrolled customers will not receive an annual participation incentive.

Trade Ally Recruitment & Training

a. The Small C&I DR offering will rely on the existing base of installed connected thermostats with ENO small commercial customers as a primary population of customers to target for enrollment.
b. Beginning in Program Year 10, connected thermostats will become an incentivized energy efficiency measure through Energy Smart. Trade ally installation of qualifying devices will broaden the eligible customer base and provide customers with an added channel to promote and facilitate enrollment.
c. APTIM will leverage the launch of the Small C&I DR offering to conduct trade ally outreach to communicate the new program opportunity and grow the trade ally network. APTIM will conduct trade ally training and provide supporting information and materials to provide a detailed understanding of the program to interested trade allies.
d. In order to ensure participating trade allies represent the program appropriately, participating trade allies will be required to sign a trade ally agreement with terms & conditions updated to include the Small C&I DR offering. Trade allies will also be furnished the Trade Ally Code of Conduct and an updated Trade Ally Operating Manual.
e. APTIM will conduct QA/QC on a sampling of installed measures and facilitate the resolution of customer complaints relating to trade ally performance.

Device Installations

a. The Small C&I DR offering enables the enrollment, monitoring, and control of qualifying connected thermostats installed at ENO small commercial customer sites. The program will allow ENO to tap into the growing base of connected thermostats in ENO territory and leverage the aggregation as a grid resource for peak reduction.
b. Initial program participation will be driven from the existing pool of devices installed at small business customer sites in the ENO territory.
c. New connected thermostats will be installed at small business sites through Energy Smart energy efficiency programs. APTIM will coordinate with EnergyHub to facilitate the enrollment of these thermostats into the Small C&I DR offering, where applicable.

d. Participation in the Small C&I DR offering allows for both self-installed connected thermostats, and equipment installed by a trade ally.
e. Customers with existing devices will enroll in the program through thermostat manufacturer-driven digital marketing (e.g., email, web and mobile) or through marketing communicated by APTIM.
f. Customers who receive a qualifying device and installation support from a trade ally will be guided through the process to enroll upon installation of the device.

Data Collection

a. The primary platform in use for the Small C&I DR offering will be the Mercury DERMS software platform. Mercury will be configured prior to program launch to ensure that all data fields required by ENO will be included in the program enrollment process.
b. During program enrollment, customer-specific data will be collected through Mercury including customer name and contact information.
c. Mercury will undergo technical integrations with each of its device partners to gain near real time access to data from participating customers' connected thermostats (e.g., connectivity status, temperature setpoint, runtime interval data, etc.). Data collected from devices may vary slightly based on the technical integrations and data availability from specific device manufacturers.
d. The Mercury platform will use a pre-validated ENO customer list to automatically match incoming applications and present verified enrollments to ENO for streamlined batch processing. APTIM and ENO will manually review and process any enrollment exceptions on a regular basis.
e. Load curtailment data will be collected through Mercury during demand response events in near real time, demonstrating the participation rate and load curtailment realized at various levels of aggregation depending on ENO's DR resource hierarchy (i.e., at the aggregate level, or based on other groupings such as topological locations on the grid).
f. APTIM and EnergyHub will coordinate efforts so that DR details captured in Mercury may be imported into APTracks so that comprehensive detail on each customer's participation in both energy efficiency and demand response offerings will be accessible to program staff. A comprehensive understanding of customer engagement in DSM and DR will streamline outreach efforts and ensure marketing can be targeted to customers' specific opportunities to participate.

Data Management & Tracking

a. Data from participating small business customers, and the results of their participation, will be collected through the Mercury platform.
b. Mercury will be used to forecast load activity and available DR capacity in near real time.
c. Mercury has the capability to configure demand response events according to ENO's specific needs, such as the desired load control strategy (i.e., a standard DR event or Mercury's intelligent dispatch feature) and event parameters (date, time, duration, notification settings). Configured events can be replicated or modified as needed.
d. Data collected during peak events will be used for measurement and verification of results following demand response events.
e. Data security measures are inherent to the Mercury platform, and strict systems access

privileges and the ability of individual users to read/write data will be enforced.

f. APTIM will also use data collected through Mercury for the purposes of data analysis and written narrative reporting presented to ENO on a regular frequency.

Inventory Management

a. Under the Small C&I DR offering, eligible connected thermostat measures will be installed at qualifying businesses either by Energy Smart trade allies, or by customers themselves.

b. Management of connected thermostat inventory for energy efficiency incentives will be handled by participating trade allies. Because measure installation will be driven by a range of trade allies, and there will be multiple manufacturer and model options for eligible thermostats, there will be no need for program staff to manage product inventory.

Evaluation, Measurement & Verification (EM&V)

Evaluation of the Small C&I DR offering will be conducted by ADM, the program evaluator for the Energy Smart Program. Supporting tasks and objectives for the evaluation process include:

a. APTIM and EnergyHub will provide ADM with read-only access to participant data for the Small C&I DR offering to assist ADM with program evaluation efforts.

b. Participant data will undergo review by program staff to identify and rectify any obvious outliers in the data set.

c. APTIM will track enrolled customers to understand participation patterns for peak demand events over time, which may inform future program planning efforts.

d. The Mercury platform has the capability to derive load shed at the participant level in comparison to a customer baseline, so load curtailment results at both the customer and full participant population levels will be accessible in near real time.

e. Program staff will conduct QA/QC on connected thermostat installations for a sampling of enrolled participants, to ensure thermostat products are installed properly and functioning as intended.

f. Although the New Orleans Technical Reference Manual (TRM) does not presently include detailed demand response methodologies, APTIM will support efforts to expand and refine elements of the TRM that establish demand response algorithms and assumptions to make load curtailment calculations increasingly transparent and accurate.

g. The results of annual program evaluation efforts will inform program planning for future years, from both process and impact perspectives. Evaluation results will be incorporated into strategic recommendations to improve and expand the Small C&I DR offering over time.

APTIM

Budgets & Savings

1. Portfolio Total Budgets and Savings

The budgets outlined within this plan include an allocation toward EM&V, which totals 6.5% of the annual budget for the relevant offerings.

ENERGY SMART - DR PORTFOLIO BUDGETS			
	Year 10	**Year 11**	**Year 12**
RESIDENTIAL TOTAL	**$651,535**	**$627,083**	**$651,782**
EM&V	*$42,351*	*$40,761*	*$42,367*
PROGRAM COSTS	*$609,185*	*$586,322*	*$609,415*
C&I TOTAL	**$89,414**	**$90,211**	**$121,478**
EM&V	*$5,812*	*$5,864*	*$7,896*
PROGRAM COSTS	*$83,602*	*$84,347*	*$113,582*
ENERGY SMART TOTAL	**$740,949**	**$717,294**	**$773,260**
EM&V	*$48,163*	*$46,625*	*$50,263*
PROGRAM COSTS	*$692,787*	*$670,669*	*$722,997*

ENERGY SMART - DR PORTFOLIO SAVINGS			
	Year 10	**Year 11**	**Year 12**
RESIDENTIAL TOTAL			
PARTICIPATION	3,416	3,971	4,444
GROSS DEMAND SAVINGS (MW)	2.83	3.49	4.03
C&I TOTAL			
PARTICIPATION	87	267	607
GROSS DEMAND SAVINGS (MW)	0.13	0.40	0.91
ENERGY SMART **TOTAL**			
PARTICIPATION	3,503	4,238	5,051
GROSS DEMAND SAVINGS (MW)	2.96	3.89	4.94

APTIM

2. Annual Portfolio Budgets & Savings

The following tables represent the budget and savings totals for the program portfolio.

2020 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
OFFERING	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
RESIDENTIAL - DLC	$24,097	$346,616	$370,713	2,066	0.76
RESIDENTIAL - BYOT	$18,254	$262,569	$280,822	1,350	2.07
SMALL C&I	$5,812	$83,602	$89,414	87	0.13
TOTAL	**$48,163**	**$692,787**	**$740,949**	**3,503**	**2.96**

2021 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
OFFERING	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
RESIDENTIAL - DLC	$21,162	$304,394	$325,556	2,871	0.62
RESIDENTIAL - BYOT	$19,600	$281,928	$301,528	1,100	2.87
SMALL C&I	$5,864	$84,347	$90,211	267	0.40
TOTAL	**$46,625**	**$670,669**	**$717,294**	**4,238**	**3.89**

2022 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
OFFERING	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
RESIDENTIAL - DLC	$19,764	$284,299	$304,063	3,494	0.54
RESIDENTIAL - BYOT	$22,602	$325,116	$347,719	950	3.49
SMALL C&I	$7,896	$113,582	$121,478	607	0.91
TOTAL	**$50,263**	**$722,997**	**$773,260**	**5,051**	**4.94**

APTIM

3. Net Benefits and Cost Effectiveness Analysis

None of these DR offerings are forecasted to exceed a TRC of 1.0 during the three-year planning period; however, BYOT and Small C&I are forecasted to do so within five years. The rate of attrition for switches in DLC is expected to exceed the rate of installation, so that offering will become less cost-effective over time. The Navigant and Optimal DSM potential studies both show higher TRCs for these offerings primarily because they provide one TRC value for a 20-year period. The offerings above would have significantly higher TRCs if a 20-year period were utilized.

The TRC calculations below use the same avoided cost values as those used in the energy efficiency implementation plan.

DR PORTFOLIO COST EFFECTIVENESS ANALYSIS	TRC BENEFITS ($)	TRC RATIO	UCT RATIO
RESIDENTIAL - DLC	$155,033	0.16	0.15
RESIDENTIAL - BYOT	$679,215	0.81	0.73
SMALL C&I	$116,130	0.41	0.39
TOTAL	**$950,377**	**0.45**	**0.43**

DR ANNUAL TRC ANALYSIS	YEAR 10	YEAR 11	YEAR 12
RESIDENTIAL - DLC	0.17	0.15	0.14
RESIDENTIAL - BYOT	0.59	0.77	0.81
SMALL C&I	0.12	0.36	0.60

Engery Smart Program Year 10-12
Implementation Plan
Large Commercial Demand Response

Honeywell

PROGRAM OBJECTIVE

The Commercial Demand Response (DR) Program discussed in this implementation plan is projected to have a term beginning on January 1, 2020 and continuing through December 31, 2022. The term coincides with Program Years 10-12 of the Council of the City of New Orleans's (Council) Energy Smart DSM program. The objective of the program is to secure a total of 9.3 megawatts (MW) of Commercial demand shed over the term of the program. Honeywell Smart Energy (HSE), in coordination with Entergy New Orleans (ENO) will recruit, enroll, conduct DR Surveys, and install control equipment at customer sites to provide a turn-key solution for ENO Commercial customers.

IMPLEMENTATION PROCESS

This document summarizes the implementation plan and proposed budget for the Commercial DR Program. It includes the program's outreach, customer DR Survey / enrollment, trade ally recruitment/training, hardware and software, Evaluation, Measurement &Verification ("EM&V"), and data collection/management procedures of DR performance.

OUTREACH / RECRUITMENT

HSE will work with designated commercial ENO Account Managers to identify, recruit, and enroll customers in the Commercial DR program. HSE requests the following documentation from ENO to assist in recruitment:

- Commercial customer list of all accounts that includes:
  - Customer Name and contact information (address, phone, email)
  - Peak demand (kW) and usage (kWh)
  - Current participation in Energy Smart Program(s)
  - Assigned ENO Account Manager (if applicable)

HSE will work with ENO Account Managers to identify (utilizing above information) and target customer outreach. HSE will attend any regular meetings or calls Account Managers may have with their customers to assist in verifying eligibility and interest in the program.

CUSTOMER DR SURVEY / ENROLLMENT

Commercial customers who have expressed interest in the program will be scheduled for an initial facility walk through and discussion with HSE and/or ENO representative. If the customer remains interested and the facility walk through determines that facility is likely eligible to participate, then a full DR survey will be scheduled. The DR survey will collect data on facility/customer operations, major energy consuming high demand equipment/appliances, existing building management system (BMS), and electrical meter location. The site data collected for the program will be agreed upon between HSE and ENO and outlined in a Statement of Work ("SOW"). The site survey will highlight potential measures that can be curtailed to reduce demand within acceptable customer operational constraints.

The DR survey will be sent to customer within 30 days of the site visit. After review and discussion of the survey with customer and if in agreement on proposed shed measures, customer would sign a DR Agreement. Agreement is between customer and ENO and indicates how DR events will be dispatched as

well as how performance payments will be calculated and paid. Initial payments, prior to the Advanced Metering Infrastructure (AMI) system going live, will be based on the number of events the customer participates in. When HSE can view AMI data, performance payments could include the amount of kW shed during events.

TRADE ALLY RECRUITMENT / TRAINING

HSE will work within the existing trade ally network and recruit new HVAC, controls, and building maintenance contractors to assist in identifying, developing, and installing final DR equipment and software. Through execution of past programs with similar scope, HSE has utilized local network of BMS and other controls vendors to assist in recruitment and identification of candidate projects. Local, existing knowledge of facilities has proven to reduce time and cost of project selection, validation and installation.

All automated solutions for the Commercial DR program will use the appropriate hardware that has been approved by the Open DR Alliance to enable the automated, remote accessible dispatch of load control signals and performance data metrics. Specific load control shed measures are tailored to individual customer facility and their operations. BMS programming changes will be conducted by the customer's current BMS provider or by a recruited subcontractor who is familiar and has the licensing to perform such work for customer.

GATEWAY & SUPPORTING HARDWARE INSTALLATION

Honeywell will utilize the following procedures when installing and commissioning the DR hardware and software:

a) Install gateway in agreed upon location at customer facility. Gateway will be installed in the vicinity of the BMS controller and ENO utility meter.
b) Ensure gateway is connected to DR software platform.
c) Site connectivity will be through facility/customer-supplied internet connection or via a cellular gateway. Internet connection allows for remote event dispatch, monitoring, and EM&V.
d) Configure existing facility BMS for agreed upon load shed measures. Programming is typically completed by existing facility BMS contractor or another subcontractor familiar with the system.
e) Following programming and hardware installation, function testing to include multiple test events will be conducted to verify load shed and installation is functioning as designed.

Following test events, local HSE and subcontractor personnel will confer with customer and ENO to ensure installation and performance has met objectives. Further programming or modifications can be accomplished to ensure all targets are achieved.

Installation will be completed by local HSE personnel or trade ally.

DR DISPATCH, CONTROL & OPTIMIZATION SOFTWARE

Honeywell will be deploying an advanced software platform for dispatch, control, and optimization of all DR resources enrolled in the Program. This software platform, Concerto®, will be provided by Honeywell's partner Enbala Power Networks.

Honeywell will utilize Concerto to advance its goals of maximizing customer satisfaction for participants in the Program while simultaneously maximizing reliability of the Program for ENO. Key features of the software platform that Honeywell will provide to ENO include:

a) Dispatch of DR resources
    - Day-Ahead forward scheduling and fast 10-minute dispatch
    - Events can call for assets to be ramped in/out slowly, curtailed immediately for emergencies, or anything in-between

a) Constraint based dispatch to ensure customer set limits are never exceeded, thereby reducing participant fatigue and ensuring the flexibly is always available.
b) Flexible methods and technology to connect to customer assets, supporting dispatch ranging from 100% control by customer to fully automated response
c) Customer ability to opt out of future or current events regardless of how they are connected/dispatched to/from Concerto
d) Unlimited ways to group customers/assets that allows ENO to call only the assets where they're needed, when they're needed
e) Two-way feedback loop to monitor and control assets
    - Allows for real-time measurement & verification of customer/asset performance
    - Provides the ability for the platform to constantly re-optimize how much demand is curtailed by each customer as real-time results reveal over or under-performance
f) Concerto User interface available to ENO to view real-time status of assets enrolled in Program

Adaptable to new and changing technologies that can provide flexibility to the program (i.e. batteries, electric vehicles, distributed solar, etc.) as new innovations come to market, allowing ENO to avoid obsolescence.

EVALUATION, MEASUREMENT & VERIFICATION (EM&V)

AMI meters, if installed during program term, at each customer location will allow for data to be captured to track DR customer performance during each energy savings event. Once completed, data will be utilized by Concerto to calculate performance and associated incentive payments.

Prior to AMI completion, HSE, during the DR installation, will install hardware to capture facility event performance. Should the customer's facility or ENO meter location make such hardware cost prohibitive a lower cost, non-communicating data logger may be installed until AMI completion.

Concerto utilizes an industry standardized approach to baseline customer energy demand and resulting event performance. Performance will be calculated after each event and communicated to ENO and customer. Payments will be sent to customer following completion of each DR season in October / November time frame.

Prior to AMI completion, HSE envisions that for the first year of the DR program, participating customers will receive a participation incentive. The initial participation incentive will be calculated based on the number of events participated in, not the actual load shed during an energy savings event. However, as AMI data becomes available, performance payments could be based on actual kW curtailed during events.

DATA MANAGEMENT & REPORTING

Honeywell will work with ENO and Enbala to develop a set of data fields that are captured during installation and after each demand reduction event.

Customer name, address, phone and account numbers will be verified before installations begin during the DR Agreement phase following survey.

Following Automated Demand Response (ADR) gateway installation, the Media Access Control ID, Virtual End Node (VEN) and corresponding facility address will be recorded and loaded into Concerto.

Customer data and event performance history will be recorded by HSE and communicated to ENO in a mutually agreed upon format.

All reporting requirements and formats will be discussed with ENO during program development discussions.

COMMERCIAL DR BUDGET & TOTAL RESOURCE COST (TRC)

HSE Commercial DR Program budget is below. This includes line items for mobilization, program design, hardware, Concerto, Command Central (Honeywell's data management software) development, outreach/enrollment, trade ally recruitment/training, and installation and programming of DR hardware and software. With development and deployment of Concerto and Command Central platforms in first year there is a higher upfront cost in the first program year. Budget is based on a total DR demand shed of 9.3MW over program period. Large Commercial Demand response programs have higher expenses in the initial year. TRC scores vary year to year depending on the acquisition and curtailment strategies. Due to higher costs in setting up a large commercial demand response program in the initial year, we estimate TRC to be 0.17 at the end of PY 10. As the program matures and additional customers enroll (adding to the cumulative annual load shed) TRC scores rise to 0.88 in PY 12. In a 5-year model the TRC continues to rise in year 4 to 1.15 and to 1.48 during the 5th year. The 5-year model assumes acquisition efforts remain through the period.

	Year 1	Year 2	Year 3
Combined Implementation + Incentives	**$ 1,064,270**	**$ 846,354**	**$ 1,013,542**

Implementation Plan – Entergy New Orleans Appliance Recycling & Replacement Pilot

Pilot Objective

Entergy New Orleans, LLC (ENO) is proposing to include an Appliance Recycling & Replacement Pilot for residential customers beginning in Program Year 10 of the New Orleans Energy Smart Program. Entergy recommends a budget of $345,744 per year for PY10 and PY11 and a budget of $494,206 for PY12. APTIM, in its role as Third Party Administrator ("TPA"), prepared the proposed budget for this pilot program and expects to select an implementer ("Implementer") to provide the services described below.

The Appliance Recycling and Replacement Pilot offering will encourage early recycling of qualifying low efficiency appliances, such as refrigerators and freezers, for residential customers. The Pilot will also offer a refrigerator replacement option for income-qualified residential customers. This new offering will go beyond federal recycling requirements using environmentally friendly best practices for recycling all components of each appliance. The pilot is projected to have 1,400-1,800 customer participants annually during this period.

Implementation Process

This section summarizes the implementation plan for the Pilot, including the program's marketing/outreach, customer recruitment, pipeline management, appliance collection process, data collection/management, Evaluation, Measurement & Verification ("EM&V") procedures, and a budget for implementation. Because this Pilot is expected to have a limited number of participants, the Implementer will utilize a targeted outreach approach for recruiting participants for the program.

1. **Marketing/Outreach**
    a. The Implementer's marketing/communications department will utilize the Energy Smart Program branding to create appropriate and impactful marketing materials for various marketing channels designed to encourage customers to participate in the Pilot.
    b. The Implementer will geographically target neighborhoods for appliance recycling. A subset of these neighborhoods will be income-qualified and targeted for the appliance replacement offering, as identified through consultation with ENO.
    c. The Implementer will enroll a significant percentage of customers through targeted emails and social media, directing them to enroll via the Energy Smart website or via phone.
    d. The Implementer's call center will answer customer questions about the pilot, review steps for participation and enroll the customer in the offering.
2. **Customer Enrollment**
    a. Customers will enroll by calling the Implementer's call center or via a form on the Energy Smart website.

b. One to two days prior to pick-up, the Implementer will confirm that the customer understands the program requirements and then schedule a four-hour window time for pick-up and/or replacement.

c. Upon arrival, the Implementer will test the appliance to confirm that it is functional and qualified. If it is functional and qualified, the Implementer will load the appliance onto the truck for recycling. The Implementer will also educate the customer on other available Energy Smart offerings.

d. The Pilot will pay the customer an incentive of $50 per unit collected within 4-6 weeks of pick up. If the customer qualifies for a refrigerator appliance replacement, the customer will receive a new energy efficient refrigerator.

3. Participation Guidelines

The Appliance Recycling & Replacement Pilot is designed to help Entergy New Orleans residential customers recycle their inefficient appliances in an environmentally responsible manner and if qualified, receive a new efficient refrigerator appliance replacement.

a. Only residential customers that receive their electric service from Entergy New Orleans can participate in this pilot.

b. Standard size refrigerators and freezers are eligible (10-30 cubic feet); mini fridges are not eligible.

c. Only refrigerators or freezers that are in operating condition qualify for recycling or replacement. If the unit is not functional, as determined by the Implementer staff onsite, the unit will not be collected and the customer will not receive an incentive.

d. Customers are required to be onsite at the time of appliance testing and collection.

e. The Implementer will recycle and replace a maximum of one appliance per year, per customer account.

f. Customers are eligible to receive an incentive of $50 per appliance recycled and may receive an energy efficient replacement refrigerator, if qualified and supplies are available.

4. Appliance Collection & Recycling

a. The Implementer will utilize the below procedures when collecting an appliance for recycling.

b. Upon arrival at the customer's home, the Implementer will:

i. Confirm with the customer that they want to participate in the pilot;

ii. Test the appliance to ensure that it is in proper working order and qualifies for recycling;

iii. If the appliance is functional and qualifying, the Implementer will load the appliance on their truck to be hauled away for recycling.

c. In cases where the unit does not qualify for recycling under the pilot, the Implementer will notify the customer of the reason that the unit does not qualify and provide the customer with a list of other Energy Smart offerings that may be beneficial to that customer.

d. The Implementer will recycle all collected appliances to the following standards:

i. Ensure that existing appliances are never returned to service in the U.S. or other countries;

ii. Maintain a partnership with EPA's Responsible Appliance Disposal Program ("RAD"), processing all applicable appliances in compliance with RAD.[1]

5. Appliance Replacement

a. The Implementer will utilize the below procedure when providing refrigerator appliance replacement services.

b. Upon arrival at the customer's home, the Implementer will:

i. Confirm with the customer that they want to participate in the pilot;

ii. Test the existing appliance to ensure that it is in proper working order and qualifies for the pilot;

iii. If the appliance is functional and qualifying, show the customer the new appliance and confirm that they will accept the new appliance;

iv. Bring the new appliance into the home, install it and confirm functionality;

v. Upon customer approval of the newly installed appliance, the Implementer will load the existing appliance on their truck to be hauled away for recycling.

c. In cases where the unit does not qualify for recycling under the pilot, the Implementer will notify the customer of the reason that the unit does not qualify and provide the customer with a list of other Energy Smart offerings that may be beneficial to that customer.

d. The Implementer shall comply with the recycling standards identified above.

6. Data Collection Requirements

a. The Implementer will work with ENO and ADM (EM&V evaluator) to develop a set of data fields that are captured for each project.

b. At a minimum, the following information will be documented:

i. Customer name, address, phone and account numbers will be verified before the Implementer enters the customer's residence;

ii. Make, model and year of manufacture of the existing unit;

iii. For refrigerator replacements, the make, model and year of manufacture of the new unit.

7. Data Management & Reporting

a. The Implementer will document appropriate information in the field, then manually enter the key data points to APTracks, the system of record for Energy Smart.

b. The Implementer and APTIM will leverage APTracks to generate program reports and provide data to ADM.

[1] https://www.epa.gov/rad/about-rad-program

8. Inventory Management

a. The Implementer will maintain pre-approved energy efficient refrigerators for replacements in a proper warehouse location.

b. The Implementer accepts responsibility for inventory management and shrinkage.

c. Replacement refrigerators must be pre-approved and be ENERGY STAR® certified.

9. Evaluation, Measurement & Verification (EM&V)

The Appliance Recycling & Replacement Pilot's evaluation will be conducted by Entergy New Orleans's contracted evaluator, ADM. The overall objectives of the program evaluation are to:

a. Confirm that the savings claimed by the Energy Smart Program are defensible, given field data and other documentation collected by the program implementation team;

b. Confirm the appropriateness of the savings methodologies used by the program implementation team to estimate energy savings;

c. Recommend strategies to respond to pilot program challenges experienced during implementation.

Once the program is implemented, Entergy New Orleans, ADM, APTIM and the Implementer can determine the appropriate date for delivery of the final EM&V report. To maximize the value of the EM&V report, Entergy New Orleans, APTIM and the Implementer will need to cross-check identified issues and address any needed changes to reported program savings and supplemental data collection.

10. Pilot Budget & Savings Estimates

APTIM has created an Appliance Recycling & Replacement Pilot program budget that includes all costs to deliver the pilot. Given the nature of the program, start-up costs are expected to be minimal.

APPLIANCE RECYCLING & REPLACEMENT PILOT - BUDGET, SAVINGS & PARTICIPATION

	EM&V	Administration	Implementation	Incentives	Total Costs	Participation - Recycling	Participation - Replacement	kWh Savings	TRC
PY10	$22,619	$13,125	$175,000	$135,000	$345,744	1,300	100	1,481,900	0.65
PY11	$22,619	$13,125	$175,000	$135,000	$345,744	1,300	100	1,481,900	0.67
PY12	$32,331	$16,875	$225,000	$220,000	$494,206	1,600	200	1,897,900	0.66
TOTAL	**$77,569**	**$43,125**	**$575,000**	**$490,000**	**$1,185,694**	**4,200**	**400**	**4,861,700**	**0.66**

CERTIFICATE OF SERVICE
Docket No. UD-17-03

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

Lora W. Johnson, CMC, LMMC
Clerk of Council
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