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August 23, 2022

VIA ELECTRONIC DELIVERY

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

RE: Filing of Entergy New Orleans, LLC’s Revisions to the Energy Smart Program Application for Approval of the Implementation Plan for Program Years 13-15 (Docket Nos. UD-20-02 and UD-08-02)

Dear Ms. Johnson:

On July 29, 2022, Entergy New Orleans, LLC (“ENO”) submitted its Application for Approval of the Implementation Plan for Program Years 13-15 of the Energy Smart Program with Exhibits attached thereto. One of the Exhibits, the Energy Smart Residential Demand Response Plan contained errors in tables showing projected demand reductions and Total Resource Cost (“TRC”) score by year. This filing corrects the errors in demand reduction and TRC score projections.

As a result of the remote operations of the Council’s office related to Covid-19, ENO submits this filing electronically and will submit the original and requisite number of hard copies once the Council resumes normal operations, or as you direct. ENO requests that you file this submission in accordance with Council regulations as modified for the present circumstances.

Should you have any questions regarding this filing, please contact my office at (504) 576-6571. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in blue ink, appearing to be 'LW', with a long horizontal flourish extending to the right.

Lacresha Wilkerson

Enclosures

cc: Official Service List (*via email*)



January 1, 2023 – December 31, 2025 Program Years 13-15 Energy Smart Residential Demand Response Plan

7/29/2022

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Contents

Summary	3
Residential Demand Response Offerings	4
Bring Your Own Thermostat	5
<i>Marketing & Outreach</i>	5
<i>Customer Enrollment and Participation</i>	5
<i>Data Collection</i>	6
<i>Evaluation, Measurement & Verification (EM&V)</i>	6
Peak Time Rebate Pilot	7
<i>Marketing & Outreach</i>	8
<i>Customer Enrollment and Participation</i>	8
<i>Data Collection</i>	9
Budgets & Savings	9
1. Portfolio Budgets and Savings	9
2. Annual Portfolio Budgets & Savings	10
3. Net Benefits and Cost Effectiveness Analysis	11



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, 2023 to December 31, 2025. 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 residential 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 13, 14 and 15 which run from January 1, 2023 to December 31, 2025.

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 Heating, Ventilation and Air Conditioning (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 expanded offerings for its Residential customers this program cycle.



Residential Demand Response Offerings

Energy Smart will continue to 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, or via the Energy Smart Online Marketplace 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 to coordinate marketing activities and DR dispatch of the EasyCool BYOT program. EnergyHub will also work with APTIM and Franklin Energy to enable the pre-enrollment of connected thermostats that are purchased through the Residential Energy Smart Online Marketplace in the EasyCool program.

The smart thermostat-based DR program will be the primary device type for scaling ENO's residential DR resource. Compared to other potential device types (e.g., water heater switches or pool pumps), this proposed measure and BYOT program design is more cost-effective and avoids the need for field services to support the installation and maintenance of other devices. Smart thermostats have current widespread deployment and an estimated 15% year-over-year growth in new installations. Historically, these devices catered to technology early adopters, however new models with reduced price points and the ability to stack energy efficiency and DR rebates in the Energy Smart Online Marketplace create an opportunity to engage this measure with ENO's low- and moderate-income customers. The estimated 13 MW resource by 2025 in this plan equates to participation from about 5% of ENO residential customers. These forecasts are in line with both the 2021 GDS and Guidehouse potential study findings.

ENO will also pursue an Opt-in Peak Time Rebate Pilot designed to flexibly manage demand including reducing total peak usage, shifting load off-peak, and optimizing grid load and demand. The proposed Peak Time Rebate Pilot allows ENO to call events year-round and would include customer engagement through email and SMS text messaging. Notification for events would be required 24-72 hours in advance and based on notice given, relevant pre-event communications would be sent to enrolled customers. The customer participation pathway is designed to integrate seamlessly in conjunction with co-existing Customer Engagement and Behavioral Energy Efficiency customer journeys.



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.

Marketing & Outreach

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. APTIM-led marketing will direct customers to an EnergyHub-powered “microsite” to enroll their existing device in the residential DR program through the device partner web or mobile application experience. Marketing will also present the option to purchase a connected device on the Energy Smart Online Marketplace.

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.

APTIM and EnergyHub will coordinate efforts so that DR enrollments captured in Mercury may be imported into APTracks so that comprehensive information 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.

Customer Enrollment and Participation

ENO residential customers with 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.

ENO residential customers that have existing connected thermostats will be directed from outbound marketing to enrollment pages for each device manufacturer where they will provide basic information to apply to the residential BYOT DR program. Customers that do not yet have a connected thermostat will receive marketing directing them to the Energy Smart Online



Marketplace. Customers that purchase the connected thermostat through the Online Marketplace will leverage the energy efficiency and EasyCool enrollment incentives at the point of purchase, with the connected thermostat pre-enrolled in the EasyCool program (i.e. once the customer registers and installs the device, it will automatically be enrolled, with no further action required by the customer).

APTIM will process BYOT DR applications using the Mercury DERMS enrollment tool. Once accepted by APTIM, enrollment incentive is issued, and residential customers are automatically available for DR dispatch within the Mercury DERMS. Participating customers will experience a temperature adjustment when a DR event is dispatched from the Mercury DERMS. Customers will be able to opt out of a DR event at any time, or may un-enroll from the BYOT program, if desired.

The program team has recommended a change to the incentive structure to include \$50 enrollment incentive and \$25 annual participation. Past program cycle experience indicates the enrollment incentive is the primary variable that impacts enrollment rates. By lowering the existing annual participation incentive from \$40 to \$25, the program's overall cost-effectiveness will be improved. This reduction is not expected to materially impact the program's attrition rate over time.

Data Collection

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 provide only a subset of this device data. Customers will authorize their device partner to share their application information and device data with ENO and its contractors (APTIM and EnergyHub) as part of T&Cs acceptance during the enrollment process.

The Mercury DERMS dashboard provides the operator with a portfolio-level view of the DR aggregation:

- Near real-time information on the devices under management including operating mode, connectivity status, current and forecasted HVAC load.
- DR event reports including participation statistics, load and load shed interval data.
- Customer enrollment status (e.g., Accepted, Rejected, Unenrolled).

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.

Evaluation, Measurement & Verification (EM&V)



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. In addition, 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 and will be provided to the program evaluator.

Peak Time Rebate Pilot

The Opt- in Peak Time Rebate Pilot will engage customers to reduce energy consumption during Peak Events. The proposed Pilot allows ENO to call events year-round and will include customer engagement through email and SMS text messaging. Email communications will notify customers when events are imminent and provide clear recommendations on how and when to reduce their energy consumption. The Pilot is designed to meet ENO's targets by balancing customer participation with an eight-event strategy.

Notification for events will be required 24-72 hours in advance and based on notice given, relevant pre-event communications will be sent to enrolled customers. The customer participation pathway is designed to integrate seamlessly in conjunction with co-existing Customer Engagement and Behavioral Energy Efficiency customer journeys.

This plan includes:

- Peak Time Rebate Pilot enrollment campaigns.
- Peak Time Rebate event notifications for customers prior to the event including insights about their typical usage and how they can save the most energy and money for the event.
- Pre-event notifications for customers to indicate event start.
- Post-event notifications including results from the event for the individual and the community.
- Event impact measurement and performance for incentive processing.

This Pilot will leverage Bidgely's AI to identify the best potential customers to recruit and treatment channels. This Pilot provides an approach to behavioral demand response that will keep customers engaged and will allow ENO to meet more aggressive goals in the future. The summarized approach is outlined in the table below.



ENERGY SMART - PEAK TIME REBATE PILOT			
	Year 13	Year 14	Year 15
Number of Customers Eligible	48,272	67,487	84,780
Expected Participation from Eligible Customers	4%	4%	4%
Total Annual Participants	1,931	2,699	3,391
PTR Events per Year	8	8	8
Peak Event Duration (hours)	4	4	4
Total Annual Load Shifted for All Participants (kWh)	22,769	31,832	39,989

Marketing & Outreach

APTIM will partner with Bidgely to offer enrollment communications intended to alert customers about the Pilot and motivate them to enroll. Leveraging the Behavioral Energy Efficiency (HERs) the program can recommend the Peak Time Rebates Pilot to target all eligible digital HERs customers. These communications will give potential participants an overview of the Pilot, and even inform them of how much they could save, allowing for a more effective and results-driven Pilot recruitment.

Customer Enrollment and Participation

ENO Customers will be prompted to enroll in a Peak Time Rebates program to shift their kWh load during peak time events. Enrolled customers can earn up to \$25 incentive in return for adjusting their energy usage during these critical peak demand and reliability periods. Enrolled customers will receive Pre-event, During and Post-event alerts that remind and guide them to behaviorally shift or reduce their variable electric loads to help earn their total potential incentive.

Pre-Event communications are crucial to educate and inform customers about the event, the benefits of participating, and practical ways in which they can save. Pre-Event notifications will go out 48 hours, 24 hours, and 8 hours prior to the event as well as at the beginning of the event. APTIM is uniquely positioned to inform customers about what specific steps they need to take to save energy based on Bidgely’s best-in-class appliance disaggregation.

A general event-end communication is sent out to all customers at the end of the event period. It will include a note indicating that results will be available soon. After ingestion of AMI interval data for each customer the program team will calculate the amount of energy a customer saved during the event compared to the baseline. Once the savings for the event has been calculated the post event summary will be sent to customers which includes an hour-by-hour breakdown of their performance. Upon completion of each pilot program year, each customer's cumulative demand reduction kWh will be calculated to determine their performance and corresponding incentive amount capped at \$25.



Data Collection

Performance can be calculated by taking the difference between each customer's usage during the peak event and their baseline. APTIM recommends using an “n in x” baseline, for example, a 5 in 10 baseline is calculated by taking the average hourly usage of the top 5 highest kWh days of the past 10 weekdays (Holidays excluded). Overall shift measurement is leveraged in the same fashion. The program EM&V evaluator will define the final type of baseline and measurement approach for this Pilot.

Budgets & Savings

1. Portfolio Budgets and Savings

The budgets outlined within this plan include an allocation toward EM&V, which totals 4% of the annual budget for the relevant offerings.

ENERGY SMART - DR PORTFOLIO BUDGETS			
	Year 13	Year 14	Year 15
Residential Total	\$1,200,019	\$1,207,632	\$1,343,077
<i>EM&V</i>	<i>\$48,038</i>	<i>\$48,342</i>	<i>\$53,764</i>
<i>Program Costs</i>	<i>\$1,151,981</i>	<i>\$1,159,290</i>	<i>\$1,289,313</i>

ENERGY SMART - DR PORTFOLIO SAVINGS			
	Year 13	Year 14	Year 15
Residential Total			
Participation	11,531	14,299	16,991
Gross Demand Savings (MW)	10.31	12.60	14.85



2. Annual Portfolio Budgets & Savings

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

PROGRAM YEAR 13 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
Offering	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
Residential Peak Time Rebate Pilot	\$11,085	\$265,835	\$276,920	1931	0.71
Residential - BYOT	\$36,952	\$886,146	\$923,098	9,600	9.6
TOTAL	\$48,038	\$1,151,981	\$1,200,019	11531	10.31

PROGRAM YEAR 14 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
Offering	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
Residential Peak Time Rebate Pilot	\$9,858	\$236,395	\$246,253	2699	1.00
Residential - BYOT	\$38,485	\$922,895	\$961,380	11,600	11.6
TOTAL	\$48,342	\$1,159,290	\$1,207,632	14299	12.60

PROGRAM YEAR 15 - ENERGY SMART DR PORTFOLIO BUDGET AND SAVINGS					
Offering	EM&V	Program Costs	Total	Participation	Gross Demand Savings (MW)
Residential Peak Time Rebate Pilot	\$10,594	\$254,055	\$264,649	3391	1.25
Residential - BYOT	\$43,170	\$1,035,258	\$1,078,428	13,600	13.6
TOTAL	\$53,764	\$1,289,313	\$1,343,077	16991	14.85



3. Net Benefits and Cost Effectiveness Analysis

The Residential Peak Time Rebate Pilot is forecasted to reach a TRC of .5 during the three-year planning period. Residential BYOT is forecasted to reach a TRC of 1.5 during the three-year planning period. The 2021 Demand Side Management Potential Studies performed by GDS Associates and Guidehouse Inc. show higher TRCs for these offerings primarily because they provide one TRC value for a 20-year period. The offerings above would have higher TRCs if a 20-year period was utilized.

DR PORTFOLIO COST EFFECTIVENESS ANALYSIS	TRC BENEFITS (\$)	TRC RATIO	UCT RATIO
Residential Peak Time Rebate Pilot	\$220,773	0.4	0.3
Residential - BYOT	\$2,585,354	1.4	0.9
TOTAL	\$2,806,127	1.14	0.75

DR ANNUAL TRC ANALYSIS	Year 13	Year 14	Year 15
Residential Peak Time Rebate Pilot	0.2	0.4	0.5
Residential - BYOT	1.2	1.4	1.5

CERTIFICATE OF SERVICE
DOCKET NO. UD-20-02

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.

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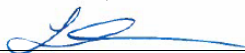
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New Orleans, Louisiana, this 23rd day of August 2022.



Lacresha Wilkerson