

1 amount for 2021 is \$0.000845 per kWh or (\$0.000833 X 1.014534 = \$0.000845).

3 Oncor's 2021 forecasted aggregate of all eligible commercial customers kWh consumption is 68,306,063,000 kWh (Total Retail 4 5 114,544,958,000 kWh - Residential 46,238,895,000 kWh) as shown in WP/MAT/3 and would equate to a not-to-exceed amount of \$57,718,623 or 6 7 (68,306,063,000 X \$0.000845). Oncor's 2021 total requested EECRF costs 8 for commercial customers is \$24,958,310 as shown in Exhibit MAT-4 (Total 9 EECRF costs \$64,782,106 - Residential EECRF costs \$39,823,796 = 10 \$24,958,310). Excluding EM&V costs for commercial programs of \$412,877, as shown in Exhibit GDJ-4, municipal EECRF proceeding costs 11 12 for commercial customers of \$4,236 (Total EECRF proceeding costs \$9,940 - Residential Service EECRF proceeding costs of \$5,704) as shown in 13 14 Exhibit MAT-4 in the testimony of Mr. Troxle, and the interest for the overrecovery of \$47,187 as shown in WP/MAT/2 (column j - column h) in the 15 16 testimony of Mr. Troxle, the total 2021 commercial customer EECRF costs 17 are \$24,588,384 [(\$24,958,310) - (\$412,877 + \$4,236 + -\$47,187)], which 18 is less than the not-to-exceed amount of \$57,718,623.

Q. WILL ANY AMOUNT OF THE 2021 REQUESTED EECRF FOR ENERGY
EFFICIENCY PROGRAMS BE USED TO FUND ANY OTHER ENERGY
EFFICIENCY PROGRAMS OUTSIDE OF RULE 25.181 AND RULE 25.182
PROGRAMS?

23 A. No.

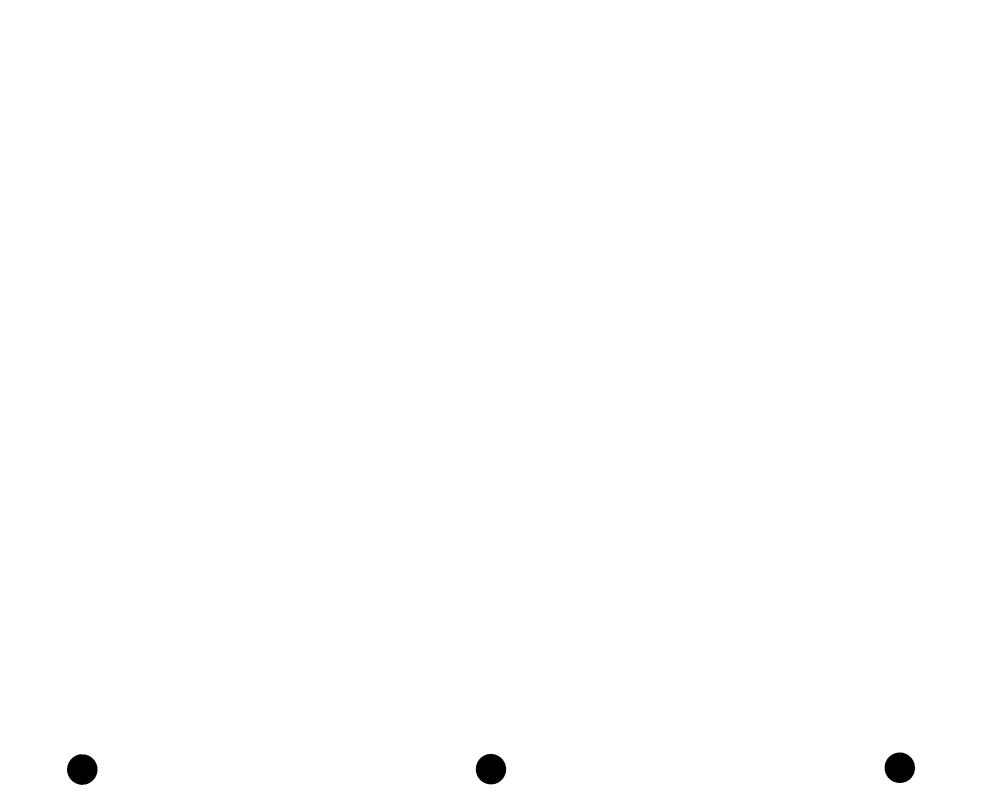
Q. WILL ONCOR SEEK TO RECOVER ANY ENERGY EFFICIENCY COSTSFOR PROGRAM YEAR 2021 IN BASE RATES?

26 A. No.

27 X. REASONABLENESS OF ONCOR'S EECRF COSTS FOR THE 2019 28 PROGRAM YEAR

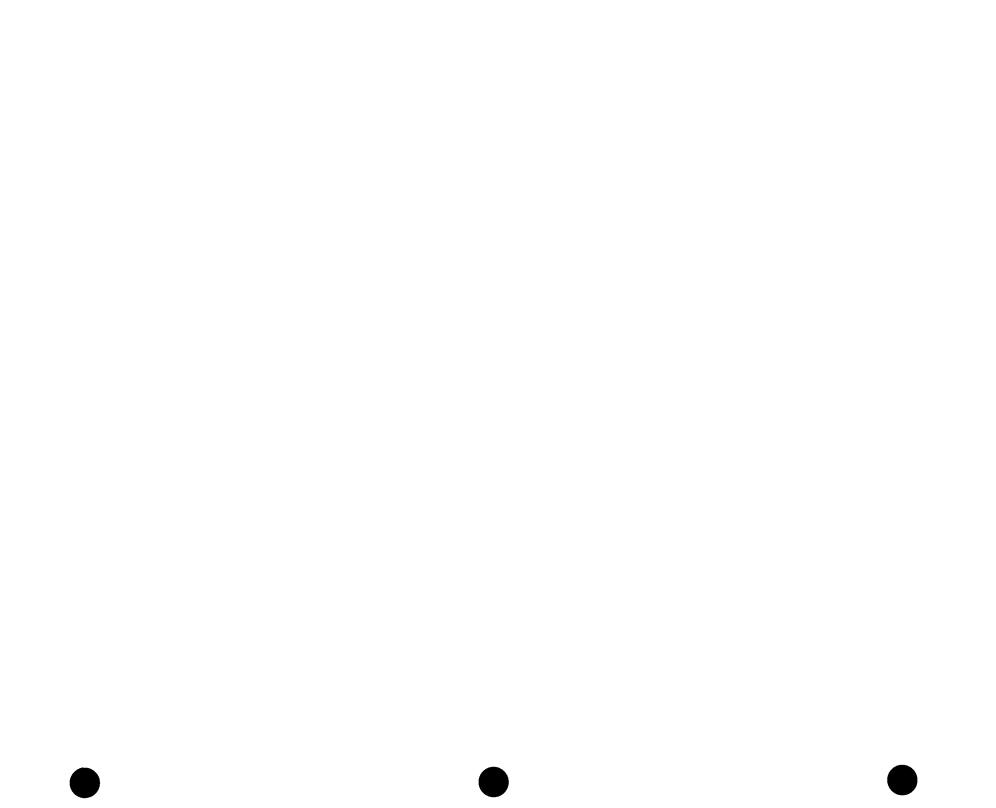
- 29 Q. DID ONCOR INCUR COSTS FOR PROGRAM YEAR 2019?
- 30 A. Yes.

PUC Docket No.



1	Q.	WERE THESE COSTS REVIEWED AND APPROVED BY THE								
2		COMMISSION?								
3	3 A. Yes, all of Oncor's proposed costs for the 2019 program year v									
4		reviewed by the Commission and its Staff in Docket Nos. 48421. On								
5		October 25, 2018, the Commission approved the costs for the 2019								
6		program year in the Final Order in Docket No. 48421 and determined that								
7		the costs were reasonable, including reasonable and necessary for Oncor								
8		to meet its goals consistent with PURA §39.905 and Rule 25.181.								
9		Additionally, Oncor has accurately described and calculated any over-								
10		recovery of costs (including applicable interest) regarding the 2019								
11		program year.								
12		XI. CONCLUSION								
13	Q.	IS ONCOR'S PROPOSED 2021 EECRF REASONABLE AND								
14		NECESSARY?								
15	Α.	Yes. Oncor has accurately and correctly calculated its proposed EECRF								
16		for 2021 consistent with the requirements of Rule 25.181 and Rule 25.182								
17		and its 2021 demand goal of 94.5 MW, based on 0.4% of peak demand with								
18		5.655% line loss. For a detailed calculation of the 5.655% line loss, please								
19		see WP/MAT/4.								
20		Approval of this EECRF will provide Oncor the flexibility to continue								
21		to pursue an aggressive set of energy efficiency programs necessary to								
22		meet the Company's savings goals, in a cost-effective manner, as								
23		established by the legislature and the Commission. For this and the other								
24		reasons discussed above and addressed by Mr. Troxle's direct testimony								
25		and the exhibits and workpapers supporting the Company's Application,								
26		Oncor's proposed 2021 EECRF is reasonable and necessary and should								
27		be approved.								
28	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?								
29	Α.	Yes, it does.								

PUC Docket No. _____



AFFIDAVIT

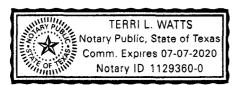
STATE OF TEXAS § § **COUNTY OF DALLAS** §

BEFORE ME, the undersigned authority, on this day personally appeared Garry D. Jones, who, having been placed under oath by me, did depose as follows:

My name is Garry D. Jones. I am of legal age and a resident of the State of Texas. The foregoing direct testimony and the attached exhibits offered by me are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true and correct.

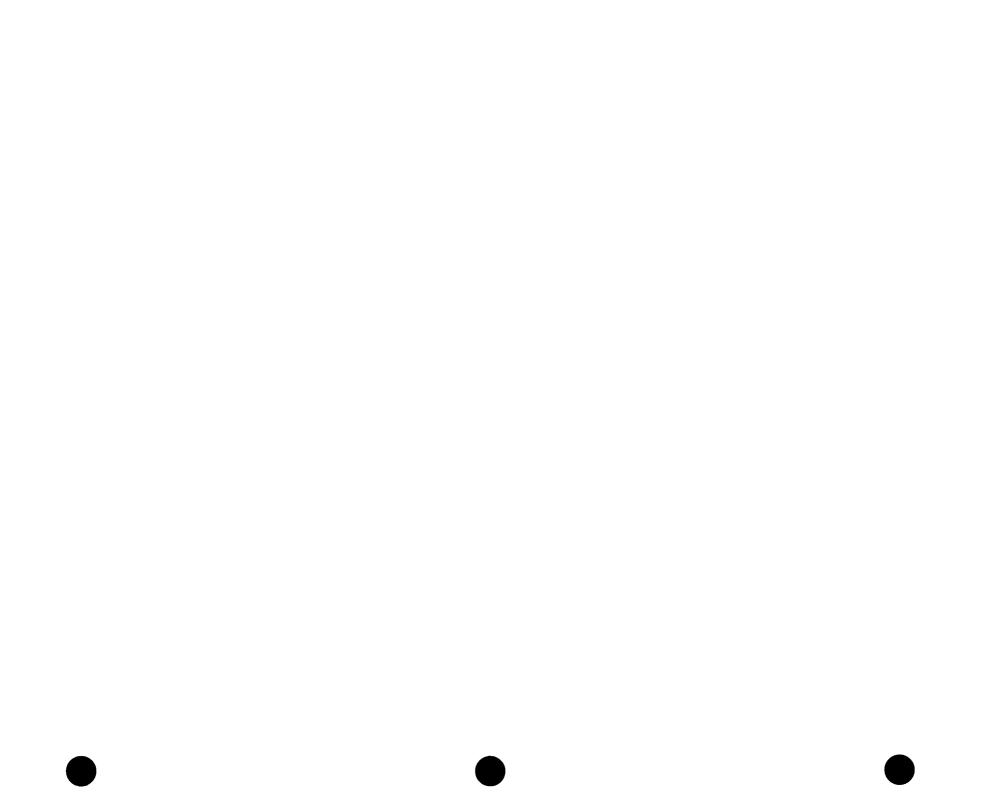
Sany D. Onis

SUBSCRIBED AND SWORN TO BEFORE ME by the said Garry D. Jones this



Jeui L. Watts Notary Public, State of Texas

PUC Docket No.



ONCOR ELECTRIC DELIVERY COMPANY LLC

2020 Energy Efficiency Plan and Report

16 Tex. Admin Code §25.181 and §25.183 (TAC)

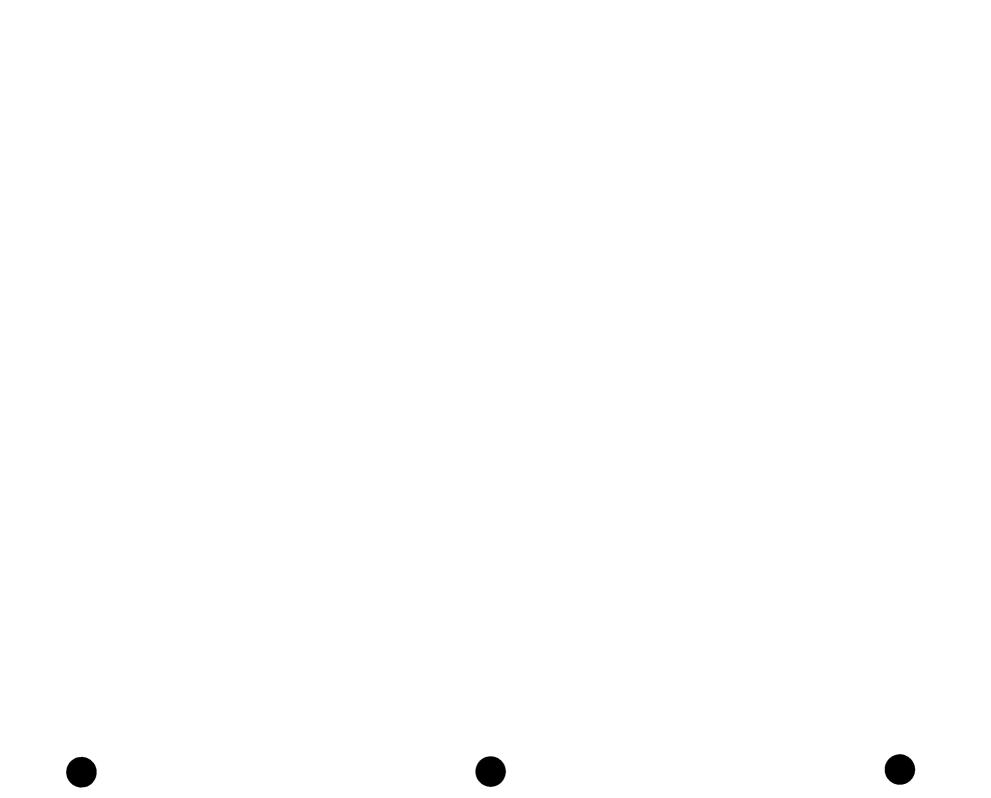
Amended May 18, 2020

Project No. 50666



Table of Contents

Intro	duction	3
Energ	gy Efficiency Plan and Report Organization	3
Execu	itive Summary	5
Energ	gy Efficiency Plan	7
I.	2020 Programs	7
А.	2020 Program Portfolio	7
В.	Existing Programs	8
C.	New Programs for 2020	15
II.	Customer Classes	15
III.	Projected Energy Efficiency Savings and Goals	16
IV.	Program Budgets	19
Energ	gy Efficiency Report	21
V.	Historical Demand Savings Goals and Energy Targets for Previous Five Years	21
VI.	Projected, Reported and Verified Demand and Energy Savings	22
VII.	Historical Program Expenditures	24
VIII.	Program Funding for Calendar Year 2019	25
IX.	Market Transformation & Research & Development Results	26
X.	Current Energy Efficiency Cost Recovery Factor (EECRF)	28
Acro	nyms	29
Gloss	ary	30
Appe	ndices	
Appe	ndix A: 2019 Reported Demand and Energy Reduction by County	A-1
Appe	ndix B: Program Templates	B-1
Appe	ndix C: List of 2019 Energy Efficiency Service Providers	C-1



INTRODUCTION

Oncor Electric Delivery Company LLC (Oncor or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (Commission) 16 TAC §25.181 and §25.183 (the Energy Efficiency Rule or EE Rule), which implement Public Utility Regulatory Act (PURA) §39.905. PURA §39.905 and the EE Rule require that each investorowned electric utility achieve the following minimum savings goals through market-based standard offer programs (SOPs), targeted market transformation programs (MTPs), or utility selfdelivered programs:

• 30% reduction of the electric utility's five-year average annual growth in demand of residential and commercial customers for the 2013 program year and for subsequent program years until the trigger described in the next paragraph is reached.

Additionally, effective September 1, 2011, PURA §39.905 requires that an electric utility, whose amount of energy efficiency to be acquired is equivalent to at least four-tenths of one percent of its summer weather-adjusted peak demand for residential and commercial customers in the previous calendar year, maintain a goal of no less than four-tenths of one percent of that summer weather-adjusted peak demand for residential and commercial customers by December 31 of each subsequent year and that the energy efficiency to be required not be less than the preceding year.

The EE Rule includes specific requirements related to the implementation of SOPs and MTPs by investor-owned electric utilities that control the manner in which they must administer their portfolio of energy efficiency programs in order to achieve their mandated energy efficiency savings goals. Oncor's EEPR is intended to enable the Company to meet its statutory savings goals through implementation of energy efficiency programs in a manner that complies with PURA §39.905 and the EE Rule. As outlined in the EE Rule, this EEPR covers the previous five years of demand savings goals and energy targets, including 2019 achievements, and reports plans for achieving 2020 and 2021 projected energy efficiency savings. The following section provides a description of what information is contained in each of the subsequent sections and appendices.

ENERGY EFFICIENCY PLAN AND REPORT ORGANIZATION

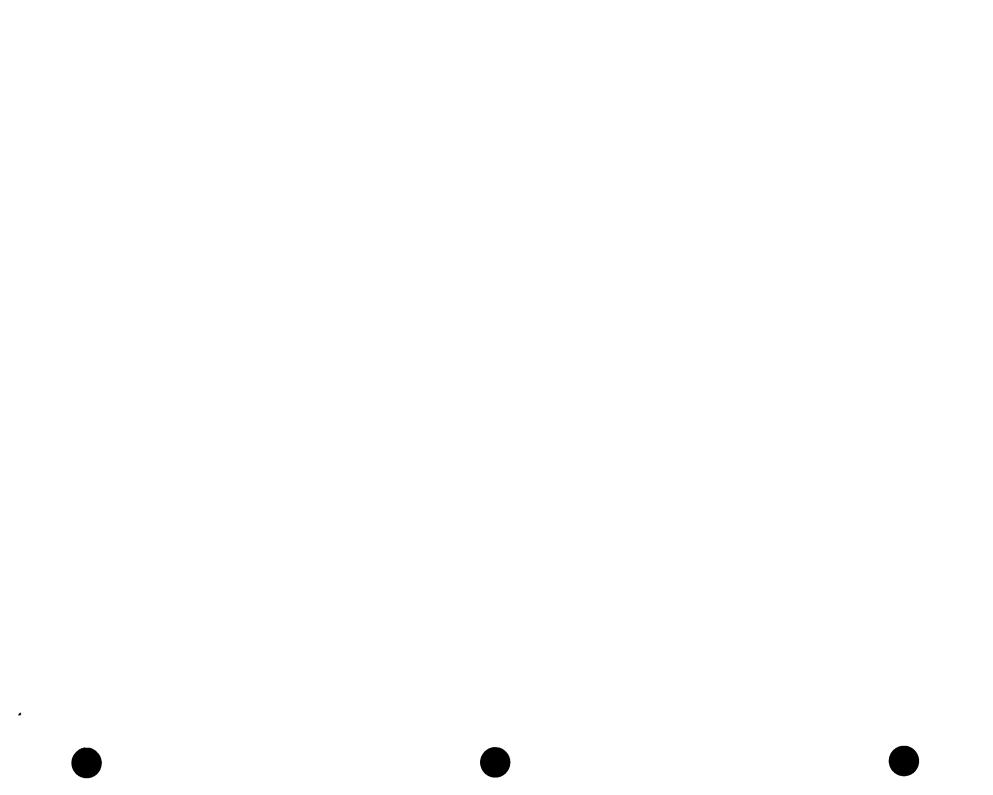
This EEPR consists of the following information:

Executive Summary

• The Executive Summary highlights Oncor's reported achievements for 2019 and Oncor's plans for achieving its 2020 and 2021 projected energy efficiency savings.

Energy Efficiency Plan (EEP)

- Section I describes Oncor's program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and provides an introduction to any programs not included in Oncor's previous EEP.
- Section II explains Oncor's targeted customer classes, specifying the size of each class and the method for determining those sizes.



- Section III presents Oncor's projected energy efficiency savings goals for the prescribed planning period broken out by program for each customer class.
- Section IV describes Oncor's proposed energy efficiency budgets for the prescribed planning period broken out by program for each customer class.

Energy Efficiency Report

- Section V documents Oncor's actual weather-adjusted demand savings goals and energy targets for the previous five years (2015-2019).
- Section VI compares Oncor's projected energy and demand savings to its reported and verified savings by program for calendar year 2019.
- Section VII details Oncor's incentive and administration expenditures for the previous five years (2015-2019) broken out by program for each customer class.
- Section VIII compares Oncor's actual and budgeted program costs from 2019 broken out by program for each customer class. It also explains any cost increases or decreases of more than 10 percent for Oncor's overall program budget.
- Section IX describes the results from Oncor's MTPs and Research & Development activities. It compares existing baselines and existing milestones with actual results, and details any updates to those baselines and milestones.
- Section X provides the revenue billed during 2019 through Oncor's Energy Efficiency Cost Recovery Factor (EECRF) and describes any over- or under-recovery of energy efficiency costs.

Acronyms

• Abbreviations for a list of common terms.

Glossary

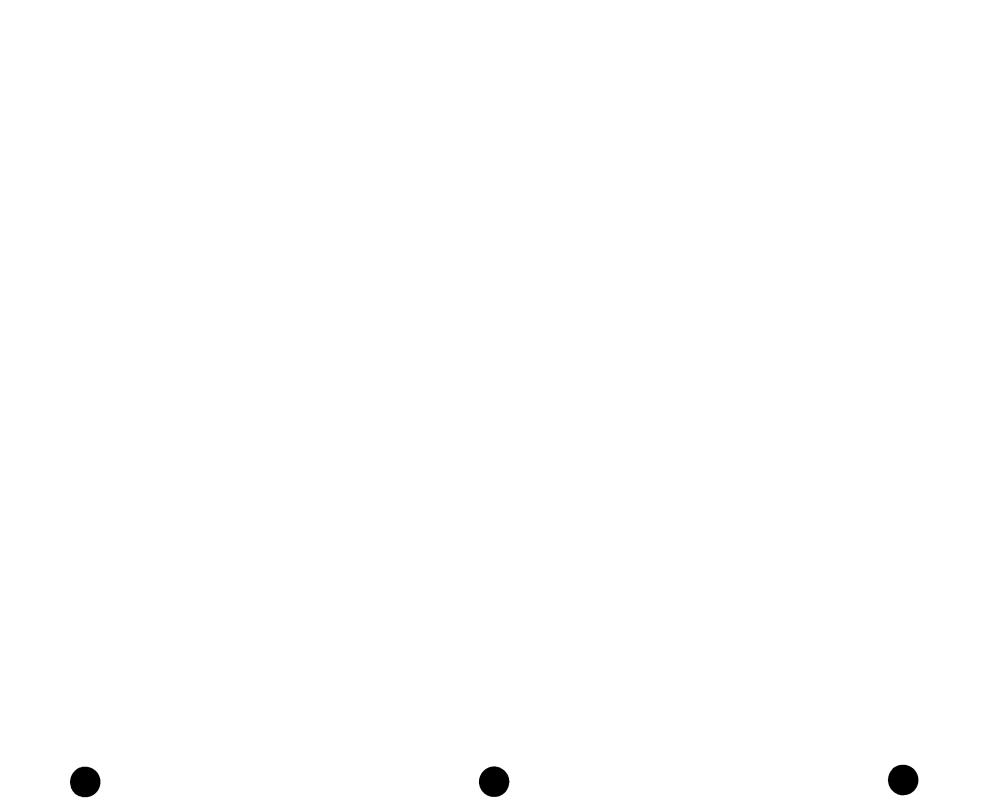
• Definitions for a list of common terms.

Appendices

- Appendix A 2019 reported kW and kWh savings broken out by county for each program.
- Appendix B Program templates for any new or newly-modified programs and any programs not included in Oncor's previous EEPRs.

4

• Appendix C – 2019 Energy Efficiency Service Providers.



EXECUTIVE SUMMARY

The Energy Efficiency Plan portion of this EEPR details Oncor's plans to achieve a 30% reduction in its five-year average annual growth in demand of residential and commercial customers for the 2020 program year and four-tenths of 1% of summer weather-adjusted five-year average peak demand for the combined residential and commercial customers for the 2021 program year. Oncor will also address the corresponding energy savings goal, which is calculated from its demand savings goal using a 20% conservation load factor. The goals, budgets and implementation plans that are included in this EEPR are highly influenced by requirements of the EE Rule and lessons learned regarding energy efficiency service provider and customer participation in the various energy efficiency programs. A summary of annual goals and budgets is presented in Table 1.

The Energy Efficiency Report portion of this EEPR demonstrates that in 2019 Oncor successfully implemented SOPs and MTPs, as required by PURA §39.905, that met Oncor's 30% energy efficiency savings goal by procuring 167,450 kW in demand savings. These programs included the Home Energy Efficiency SOP, Hard-to-Reach SOP, Targeted Weatherization Low-Income SOP, Residential Solar Photovoltaic Installation SOP, Residential Load Management SOP, Commercial Solar Photovoltaic Installation SOP, Small Business Direct Install MTP, Commercial SOP, Commercial Load Management SOP, Retro-commissioning MTP and the Retail Platform MTP.

Calendar Year	Average Growth in Demand (MW at Source)	MW Goal (% of Growth in Demand)	Demand (MW) Goal (at Meter) based on 30% Reduction)*	Energy MWh Goal (at Meter) based on 30% Demand Goal***	Demand Goal (MW) at 0.4% of Peak Demand (at meter)**	Energy MWh Goal at 0.4% of Peak Demand (at Meter)***	Projected MW Savings (at Meter)	Projected MWh Savings (at Meter)	Projected Budget (000's)
2020	206.3	30%	69.4	121,589	93.0	162,936	163.3	248,055	\$50,427
2021	376.3	30%	106.5	186,588	94.5	165,564	165.0	254,533	\$52,357

Table 1: Summary of Goals, Projected Savings, and Projected Budgets¹

* The 2020 Demand Goal is actually 58.3 MW when calculated per the EE Rule that requires a 30% reduction in the five-year average of annual demand growth (206.3 MW x 30% annual growth in demand reduction) x (1-.05775 line loss). However, under the EE Rule, a utility's demand reduction goal shall not be less than the prior year's goal, thus, the 2020 goal is 69.4. Line loss is the 5-year weighted average of the actual loss factors at the time of Oncor's annual peaks.

** The 2021 Demand Goal is calculated according to 16 TAC §25.181(e)(3)(B) because the four-tenths of 1% trigger described in 16 TAC §25.181(e)(1)(B) was met in 2019. The 2021 Demand Goal is calculated by applying the four-tenths of 1% goal to the summer weather-adjusted five-year average peak demand for eligible residential and commercial customers (25,038 MW x 0.4% x (1 - .05655)).

*** Calculated using a 20% conservation load factor.

In order to reach the above projected savings, Oncor proposes to continue implementation of the 2019 programs listed above and add the Commercial HVAC Distributor MTP (Pilot) in 2020.

Oncor programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. Oncor plans to conduct ongoing informational activities to encourage participation in these SOPs and MTPs. Oncor identifies specific markets

¹ Projected MW and MWh taken from Table 5 in this document. Budget data is taken from Table 6 in this document.



for each of its programs, and tailors communications and outreach to the customers and service providers serving the market. At a minimum this will include a program website, brochures, and an introductory meeting to explain the program prior to the program start-date. Furthermore, Oncor plans to participate in conferences to provide information related to its Energy Efficiency Programs.

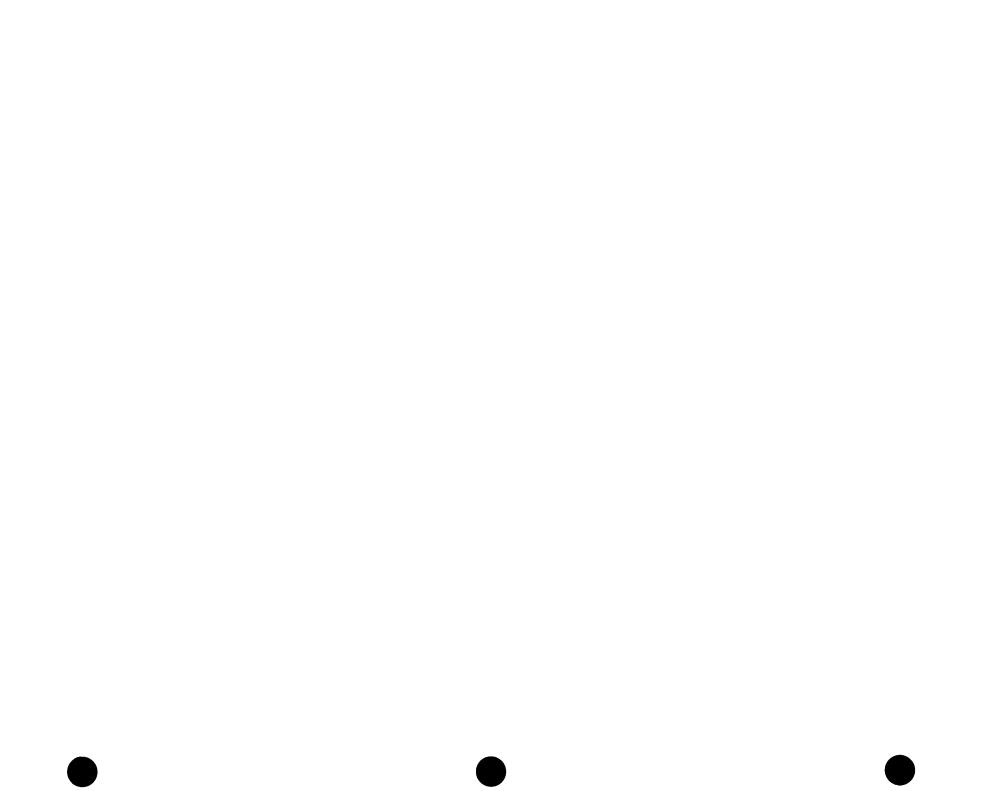
Oncor is continuing its effort to increase Retail Electric Provider (REP) participation in the energy efficiency programs it manages. This plan involves multiple activities and approaches that will reflect Oncor's commitment to this effort. This plan includes, but is not limited to, the following activities:

• Invite REPs to program outreach meetings with Energy Efficiency Service Providers.

6

- Coordinated effort with Oncor's REP Relations group to identify key REP contacts. Through REP Executive and on-site visits, Oncor will conduct energy efficiency discussions while sharing related program information and materials during these visits.
- Make contact with individual REPs at local, regional, and national conferences, trade shows and/or events as the opportunity is available.

All Oncor programs are offered on a first-come, first-served basis.



ENERGY EFFICIENCY PLAN

I. 2020 Programs

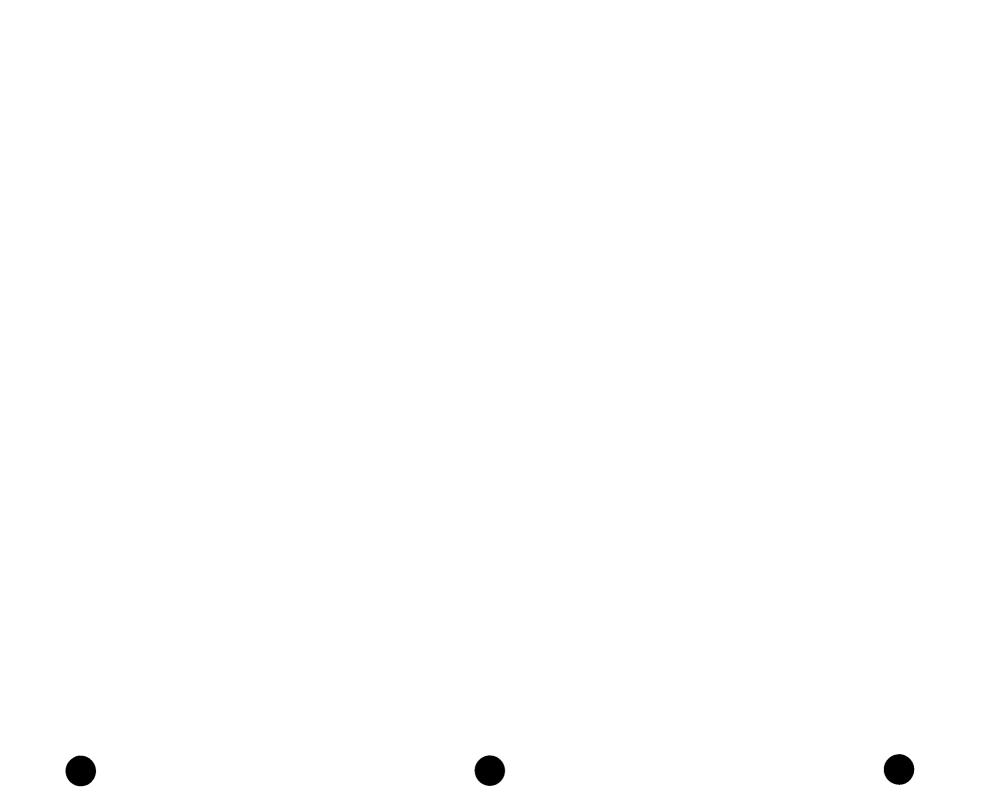
A. 2020 Program Portfolio

Oncor plans to implement 13 market transformation and standard offer programs that are based upon Commission-approved program templates. One program, the Targeted Weatherization Low-Income SOP, is required by Senate Bill 712, which was passed by the Texas Legislature in 2005. Additional requirements were passed by the Texas Legislature in 2011. Senate Bill 1434 requires that annual expenditures for the Targeted Weatherization Low-Income SOP are not less than 10 percent of the utility's energy efficiency budget for the year.

As discussed below, the Company's programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. Oncor anticipates that outreach to a broad range of service provider types will be necessary in order to meet the savings goals required by PURA §39.905 and the EE Rule on a continuing basis. Table 2 summarizes the programs and target markets.

Program	Target Market	Application		
Commercial SOP	Commercial	Retrofit; New Construction		
Hard-to-Reach SOP	Hard-to-Reach Residential	Retrofit		
Emergency Load Management SOP	Existing Industrial	Load Management		
Commercial Load Management SOP	Large Commercial	Load Management		
Small Business Direct Install MTP	Small Commercial	Retrofit		
Home Energy Efficiency SOP	Residential	Retrofit		
Targeted Weatherization Low- Income SOP	Low-Income Residential	Retrofit		
Commercial Solar Photovoltaic Installation SOP	Commercial	Retrofit		
Residential Solar Photovoltaic Installation SOP	Residential	Retrofit		
Residential Load Management SOP	Residential	Load Management		
Retail Platform MTP	Residential; Commercial	Retrofit; New Construction		
Retro-commissioning MTP	Commercial	Retrofit		
Commercial HVAC Distributor MTP (Pilot)	Commercial	Retrofit; New Construction		

Table 2: 2020 Energy Efficiency Program Portfolio



The programs listed in Table 2 are described in further detail below. Oncor maintains a website containing links to the program manuals of the SOPs, all of the requirements for project participation, the forms required for project submission, and the current available funding at <u>https://eepm.oncor.com/</u>. This website will be the primary method of communication used to provide potential Energy Efficiency Service Providers with program updates and information, including information on future opportunities to bid to be an implementer of an Oncor Market Transformation Program. Additional information to help residential consumers, business owners and government and educational facilities with their energy efficiency efforts can be found at <u>http://www.takealoadofftexas.com/</u>.

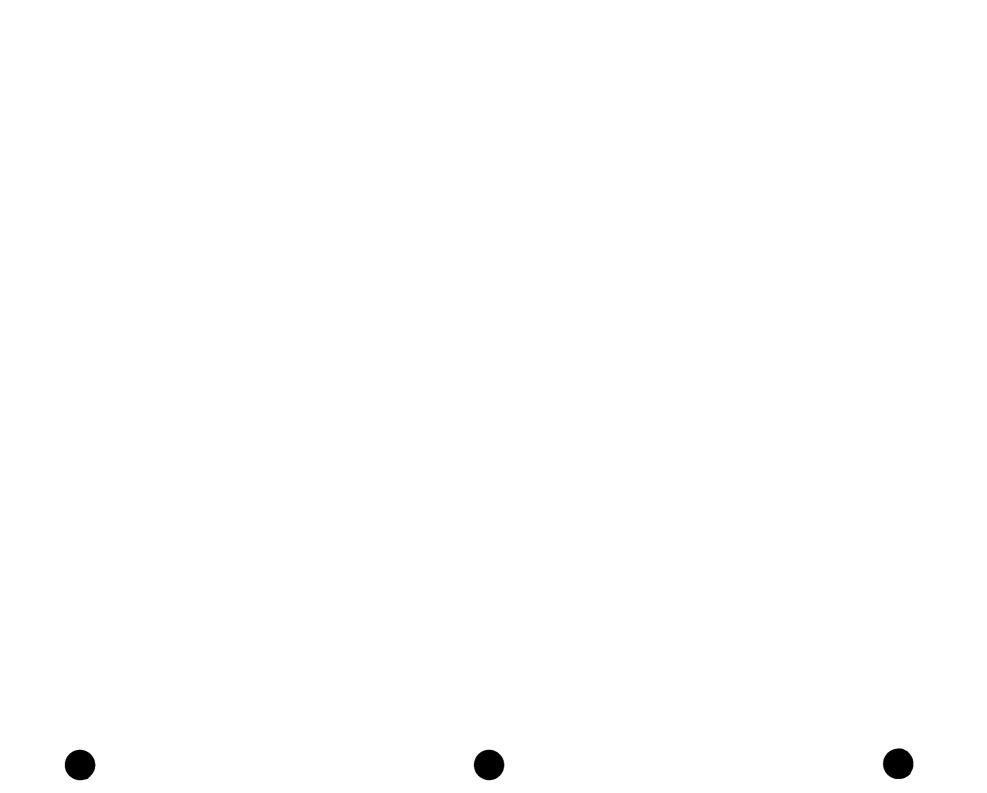
B. Existing Programs

Commercial Standard Offer Program (CSOP)

The Commercial SOP targets commercial customers with new or retrofit projects that either require measurement and verification or use deemed savings. Oncor provides incentives to Energy Efficiency Service Providers who install approved energy efficiency measures in business, government, nonprofit, and worship facilities in Oncor's service area. These include, but are not limited to, lighting, air conditioning, motors, variable frequency drives, ENERGY STAR® roofs and food service equipment, refrigeration measures, window film, cooling, and process upgrades as well as new construction that exceeds existing energy code baselines per the Texas Technical Reference Manual (TTRM). These energy-saving projects must be approved by Oncor prior to project start. Once completed, Oncor verifies the savings and the Energy Efficiency Service Providers receive incentive payments based on the project's actual savings. Also included is the replacement of existing HVAC units using early replacement in master metered multifamily apartment complexes with high efficiency heat pumps. In prior years this program had two components, the Basic component that did not require measurement and verification, and the Custom component that required measurement and verification. These two components will be rolled into one program in 2020 with a budget of \$9,521,571 and targeted impacts of 12,711 kW and 69,142,575 kWh.

Home Energy Efficiency Standard Offer Program (HEE SOP)

The HEE SOP targets residential customers with existing homes. This program is designed to achieve energy and demand savings in the residential market with the installation of a wide range of energy-efficiency measures in homes and multi-family residences. Incentives are paid to Energy Efficiency Service Providers to help offset the cost of these energy efficiency measures. Oncor provides the incentive directly to the Service Provider. Charges to customers vary by Service Provider and no incentives for this program are paid directly to the customer by Oncor. The 2020 budget for this program is \$10,749,330 with targeted impacts of 20,899 kW and 35,709,065 kWh. The most common energy-efficient measures installed in the HEE SOP are attic insulation and caulking/weather-stripping around doors and windows. Energy Efficiency Service Providers must test for air leakage before and after installation when installing caulking/weather-stripping measures. Other eligible energy-efficient measures include replacement of air conditioning units, heat pumps, and installation of ENERGY STAR® windows, refrigerators, dishwashers, and clothes washers, wall insulation, floor insulation, and water heater jackets. Also included is the replacement of existing HVAC units using early replacement in multifamily apartment complexes with high efficiency heat pumps.



Hard-to-Reach Standard Offer Program (HTR SOP)

The HTR SOP targets residences with household incomes at or below 200% of the federal poverty guidelines. This program is designed to achieve energy and demand savings with the installation of a wide range of energy-efficiency measures. Energy Efficiency Service Providers implement energy saving projects in homes located in Oncor's service area. Incentives are paid to these Energy Efficiency Service Providers to help offset the cost of these energy efficiency measures. The most common measures, such as insulation and caulking/weather-stripping are installed at low or no cost to the customer. Energy Efficiency Service Providers must test for air leakage before and after installation when installing caulking/weather-stripping measures. Oncor provides the incentive directly to the Service Provider. Qualifying measures are similar to those described above for the HEE SOP, as well as water-saving devices. Also included is the replacement of existing HVAC units using early replacement in multifamily apartment complexes with high efficiency heat pumps. The same income qualifications (household incomes at or below 200% of current federal poverty level guidelines) apply to this new program option. The 2020 budget for this program is \$6,800,270 with targeted impacts of 12,108 kW and 18,688,666 kWh.

Emergency Load Management Standard Offer Program (ELM SOP)

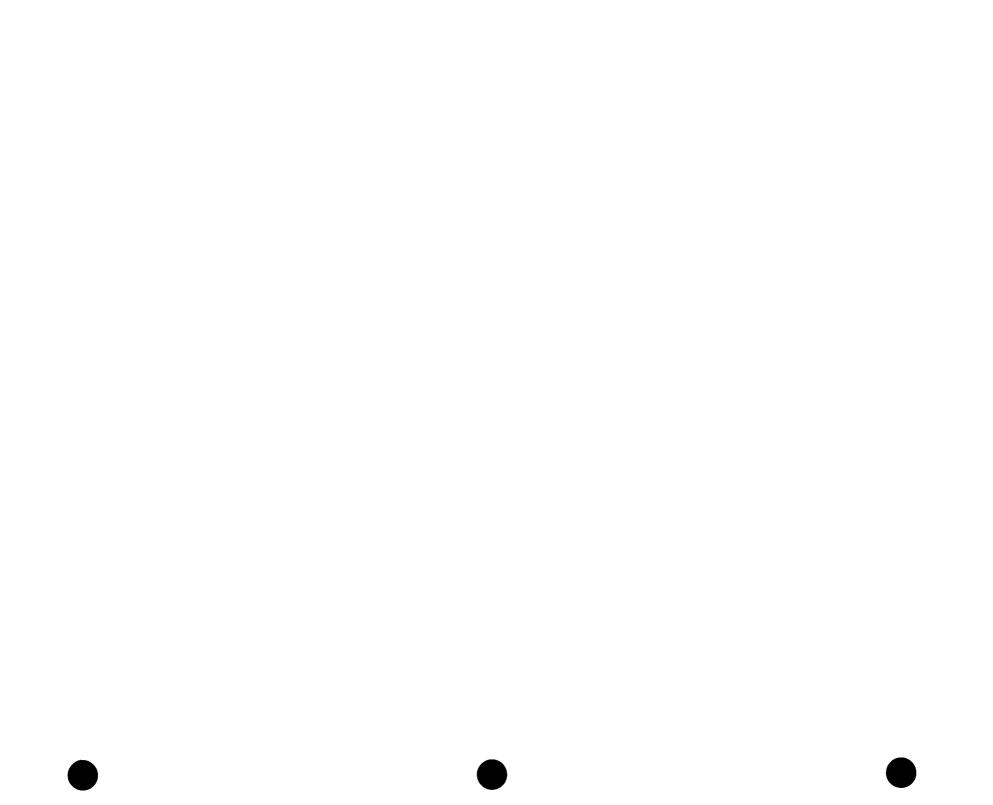
The ELM SOP targets industrial customers with demands greater than 700 kW. This program is Grandfathered under the provisions of 16 TAC §25.181(t). The program is offered to for-profit transmission voltage level end-use customers, which includes large industrial sites. Participants are requested to reduce load when called for by Oncor. The demand reductions must be verified by Oncor in order for the incentives to be paid. This is accomplished by reviewing data recorded on Interval Data Recorders (IDRs) and calculating the amount of demand savings achieved through the "curtailment" during the summer on-peak season. The incentive is paid directly to the program participant and a ten-year contract is required to participate in the program. No customers have participated in this program since 2007 and no customers are expected to participate in 2020.

Commercial Load Management Standard Offer Program (CLM SOP)

Oncor pays incentives to Energy Efficiency Service Providers and Aggregators who work with local commercial and manufacturing facilities to achieve documented summer, on-peak demand reductions in those facilities. End-use customers may also act as the Energy Efficiency Service Provider. The program is designed to assist businesses reduce their summer on-peak energy demand and help meet the state's energy efficiency goals. The demand reductions must be verified by Oncor in order for the incentives to be paid. This is accomplished by reviewing data recorded by meters and calculating the amount of demand savings achieved through the "curtailment" during the summer on-peak season. The incentive is paid directly to the Service Provider, Aggregator or End-Use Customer. Each project must achieve a total estimated demand savings of at least 100 kW during the summer on-peak demand period. Participating customer facilities must reduce load when called for by Oncor. The 2020 budget for this program is \$2,486,400 with targeted impacts of 60,000 kW and 180,000 kWh.

Commercial Solar Photovoltaic Installation Standard Offer Program (CSPV SOP)

The Commercial Solar Photovoltaic Installation SOP provides incentives for the installation of Solar Photovoltaic systems that reduce customer energy costs, reduce peak demand and save energy in existing commercial customer structures. Incentives are paid to Energy Efficiency Service Providers on the basis of savings calculations per the Texas Technical Reference Manual.



The 2020 budget for the CSPV SOP is 2,323,820 with targeted impacts of 1,534 kW and 4,979,022 kWh.

Residential Solar Photovoltaic Installation Standard Offer Program (RSPV SOP)

The Residential Solar Photovoltaic Installation SOP provides incentives for the installation of Solar Photovoltaic systems that reduce customer energy costs, reduce peak demand and save energy in existing residential customer structures. Incentives are paid to Energy Efficiency Service Providers on the basis of savings calculations per the Texas Technical Reference Manual. The 2020 budget for the RSPV SOP is \$1,539,920 with targeted impacts of 1,160 kW and 2,875,930 kWh.

Small Business Direct Install MTP (SBDI MTP)

Oncor's Small Business Direct Install MTP is a market transformation program designed to offer contractors and customers education on energy efficiency technologies, equip participating contractors with the tools they need to succeed in installing projects in the small business market, and offer incentives to assist small ($\leq 200 \text{ kW}$) and very small ($\leq 10 \text{ kW}$) businesses to install energy-efficient products such as high efficiency lighting and refrigeration measures. The program is focused on the non-Metro counties served by Oncor. The 2020 budget for the SBDI MTP is \$3,456,430 with targeted impacts of 2,610 kW and 15,711,041 kWh.

Targeted Weatherization Low-Income SOP

For the 2020 Program year Oncor is implementing the Targeted Low-Income Weatherization Program to comply with the Public Utility Regulatory Act (PURA) §39.905(f) which states, "Unless funding is provided under §39.903, each unbundled transmission and distribution utility shall include in its energy efficiency plan a targeted low-income energy efficiency program as described by Section 39.903(f)(2), and the savings achieved by the program shall count toward the transmission and distribution utility's energy efficiency goal. The commission shall determine the appropriate level of funding to be allocated to both targeted and standard offer low-income energy efficiency programs in each unbundled transmission and distribution utility service area. The level of funding for low-income energy efficiency programs shall be provided from money approved by the commission for the transmission and distribution utility's energy efficiency programs. The commission shall ensure that annual expenditures for the targeted low-income energy efficiency programs of each unbundled transmission and distribution utility are not less than 10 percent of the transmission and distribution utility's energy efficiency budget for the year. A targeted low-income energy efficiency program must comply with the same audit requirements that apply to federal weatherization subrecipients." Section 39.903(f)(2) states that targeted energy efficiency programs are to be administered by the Texas Department of Housing and Community Affairs (TDHCA) in coordination with existing weatherization programs.

16 TAC §25.181(p) states, "Each unbundled transmission and distribution utility shall include in its energy efficiency plan a targeted low-income energy efficiency program. A utility in an area in which customer choice is not offered may include in its energy efficiency plan a targeted low-income energy efficiency program that utilizes the cost-effectiveness methodology provided in paragraph (2) of this subsection. Savings achieved by the program shall count toward the utility's energy efficiency goal.



- (1) Each utility shall ensure that annual expenditures for the targeted low-income energy efficiency program are not less than 10% of the utility's energy efficiency budget for the program year.
- (2) The utility's targeted low-income program shall incorporate a whole-house assessment that will evaluate all applicable energy efficiency measures for which there are commission-approved deemed savings. The cost-effectiveness of measures eligible to be installed and the overall program shall be evaluated using the Savings-to-Investment ratio (SIR).
- (3) Any funds that are not obligated after July of a program year may be made available for use in the hard-to-reach program."

Oncor is implementing a Program through Texas Association of Community Action Agencies (TACAA) who will provide funds to designated federal Weather Assistance Program (WAP) Subrecipient agencies enabling them to provide weatherization services to residential electric distribution customers of Oncor who have household incomes at or below 200% of current federal poverty level guidelines.

TACAA will be entitled to compensation for materials, labor and program support used by the federally funded Sub recipient to install weatherization measures for up to \$6,500 per weatherized Dwelling Unit. TACAA may reimburse the federally funded Subrecipient for program support costs and up to 10% of the invoice amount for administration, which amounts are not part of the 8% program administration fee paid to TACAA. Federally funded Sub recipient program support costs shall be included in the calculation of the \$6,500 per Dwelling Unit cap, but shall not be included in calculating the Whole House SIR.

Energy-efficient measures installed include aerators, ceiling insulation, air infiltration, central air conditioning units, central heat pumps, floor insulation, ENERGY STAR[®] refrigerators, dishwashers, clothes washers and windows, showerheads, window air conditioning units, wall insulation, water heater jackets and water heater pipe insulation.

In 2017, Oncor added EnerChoice as a Program Implementer. EnerChoice uses program incentives to replace existing HVAC units in multifamily apartment complexes with high efficiency heat pumps and earns an administration fee of up to 10% for their services. The same income qualifications (household incomes at or below 200% of current federal poverty level guidelines) apply to this new program option.

The 2020 budget for this program is 5,002,080 with targeted impacts of 2,758 kW and 4,076,945 kWh.

Program History - This program targeted Oncor's low-income residential customers who met DOE's income eligibility guidelines which are at or below 200% of the federal poverty level guidelines and are connected to Oncor's electric system. Incentive funds were provided to the TDHCA sub-recipient agencies and other not-for-profit or local government agencies, enabling them to provide weatherization services to qualifying customers. Participating agencies provided outreach, eligibility verification, assessments, and could either install or contract for the installation of cost-effective energy-efficient measures. Agencies received reimbursement for conducting assessments and installing the measures, plus an administrative fee equal to eight percent of the measure installation costs. The maximum expenditure per home was \$6,500.



Energy-efficient measures installed included attic insulation, duct sealing and caulking/weatherstripping around doors and windows, central air conditioning units, central heat pumps, window air conditioning units, replacement of electric water heaters, installation of ENERGY STAR[®] refrigerators, solar window screens, wall insulation, CFLs, water heater jackets and ENERGY STAR[®] ceiling fans with a light kit.

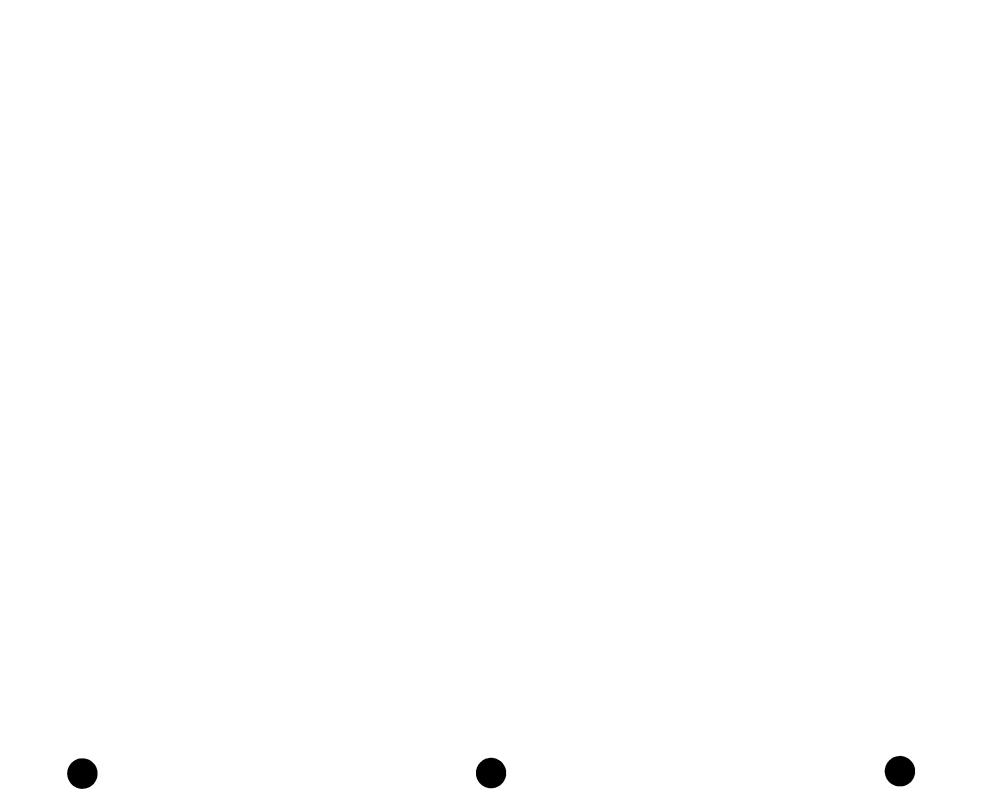
Prior to 2005, the TDHCA administered a targeted energy efficiency program that was funded through the System Benefit Fund (SBF). When appropriations from the SBF were discontinued for TDHCA's program in 2005, the Texas Legislature enacted SB 712. SB 712 amended PURA §39.905(f), requiring unbundled utilities like Oncor to fund through rates a targeted low-income energy efficiency program that would be administered by TDHCA. In the summer of 2006, the Commission approved (in Docket No. 32103) an agreement among TLSC/Texas ROSE, the Commission Staff, Oncor (then TXU Electric Delivery Company), AEP Texas Central Company, AEP Texas North Company, CenterPoint Energy Houston Electric, LLC, and Texas-New Mexico Power Company, that reflected a plan for implementing SB 712's requirements in calendar years 2006 and 2007 (the Docket No. 32103 Agreement). Oncor agreed to provide \$3,412,941 annually to TDHCA for the Company's SB 712 obligation. Among other terms, the Docket No. 32103 Agreement provided that the program would be targeted to households with income at or below 125% of the federal poverty guidelines.

On May 23, 2007, TDHCA informed Oncor that it was not authorized to spend the funds paid by Oncor due to a ruling by the Office of Comptroller of Public Accounts, and that Oncor should make alternative arrangements to complete the program that did not involve TDHCA. Thus, Oncor promptly entered into talks with Frontier Associates LLC (Frontier) and ultimately reached an agreement with Frontier for it to administer the SB 712 program in Oncor's service area, *i.e.*, the Pilot Targeted Weatherization Low-Income Program.

On July 27, 2007, TLSC/Texas ROSE filed a petition with the Commission seeking to have Texas Association of Community Action Agencies (TACAA) designated as the sole administrator for the SB 712 programs of all the unbundled utilities, including Oncor. TLSC/Texas ROSE's petition was litigated in Docket No. 34630, *Petition of Texas Legal Services Center and Texas Ratepayers'* Organization to Save Energy to Modify the Commission's Final Order in Docket No. 32103 and to Reform the Agreement to Implement Weatherization Programs. The Commission found that the utilities should have the flexibility to contract with a provider of their choice, as Oncor did with Frontier, to implement SB 712 programs.

During the 2011 Texas Legislative session, SB 1434 was passed and signed into law by the Governor of Texas. Contained in the 2011 legislation is the following language related to the Targeted LIW Program:

Unless funding is provided under Section 39.903, each unbundled transmission and distribution utility shall include in its energy efficiency plan a targeted low-income energy efficiency program as described by Section 39.903(f)(2), and the savings achieved by the program shall count toward the transmission and distribution utility's energy efficiency goal. The commission shall determine the appropriate level of funding to be allocated to both targeted and standard offer low-income energy efficiency programs in each unbundled transmission and distribution utility service area. The level of funding for low-income energy efficiency programs shall be



provided from money approved by the commission for the transmission and distribution utility's energy efficiency programs. The commission shall ensure that annual expenditures for the targeted low-income energy efficiency programs of each unbundled transmission and distribution utility are not less than 10 percent of the transmission and distribution utility's energy efficiency budget for the year. A targeted low-income energy efficiency program must comply with the same audit requirements that apply to federal weatherization subrecipients. In an energy efficiency cost recovery factor proceeding related to expenditures under this subsection, the commission shall make findings of fact regarding whether the utility meets requirements imposed under this subsection.....

In 2012 Oncor implemented the program to provide funds to TDHCA sub-recipient agencies and other not-for-profit or local government agencies, enabling them to provide weatherization services to residential electric distribution end-use consumers of Oncor who had household incomes at or below 200% of the current federal poverty guidelines. Participating agencies provided outreach, eligibility verification, assessments, and either installed or contracted for the installation of cost-effective measures. Agencies received reimbursement for conducting assessments and installing the measures, plus an administrative fee equal to 8 percent of the measure installation costs. The maximum expenditure per home was \$6,500. The \$6,500 per home cap included assessment and/or testing fees from homes that did not qualify for installed measures based on the assessment.

Residential Load Management SOP (RLMSOP)

Oncor's Residential Load management SOP is an expansion of the 2015-2016 pilot, which provided incentives to participating providers for reducing peak electric demand at residential premises. In 2020, the program will engage providers to provide demand response capability using remotely controlled load control devices in homes. The providers will use various control strategies, such as pre-cooling and cycling to reduce overall demand during the peak period. Implementation will occur in the Oncor service territory and target residential homes. The participating providers are responsible for ensuring the presence of load control devices in participating residences. The actual demand savings will be determined by Oncor using advanced meter data. The 2020 Program budget is \$1,243,200, with targeted impacts of 30,000 kW and 90,000 kWh.

Retail Platform MTP (RPMTP)

The Retail Platform MTP provides incentives directly to Residential Customers through in-store point of sale discounts for the purchase of qualifying ENERGY STAR-rated LED lighting products and consumer appliances. The Program is partnership-based and delivers qualified product measures by contracting with major market manufacturers and through cooperation with their retail alliance partners. Slated to continue through 2020, the program has a budget of \$5,176,411 in 2020 with targeted impacts of 19,141 kW and 86,049,726 kWh. Additional retail partners will be added outside of the Metroplex in 2020 to reach more rural customers. Based on the Texas Technical Reference Manual Version 5.0 recommendation, claimed savings will be attributed based on five percent of upstream lighting program benefits and costs allocated to commercial customers with the remaining 95 percent allocated to residential customers. Commercial savings are calculated using the 'office' building type for lighting per Tetra Tech's Guidance Memo dated April 28, 2016.



In November 2018 select ENERGY STAR rated Nest and Ecobee smart thermostats were made available as part of this program, giving customers the ability to monitor and adjust their home's temperature even when away from home. Oncor customers can obtain a coupon to purchase a smart thermostat by visiting <u>www.smartsavingstx.com</u>.

Retro-commissioning (Commercial Tune-Up) MTP (RCMTP)

The RCMTP program is designed to assist building owners with a low cost, low resource commitment opportunity that offers quick energy savings. The program features a pre-defined measure list, fixed project fees, clear reimbursement schedule and short project cycle times. This leads to quick collection of impacts for our utility partners.

It is common for a building's energy management system to be overridden over time, resulting in wasted energy. These customers can benefit from assistance through a controls program that will identify energy waste and improve the management of the building's systems. The program offers a controls tune-up to capture savings in small- to medium-sized commercial buildings and focuses on capturing savings that are available but may be ignored in utility program portfolios because the measures typically have a payback of less than a year. Primary measures include the following:

- Schedule refinement or optimal start/stop
- Zone level airflow control
- Static pressure settings
- Supply temperature settings

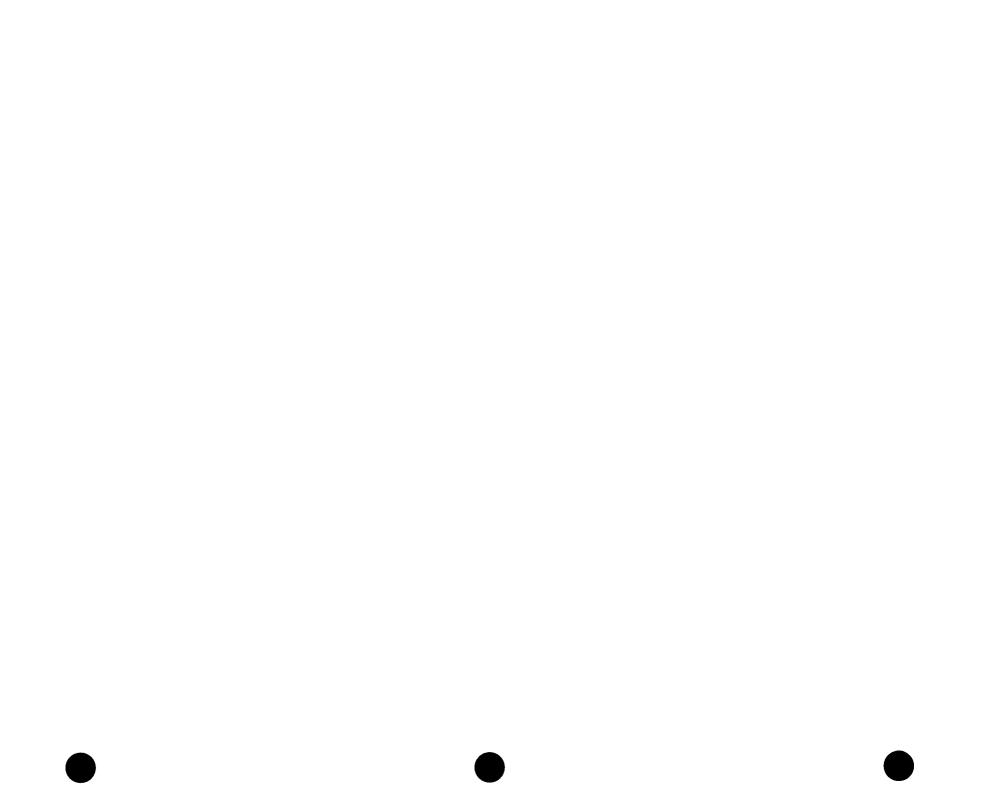
The following list describes the target market that would both benefit and yield savings as a participant in the program.

- Participating facilities must have a modern Building Automation System (BAS), Direct Digital Control System (DDC) or Energy Management System (EMS)
- Smaller and medium commercial properties under 200,000 square feet (e.g. office, medical centers, public facilities)
- A facility that has had building or operational changes
- A facility containing multiple HVAC systems
- The facility is not under construction or planning construction in the next few months (participant requirement)

The 2020 budget for the RCMTP is \$572,000 with targeted impacts of 8,000,000 kWh.

Research and Development

During 2020, Oncor will begin developing a new efficient technology incubator. The purpose of the incubator is to identify and test new energy efficient technologies and program ideas for inclusion in the Oncor Energy Efficiency portfolio. Promising technologies may also be submitted to the State for inclusion in the Texas Technical Reference Manual.



Additionally, Oncor will continue its membership in the Texas Energy Poverty Research Institute (TEPRI) for 2020. TEPRI is a 501(c) (3) whose mission is to research the root causes of energy and fuel poverty and provide data for solutions that have an impact on low-income households. In 2020, TEPRI will continue compiling Best Practices of Low-Income Services, Programs, and Technologies. Additionally, TEPRI will update their portal of information on publications, websites, and other resources that are specific to the topic of energy and poverty in Texas and the nation.

Oncor will continue to fund studies to evaluate energy efficiency market attributes, new technologies, and new program ideas. The studies will be conducted by third party consultants and will address Oncor specific portfolio needs, and as well as Texas market issues and opportunities.

For more details on these programs, please see Section IX.

C. New Programs for 2020

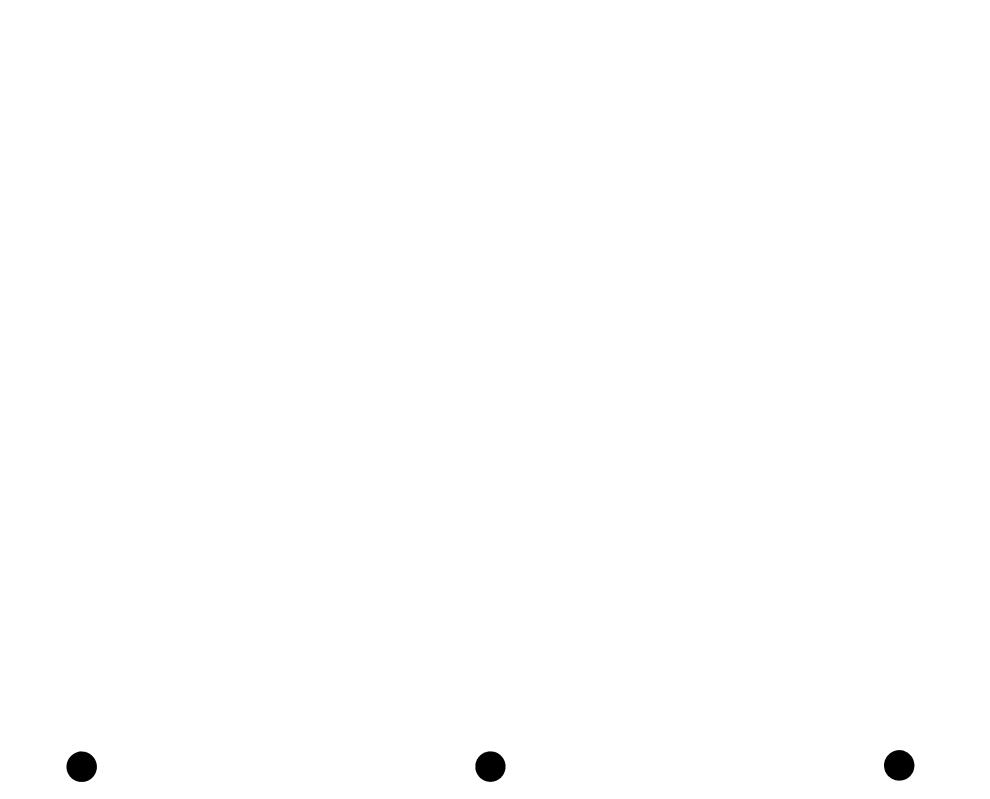
Commercial HVAC Distributor MTP (Pilot)

Oncor plans to implement a Commercial HVAC Distributor MTP during 2020 with an implementer determined during the first half of the year. This program will be a market transformation program designed to provide incentives to air conditioning distributors who agree to facilitate the installation of high-efficiency air conditioners and heat pumps in commercial facilities. The 2020 budget for the Commercial HVAC Distributor MTP is \$497,280 with targeted impacts of 417 kW and 2,552,190 kWh.

II. Customer Classes

Customer classes targeted by Oncor's energy efficiency programs are the Hard-to-Reach, Residential, and Commercial customer classes. The annual demand goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and complying with 16 TAC §25.181(e)(3)(F), which states that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers. Also factored into the allocation is the PURA §39.905 requirement that annual expenditures for the targeted low-income energy efficiency programs are not less than 10 percent of the annual energy efficiency budget for the year. Table 3 summarizes the number of customers in each of the customer classes, which was used to determine budget allocations for those classes. Oncor used year-end 2019 Customer Information System (CC&B) premise-level data to estimate the number of customers in each class. The Hard-to-Reach class was estimated by multiplying the total number of residential customers by 27.7%. According to the U.S. Census Bureau's 2019 Current Population Survey (CPS), 27.7% of Texas families fall below 200% of the poverty threshold (2018 CPS was 27.8%). Applying that percentage to Oncor's residential customer totals, the number of HTR customers is estimated at 866,751 compared to 853,814 in 2018. This calculation is only an estimate. Oncor does not have access to its residential customers' income levels. The actual percentage may be higher or lower.

It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace, the potential interest that a customer class may have toward a specific program and the overriding objective of meeting the legislative goal.



Oncor will offer a portfolio of Standard Offer and Market Transformation Programs that will be available to all customer classes.

Program	Number of Customers
Commercial	488,300*
Residential	2,262,314
Hard-to-Reach	866,751
Total	3,617,365

Table 3: Summary of Customer Classes

* Customer count takes into account 9,760 qualifying for-profit industrial customers who have elected to exclude themselves from participation in Oncor's energy efficiency programs per 16 TAC 25.181(u), as well as lighting premises.

III. Projected Energy Efficiency Savings and Goals

As prescribed by 16 TAC §25.181, Oncor's demand goal is specified as a percent of its historical five-year average rate of growth in demand. As an example, the annual growth in demand defined for the 2020 goal reflects the average annual growth in peak demand for the years 2014 through 2018. The demand goal is based on meeting 30% of the electric utility's annual growth in demand of eligible residential and commercial customers for the 2019 and 2020 program years. Because the four-tenths of 1% trigger described in TAC §25.181(e)(1)(B) was met in 2019, the demand goal for 2021 is calculated according to TAC §25.181(e)(3)(B), applying the four-tenths of 1% goal to the weather-adjusted five-year average peak demand for eligible residential and commercial customers. The corresponding energy savings goals are determined by applying a 20% conservation load factor to the applicable demand savings goals.

Table 4 presents historical annual growth in demand for the previous five years. Total System numbers include all customers (including transmission voltage and qualifying for-profit industrial customers who elected to exclude themselves from participation in Oncor's energy efficiency programs) while Residential and Commercial totals include eligible residential and non-residential customers taking delivery at a distribution voltage and non-profit customers and government entities, including educational institutions. Table 5 presents the projected demand and energy savings broken out by program for each customer class for 2020 and 2021. The program-level goals presented in Table 5 are at the meter and take into account transmission and distribution line losses.



	Peak Demand (MW) (at Source) **					Energy Consumption (MWh) (at Meter)				Residential & Commercial	
Calendar Year			lotal System			ential & nercial	Growth (MW)	Avg 5 Yr (MW) Growth			
i cui	Actual	Actual Weather Adjusted	Secondary/ Primary, & Transmission Voltage***	Actual	Actual Weather Adjusted ²	Actual	Actual Weather Adjusted ²	Actual	Actual Weather Adjusted ²	Actual Weather Adjusted ²	Actual Weather Adjusted ²
2014	24,102	26,033	1,589	22,514	24,444	114,905,829	113,939,185	101,640,875	100,674,230		
2015	25,511	26,158	1,646	23,865	24,513	116,594,625	116,554,605	102,634,272	102,594,252	68.4	
2016	25,766	26,599	1,755	24,010	24,843	115,791,379	117,927,439	100,977,674	103,113,734	330.3	
2017	25,148	26,245	1,879	23,269	24,366	117,017,075	119,776,460	100,971,312	103,730,697	-476.9	
2018	27,471	27,201	2,055	25,415	25,145	130,007,690	128,631,337	111,336,170	109,959,816	779.3	
2019	27,174	28,733	2,408	24,767	26,326	133,357,452	133,307,591	112,552,481	112,502,621	1,180.3	376.3
2020 ³	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021 ³	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4: Annual Growth in Demand and Energy Consumption *

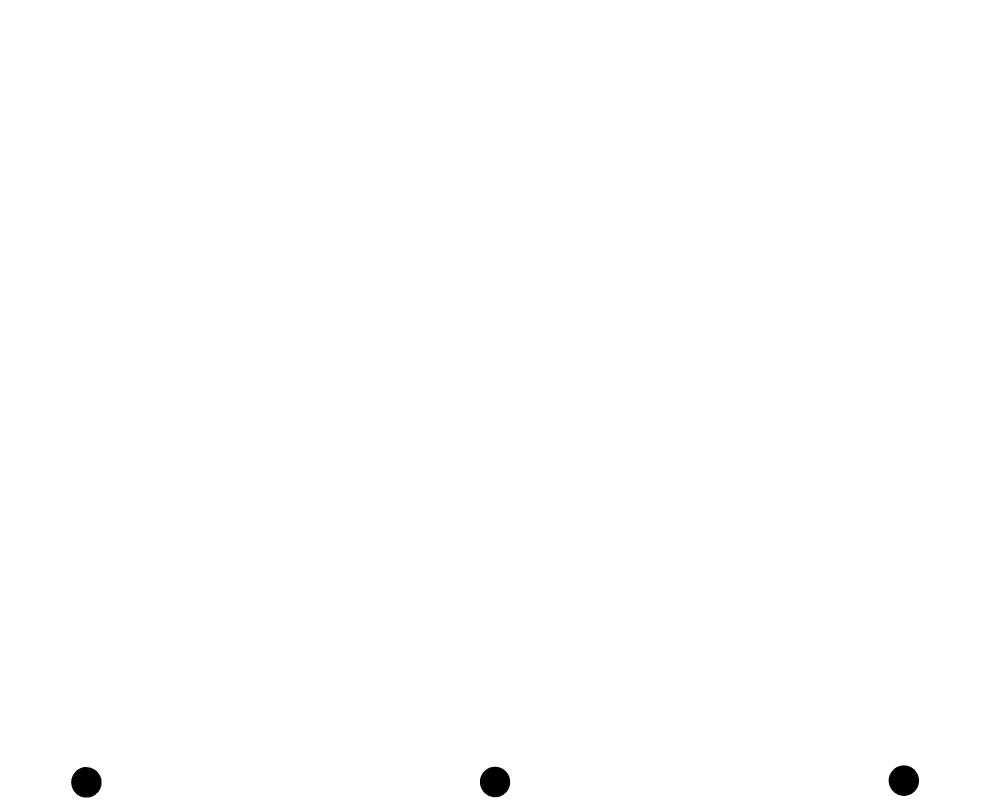
* Table 4 values can differ from prior years due to restatement of historic demands from ERCOT Settlement interval data. Additional variance is due to changing the weather adjustment process to better match the ERCOT Settlement method. Values may not add due to rounding.

** Peak Demand values have been revised to reflect the combined Oncor and former Sharyland MW values for 2014-2017.

*** Includes the peak demand of qualifying for-profit industrial customers who receive service at primary/secondary voltage and have elected to exclude themselves from participation in Oncor's energy efficiency programs in the following amounts: Year 2014 - 393 MW, Year 2015 - 414 MW, Year 2016 - 429 MW, Year 2017 - 486 MW, Year 2018 - 539 MW, and Year 2019 - 524 MW.

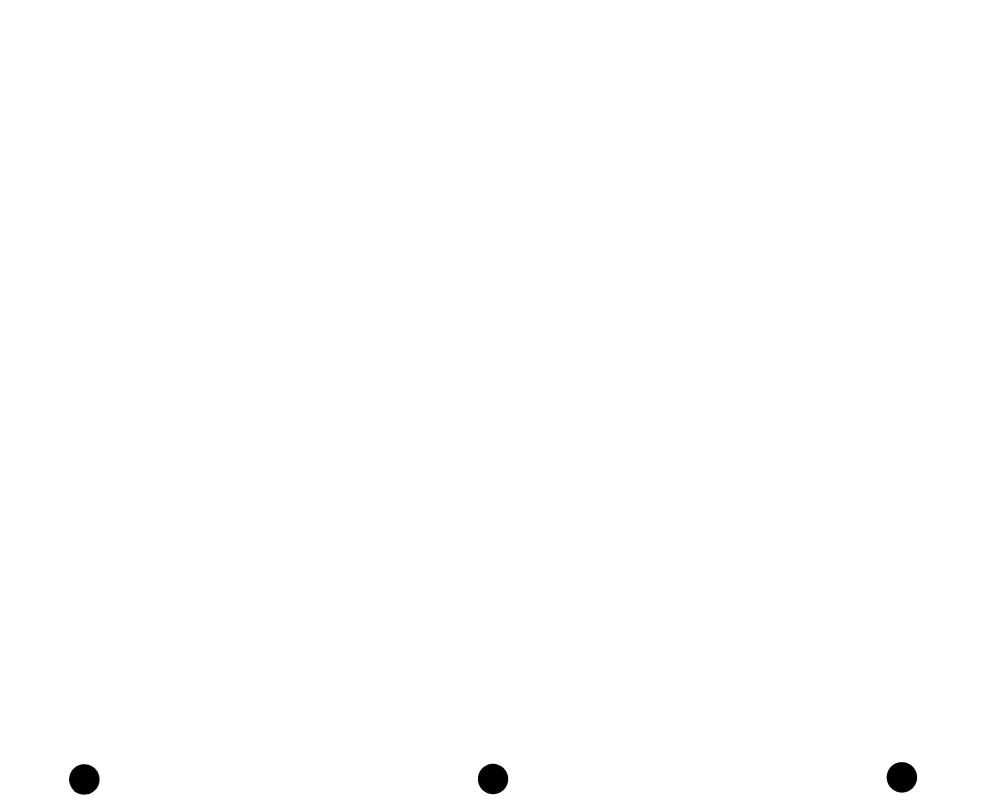
² "Actual Weather Adjusted" Peak Demand and "Energy Consumption" are adjusted for weather fluctuations using weather data for the most recent ten years.

³ "NA" = Not Applicable. Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand; so peak demand and energy consumption forecasts for 2020 and 2021 are not applicable.



	2020 Proje	ected Savings	2021 Proj	ected Savings	
Customer Class and Program	(kW)	(kWh)	(kW)	(kWh)	
Commercial	78,229	104,867,314	78,536	110,618,913	
Commercial SOP	12,711	69,142,575	12,562	67,009,760	
Emergency Load Management SOP	0	0	0	0	
Commercial Load Management SOP	60,000	180,000	60,000	180,000	
Small Business Direct Install MTP	2,610	15,711,041	2,610	15,698,285	
Solar PV SOP	1,534	4,979,022	1,534	4,979,022	
Retail Platform MTP	957	4,302,486	891	4,003,671	
Retro-commissioning MTP	0	8,000,000	0	13,000,000	
Commercial HVAC Distributor MTP (Pilot)	417	2,552,190	939	5,748,175	
Residential	70,243	120,422,235	69,709	119,271,763	
Home Energy Efficiency SOP	20,899	35,709,065	20,873	35,602,085	
Solar PV SOP	1,160	2,875,930	1,015	3,409,927	
Residential Load Management SOP	30,000	90,000	30,000	90,000	
Retail Platform MTP	18,184	81,747,240	16,921	76,069,751	
Residential New Home Construction MTP	NAP	NAP	900	4,100,000	
Hard-to-Reach	14,866	22,765,611	16,733	24,642,075	
Hard-to-Reach SOP	12,108	18,688,666	14,021	20,631,773	
Targeted Weatherization Low-Income SOP	2,758	4,076,945	2,712	4,010,302	
Total Annual Savings Goals	163,338	248,055,160	164,978	254,532,751	

Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)



IV. Program Budgets

Table 6 represents total proposed budget allocations required to achieve the projected demand and energy savings shown in Table 5. The budget allocations are defined by the overall demand and energy savings presented above, allocation of demand savings goals among customer classes, and SB 712 and SB 1434 Targeted Low-Income mandates. The budget allocations presented in Table 6 below are first broken down by customer class and program, and are then further subdivided into the incentive payments and administration categories.

Administration costs include labor and loading, evaluation, outreach, Energy Efficiency Program Management (tracking and reporting system), program development, program implementation, regulatory reporting, and any costs incurred associated with the EECRF filing by the company. Costs associated with specific programs are charged directly to those programs, while costs not associated with specific programs are allocated among all programs.

While Oncor has estimated budgets by customer class, Oncor plans to track and report budgets by program, since individual programs may serve multiple customer classes.

2020 Customer Class & Program	Incentives	Administration	Total Budget
Commercial	\$16,836,594	\$2,279,727	\$19,116,321
Commercial SOP	\$8,236,653	\$1,284,918	\$9,521,571
Emergency Load Management SOP	\$0	\$0	\$0
Commercial Load Management SOP	\$2,220,000	\$266,400	\$2,486,400
Solar PV SOP	\$2,038,440	\$285,380	\$2,323,820
Small Business Direct Install MTP	\$3,142,210	\$314,220	\$3,456,430
Retail Platform MTP	\$235,291	\$23,529	\$258,820
Retro-commissioning MTP	\$520,000	\$52,000	\$572,000
Commercial HVAC Distributor MTP (Pilot)	\$444,000	\$53,280	\$497,280
Residential	\$16,232,237	\$2,217,804	\$18,450,041
Home Energy Efficiency SOP	\$9,302,750	\$1,446,580	\$10,749,330
Solar PV SOP	\$1,348,950	\$190,970	\$1,539,920
Residential Load Management SOP	\$1,110,000	\$133,200	\$1,243,200
Retail Platform MTP	\$4,470,537	\$447,054	\$4,917,591
Hard-to-Reach	\$10,399,620	\$1,402,730	\$11,802,350
Hard-to-Reach SOP	\$5,965,150	\$835,120	\$6,800,270
Targeted Weatherization Low-Income SOP	\$4,434,470	\$567,610	\$5,002,080
Research & Development*	\$0	\$310,000	\$310,000
Evaluation, Measurement & Verification**	\$0	\$748,525	\$748,525
Total Budgets by Category	\$43,468,451	\$6,958,786	\$50,427,237

Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class



2021 Customer Class and Program	Incentives	Administration	Total Budget
Commercial	\$17,203,664	\$2,275,432	\$19,479,096
Commercial SOP	\$7,353,614	\$1,051,567	\$8,405,181
Emergency Load Management SOP	\$0	\$0	\$0
Commercial Load Management SOP	\$2,100,000	\$294,000	\$2,394,000
Solar PV SOP	\$2,038,440	\$285,380	\$2,323,820
Small Business Direct Install MTP	\$3,139,660	\$313,970	\$3,453,630
Retail Platform MTP	\$218,950	\$21,895	\$240,845
Retro-commissioning MTP	\$1,040,000	\$124,800	\$1,164,800
Commercial HVAC Distributor MTP	\$1,313,000	\$183,820	\$1,496,820
Residential	\$17,102,190	\$2,134,885	\$19,237,075
Home Energy Efficiency SOP	\$9,113,190	\$1,321,410	\$10,434,600
Solar PV SOP	\$1,348,950	\$190,970	\$1,539,920
Residential Load Management SOP	\$1,050,000	\$136,500	\$1,186,500
Retail Platform MTP	\$4,160,050	\$416,005	\$4,576,055
Residential New Home Construction MTP	\$1,430,000	\$70,000	\$1,500,000
Hard-to-Reach	\$11,252,560	\$1,501,790	\$12,754,350
Hard-to-Reach SOP	\$6,628,480	\$925,870	\$7,554,350
Targeted Weatherization Low-Income SOP	\$4,624,080	\$575,920	\$5,200,000
Research & Development*	\$0	\$150,000	\$150,000
Evaluation, Measurement & Verification**	\$0	\$735,989	\$735,989
Total Budgets by Category	\$45,558,414	\$6,798,096	\$52,356,510

* Research & Development costs will be split into Residential and Commercial classes and then allocated among the Programs (by class) in proportion to the program incentives in Oncor's EECRF filings.

** EM&V costs shown for 2020 are projected expenditures Oncor will incur in 2020 for completing review of Program Year 2019. EM&V costs shown for 2021 are actual expenses incurred in 2019 for review of the 2018 program and are an estimate of costs for the 2021 program year review. The actual 2021 program year expenses may differ from those incurred in 2019 for the review of the 2018 program year expenses.



ENERGY EFFICIENCY REPORT

V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

Table 7 documents Oncor's projected demand savings, actual demand goals and projected energy savings for the previous five years (2015-2019) calculated in accordance with 16 TAC §25.181.

Calendar Year	Actual Demand Goal (MW at Meter)*	Projected Savings (MW at Meter)	Projected Energy Savings (MWh at Meter)	Reported & Verified Savings (MW at Meter)*	Reported & Verified Energy Savings (MWh at Meter)
2019 ⁴	69.4	161.4	218,630	167.4	243,152
2018 ⁵	69.4	155.3	206,072	172.4	218,304
2017 ⁶	69.4	145.8	208,513	155.2	170,124
2016 ⁷	69.4	138.1	225,783	128.8	198,743
2015 8	69.4	110.3	197,436	115.8	178,908

Table 7: Historical Demand Savings Goals and Energy Targets

* The 2019 MW savings at the Source is 178.0 (167.4 MW / (1-.05932 line loss)). The 2019 demand goal MW at the source is 73.8 (69.4 MW/ (1 - .05932 line loss)). The line loss was reported in Oncor's 2019 EECRF (Docket No. 48421 – WP/JMS/4).

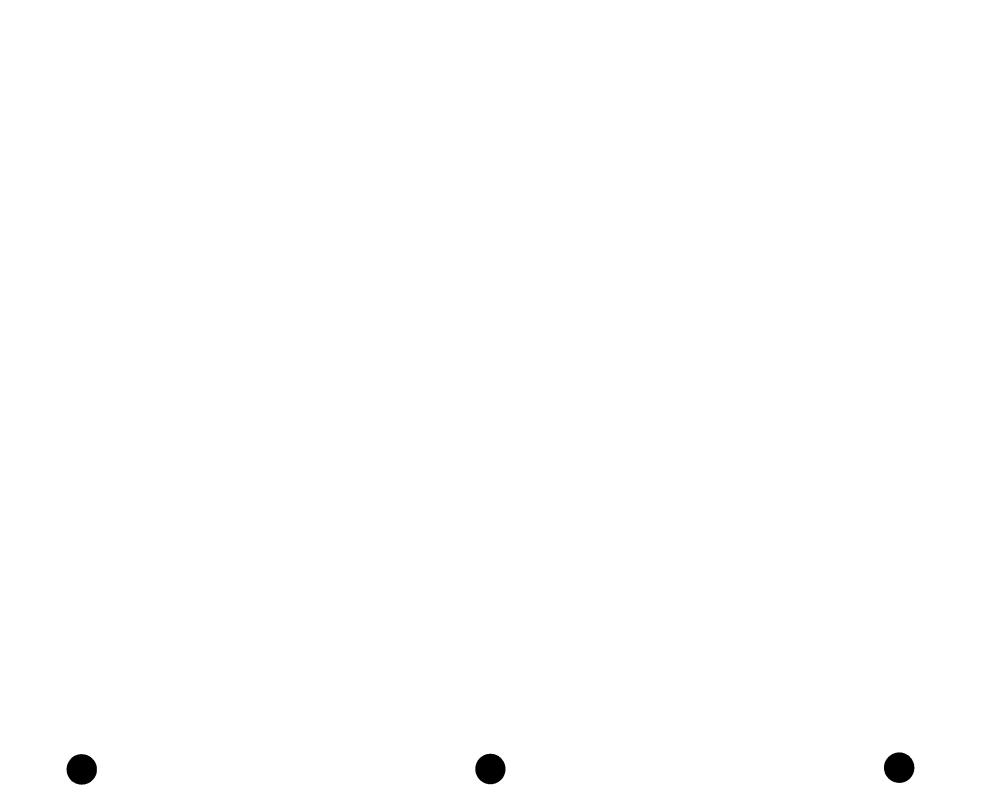
⁴ Projected MW Savings and Projected Energy Savings as reported in the 2019 Energy Efficiency Plan & Report (EEPR) filed in April of 2019 (and amended on May 24, 2019) under Project No. 49297. Actual Demand Goal as discussed in Tables 1 & 4.

⁵ Projected MW Savings and Projected Energy Savings as reported in the 2018 Energy Efficiency Plan & Report (EEPR) filed in March of 2018 under Project No. 48146. Actual Demand Goal as discussed in Tables 1 & 4.

⁶ Projected MW Savings and Projected Energy Savings as reported in the 2017 Energy Efficiency Plan & Report (EEPR) filed in April of 2017 under Project No. 46907. Actual Demand Goal as discussed in Tables 1 & 4.

⁷ Projected MW Savings and Projected Energy Savings as reported in the 2016 Energy Efficiency Plan & Report (EEPR) filed in April of 2016 under Project No. 45675. Actual Demand Goal as discussed in Tables 1 & 4.

⁸ Projected MW Savings and Projected Energy Savings as reported in the 2015 Energy Efficiency Plan & Report (EEPR) filed in April of 2015 under Project No. 44480. Actual Demand Goal as discussed in Tables 1 & 4.



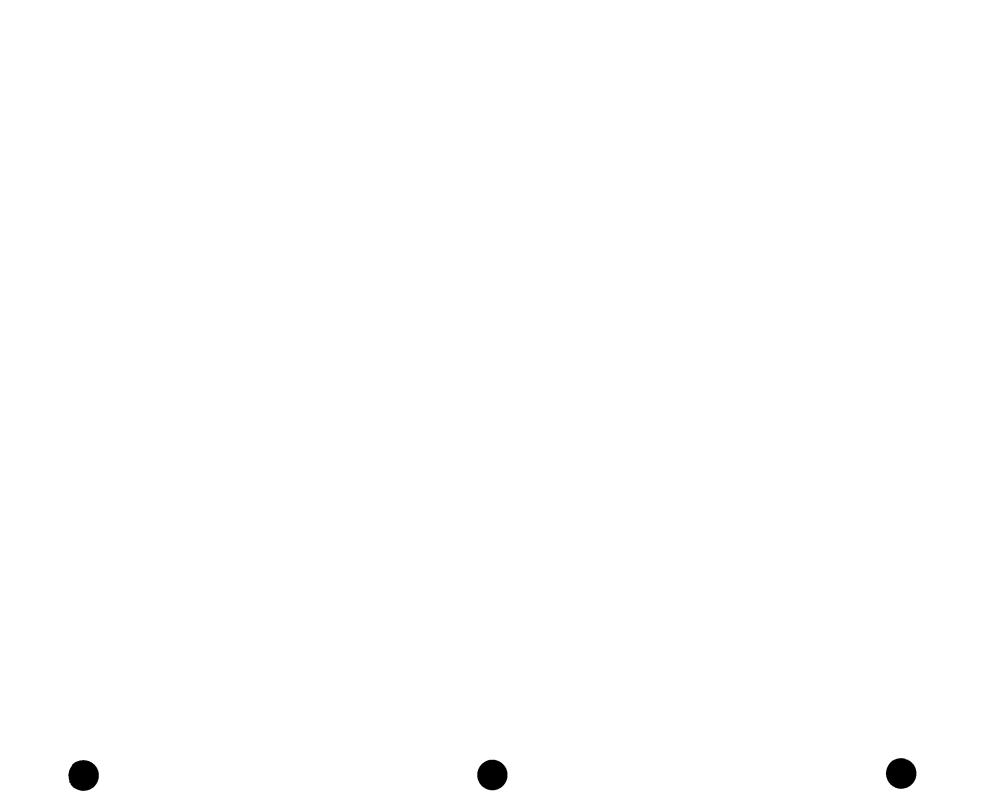
VI. Projected, Reported and Verified Demand and Energy Savings

2019	Projecte	d Savings	Reported and Verified Savings		
Customer Class and Program	kW	kWh	kW	kWh	
Commercial	78,391	100,221,654	88,349	134,520,038	
Commercial SOP (Custom)	3,465	20,338,921	572	2,765,155	
Commercial SOP (Basic)	10,557	55,520,837	18,669	93,296,463	
Emergency Load Management SOP	-	-	0	0	
Commercial Load Management SOP	60,000	180,000	60,000	180,000	
Solar PV SOP	1,534	4,979,022	2,141	6,724,377	
Small Business Direct Install MTP	2,179	13,365,283	1,892	9,150,313	
Retail Platform MTP	656	2,837,591	5,075	20,616,328	
Retro-commissioning MTP	0	3,000,000	0	1,787,403	
Residential	68,172	95,646,197	61,679	80,961,820	
Home Energy Efficiency SOP	21,310	36,706,893	18,860	35,959,167	
Solar PV SOP	1,492	4,827,683	1,506	4,901,773	
Residential Load Management SOP	32,900	197,400	29,426	88,294	
Retail Platform MTP	12,470	53,914,221	11,887	40,012,586	
Hard-to-Reach	14,855	22,762,014	17,422	27,669,999	
Hard-to-Reach SOP	12,105	18,686,710	13,173	19,638,109	
Targeted Weatherization LI SOP	2,750	4,075,304	4,249	8,031,890	
Total Annual Savings Goals	161,418	218,629,865	167,450	243,151,857	
2018 ¹⁰	Projected Savings		Reported and Verified Savin		
Customer Class and Program	kW	kWh	kW	kWh	
Commercial	82,888	121,300,632	90,372	119,718,732	
Commercial SOP (Custom)	4,074	27,547,542	1,428	12,588,022	
Commercial SOP (Basic)	13,477	67,549,695	13,766	73,230,061	
Emergency Load Management SOP	0	0	0	0	
Commercial Load Management SOP	60,000	180,000	67,658	202,974	
Solar PV SOP	2,840	11,632,080	2,512	8,212,970	
Small Business Direct Install MTP	2,294	13,367,902	2,567	14,143,908	
Retail Platform MTP	203	1,023,413	2,440	11,340,797	
Residential	63,117	63,416,134	67,874	77,468,606	
Home Energy Efficiency SOP	25,257	39,127,496	24,388	40,914,271	
Solar PV SOP	1,096	4,646,400	1,113	3,730,231	
Residential Demand Response SOP	32,900	197,400	34,756	104,271	
Retail Platform MTP	3,864	19,444,838	7,618	32,719,833	

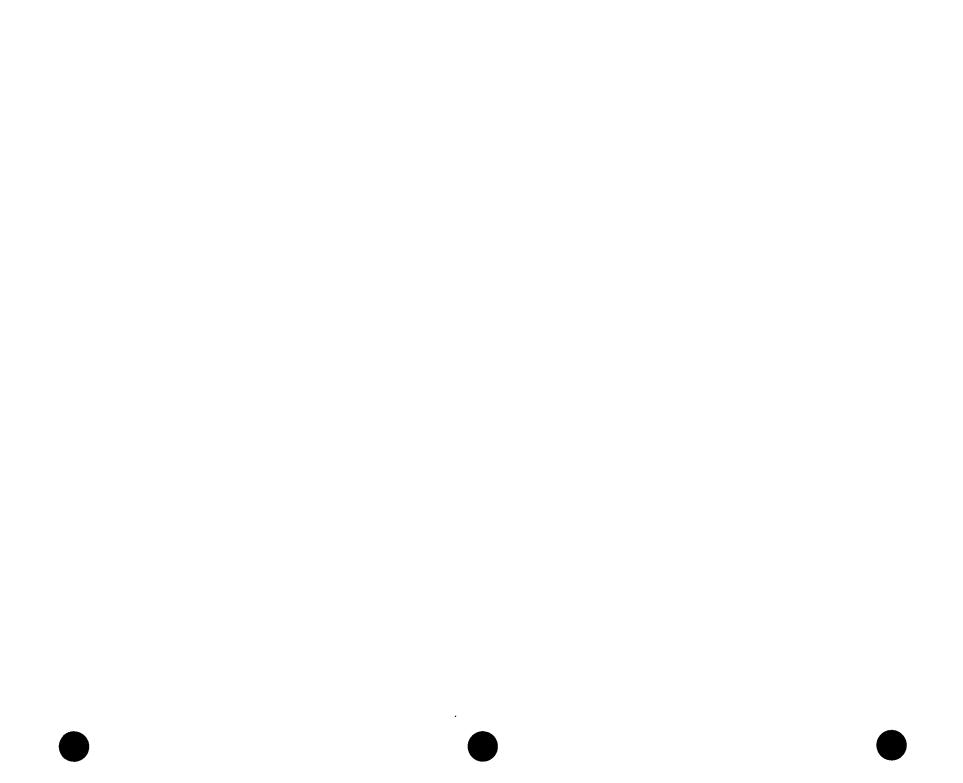
Table 8: Projected versus Reported and Verified Savings for 2019 and 2018⁹ (at Meter)

⁹ Projected Savings totals for 2019 and 2018 from Table 7. Reported Savings may not add due to rounding.

¹⁰ Reported and Verified Savings data for 2018 taken from EEPR, Project 49297.



Hard-to-Reach	9,293	21,354,929	14,163	21,116,762
Hard-to-Reach SOP	7,850	18,815,742	11,256	15,825,595
Targeted Weatherization LI SOP	1,443	2,539,187	2,908	5,291,167
Total Annual Savings Goals	155,298	206,071,695	172,409	218,304,100

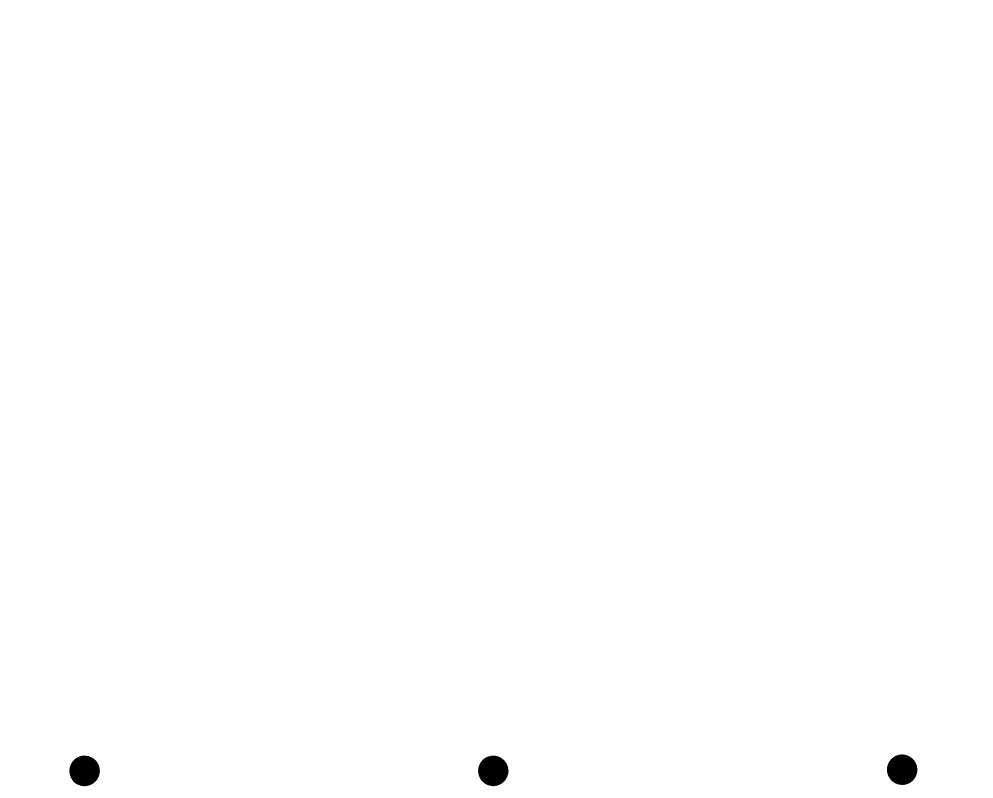


VII. Historical Program Expenditures

This section documents Oncor's incentive and administration expenditures for the previous five years (2015-2019) broken out by program for each customer class.

	20	19	2018		2017		2016		2015	
	Incentive (\$)	Admin (\$)								
Commercial	17,737,374	2,618,203	18,551,494	2,810,365	16,421,430	2,258,138	17,200,144	2,172,123	16,348,143	2,405,110
Solar PV SOP	2,751,931	348,614	3,199,284	404,539	2,016,566	296,888	6,027,919	497,068	4,815,294	489,580
Commercial SOP (Custom)	304,852	78,986	1,220,715	333,133	2,219,776	274,463	1,630,922	264,240	1,457,162	299,232
Emergency Load Management SOP	0	0	0	0	0	0	0	0	0	0
Commercial Load Management SOP	2,280,000	219,548	2,264,382	221,156	2,335,033	206,441	2,400,661	183,537	2,196,080	204,745
Retail Platform MTP	146,966	13,412	87,693	7,681	NA	NA	NA	NA	NA	NA
Small Business Direct Install MTP	1,880,379	179,987	3,407,414	281,331	1,640,121	136,407	544,189	50,966	1,784,748	151,836
Healthcare MTP	NA	NA	NA	NA	363,758	26,348	931,556	74,226	NA	NA
Retro-commissioning MTP	153,864	38,835	NA	NA	NA	NA	NA	NA	NA	NA
Commercial SOP (Basic)	10,219,382	1,738,821	8,372,006	1,562,525	7,846,176	1,317,591	5,664,897	1,102,086	6,094,859	1,259,717
Residential	14,408,317	1,719,366	14,255,973	1,819,899	15,618,050	1,900,301	19,377,105	2,040,667	13,659,678	1,911,756
Home Energy Efficiency SOP	8,436,929	1,044,545	9,786,238	1,270,240	12,111,569	1,451,784	14,435,266	1,521,569	10,005,295	1,435,699
Solar PV SOP	2,007,054	312,976	1,487,569	283,920	2,540,451	359,259	4,757,415	490,263	3,414,383	456,130
Residential Load Management SOP	1,118,156	102,917	1,316,000	119,803	966,030	89,258	184,424	28,835	240,000	19,927
Retail Platform MTP	2,846,178	258,928	1,666,166	145,936	NA	NA	NA	NA	NA	NA
Hard-to-Reach	10,467,278	1,163,385	9,162,979	1,172,244	11,048,655	1,264,640	11,117,443	1,117,681	11,653,832	1,327,473
Hard-to-Reach SOP	6,038,597	753,931	4,685,428	753,177	6,019,635	847,106	5,953,011	750,470	6,004,832	849,060
Targeted Weatherization LI SOP	4,428,681	409,454	4,477,551	419,067	5,029,020	417,534	5,164,432	367,211	5,649,000	478,413
Total Program Expenditures	42,612,969	5,500,954	41,970,446	5,802,508	43,088,135	5,423,079	47,694,692	5,330,471	41,661,653	5,644,339

Table 9: Historical Program Incentive and Administrative Expenditures for 2015 through 2019



VIII. Program Funding for Calendar Year 2019

Oncor exceeded its 2019 mandated demand goal of 69.4 MW by obtaining 167.5 MW in energy efficiency savings. As shown on Table 10, funds were either spent or committed by contracts with energy efficiency service providers in the amount of \$52,527,670.

The **Retro-commissioning MTP** was under budget in 2019 in part because the program kicked off later in the year than anticipated and because some of the projected participants were reluctant to move forward in the program without seeing actual results from similar projects. With 2019 results now available to present to potential participants, the program is expected to show increased spending and savings in 2020.

The **Commercial SOP (Custom)** was under budget in 2019 due in large part to measures that previously required measurement & verification are now allowed to use deemed savings per the Texas Technical Reference Manual. This has redirected several large projects from the Commercial SOP (Custom) to the Commercial SOP (Basic). Incentive funding was reallocated from the Commercial SOP (Custom) to the Commercial SOP (Basic) and Commercial Solar Photovoltaic SOP.

The **Commercial Solar Photovoltaic Installation SOP** was over budget in 2019 because a large number of projects that were on the waitlist were able to be funded when other commercial programs fell short of their budget and their incentives were reallocated to the Commercial Solar Program.

The **Small Business Direct Install MTP** was under budget in 2019 because the program start-up was delayed at the beginning of the year. The program is expected to have improved performance in 2020 as both staffing and measure offerings have been increased.

The **Residential Load Management SOP** was under budget in 2019 primarely due to a software malfunction by one of the larger providers that resulted in a communication failure with 40% of its enrolled thermostats.

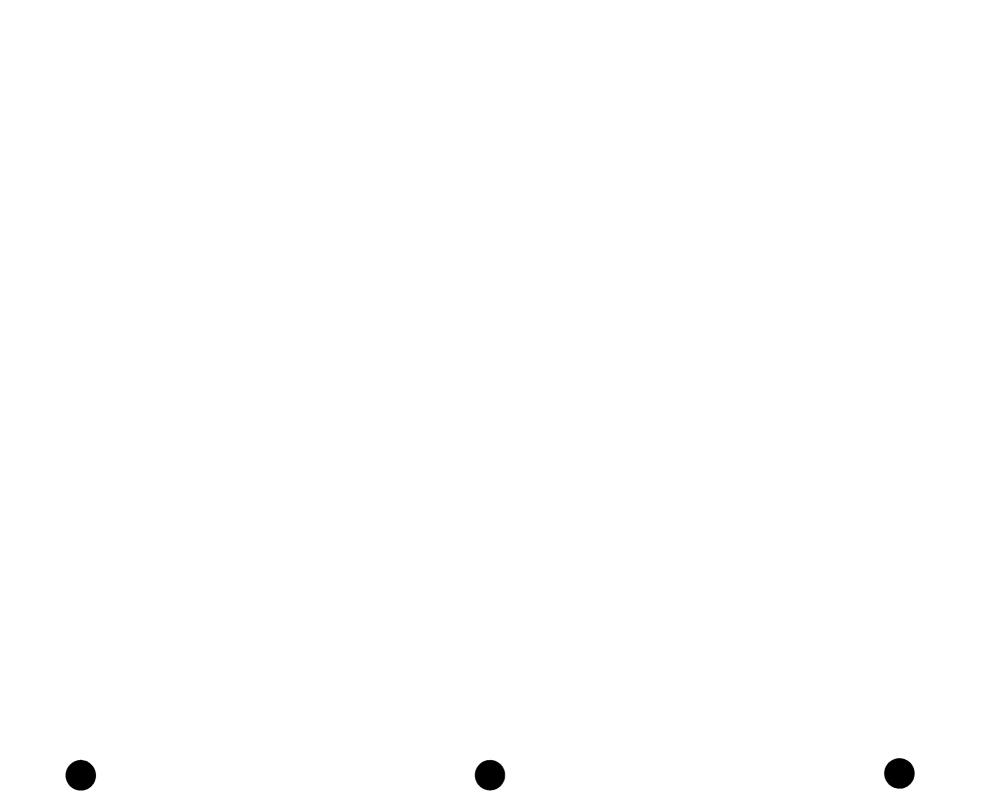


Table 10: Program Fu	inding for Calendar	Year 2019
----------------------	---------------------	-----------

	Numbers of Customer Meters	Total Projected Budget ¹¹ (\$)	Actual Funds Expended (Incentives) (\$)	Actual Funds Expended (Admin)* (\$)	Total Funds Expended (\$)	Funds Committed (Not Expended) (\$)	Funds Remaining (Not Committed) (\$)
Commercial	1,702	20,813,557	17,737,374	2,618,203	20,355,577	3,526,743	(3,068,763)
Solar PV SOP	54	2,323,820	2,751,931	348,614	3,100,545	0	(776,725)
Commercial SOP (Custom)	329	3,498,797	304,852	78,986	383,838	59,809	3,055,150
Emergency Load Management SOP	0	0	0	0	0	0	0
Commercial Load Management SOP	284	2,576,400	2,280,000	219,548	2,499,548	0	76,852
Retail Platform MTP	NAV	168,726	146,966	13,412	160,378	0	8,348
Small Business Direct Install MTP	174	3,517,740	1,880,379	179,987	2,060,366	0	1,457,374
Retro- commissioning MTP	2	218,400	153,864	38,835	192,699	0	25,701
Commercial SOP (Basic)	859	8,509,674	10,219,382	1,738,821	11,958,203	3,466,934	(6,915,463)
Residential	40,660	16,692,283	14,408,317	1,719,366	16,127,683	0	564,600
Home Energy Efficiency SOP	7,930	9,807,389	8,436,929	1,044,545	9,481,474	0	325,915
Solar PV SOP	335	2,280,370	2,007,054	312,976	2,320,030	0	(39,660)
Residential Load Management SOP	32,395	1,412,730	1,118,156	102,917	1,221,073	0	191,657
Retail Platform MTP	NAV	3,191,794	2,846,178	258,928	3,105,106	0	86,688
Hard-to-Reach	10,137	11,806,570	10,467,278	1,163,385	11,630,663	0	175,907
Hard-to-Reach SOP	8,758	6,800,670	6,038,597	753,931	6,792,528	0	8,142
Targeted Low- Income SOP	1,379	5,005,900	4,428,681	409,454	4,838,135	0	167,765
Research & Development	NA	310,000	0	151,015	151,015	0	158,985
EM&V**	NA	735,989	0	735,989	735,989	0	0
Total	52,499	50,358,399	42,612,969	6,387,958	49,000,927	3,526,743	(2,169,271)

* Administration funds include \$11,865 of Rate Case Expenses approved in Docket No. 49594.

** EM&V costs shown are actual booked costs for 2019. For purposes of cost-effectiveness and bonus calculations, \$748,525 is used per TetraTech's 2019 EM&V cost allocation.

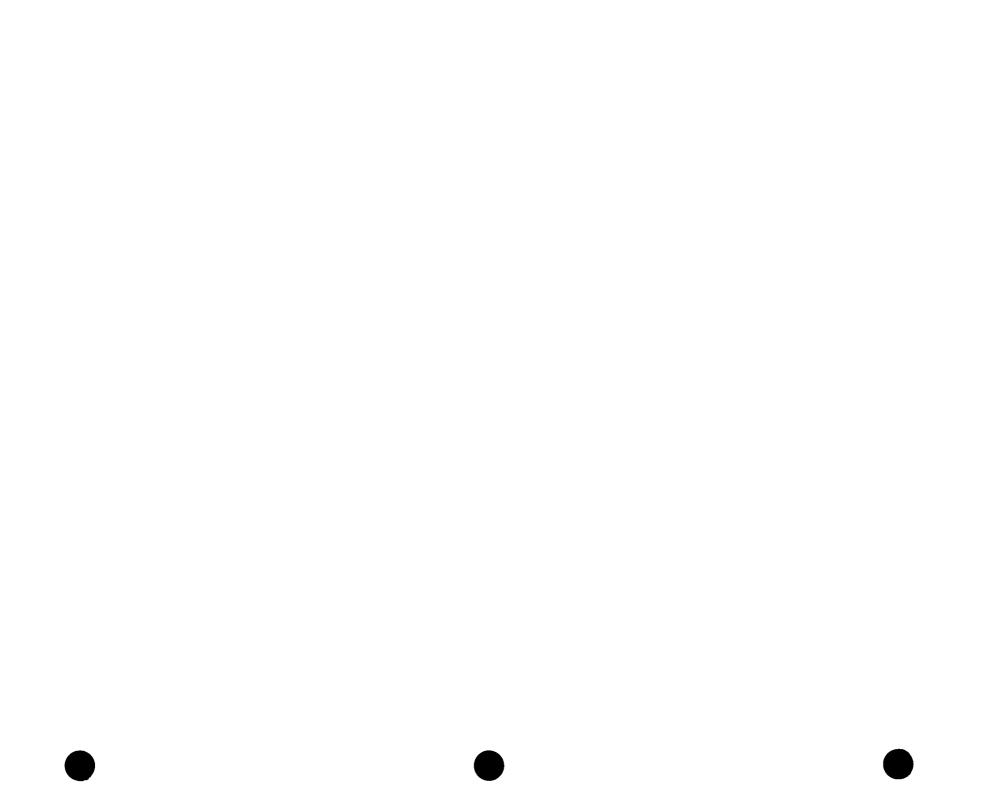
IX. Market Transformation & Research & Development Results

Energy Efficiency Service Providers have the opportunity to bid to become an implementer of one or more of Oncor's Market Transformation Programs. The process Oncor uses to choose implementers includes identifying potential bidders, distributing a RFP (Request for Proposal),

26

¹¹ Projected Budget taken from the EEPR filed in April 2019 under Project No. 49297

Oncor



conducting a Bidders Conference, evaluating proposals, narrowing bidders to a shortlist, conducting oral presentations, selecting the winning bid, and negotiating and finalizing the contract.

Oncor's 2019 Market Transformation and Research & Development Programs are described below.

Small Business Direct Install Program (MTP)

Oncor's Small Business Direct Install MTP was launched during the third quarter of 2013. The existing implementer's contract was renewed in 2019 after a RFP process was completed. The implementer has managed similar programs for utilities across the United States. This program was developed to assist an under-served segment identified by Oncor. The SBDI is a market transformation program designed to offer participating small commercial customers education on energy efficiency technologies, equip participating sub-contractors with the tools they need to succeed in installing projects in the small business market, and offer incentives to assist small ($\leq 200 \text{ kW}$) businesses to install energy-efficient products such as high efficiency lighting and refrigeration measures. The program is focused on the non-Metro counties served by Oncor. In 2019 participants installed measures that resulted in savings of 1,892 kW and 9,150,313 kWh.

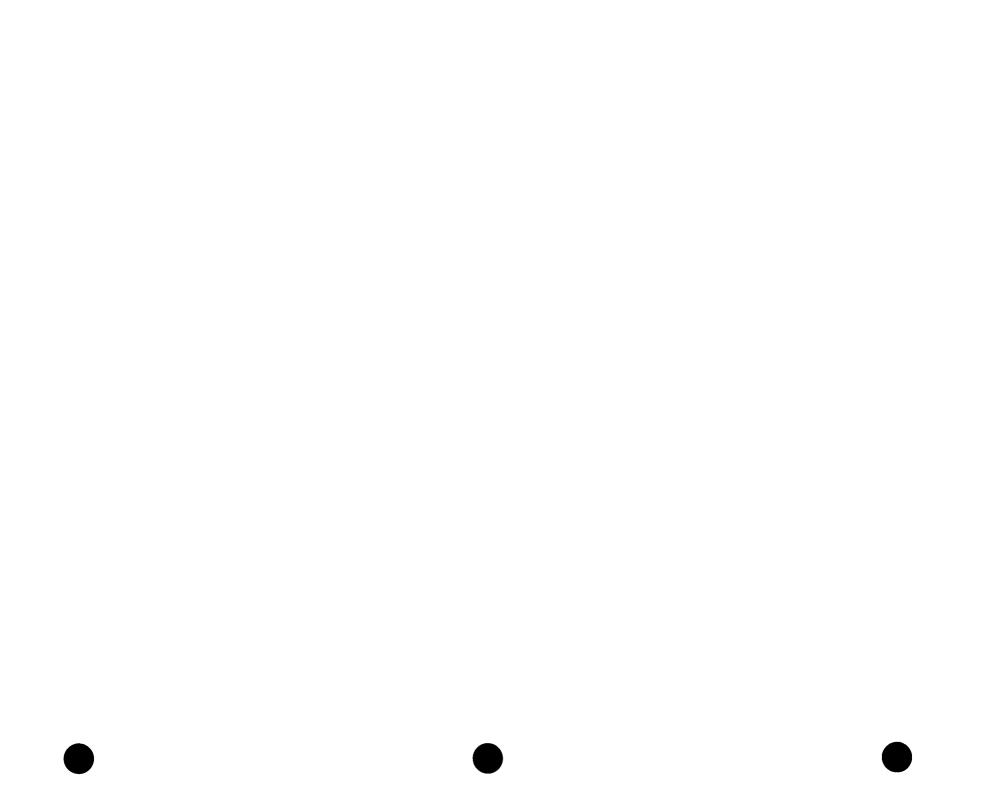
The Program goals for 2019 were to provide convenient, turn-key select energy efficient measures to small and mid-sized non-residential customers.

Retail Platform MTP

Oncor's Retail Platform MTP was launched during the fourth quarter of 2018. An implementer was awarded the contract in 2018 after a RFP process was completed. The implementer has managed similar programs for utilities across the United States. This program was developed to provide incentives directly to Oncor Residential Customers through in-store point of sale discounts for the purchase of qualifying ENERGY STAR-rated LED lighting products. In November of 2018 a smart thermostat measure was added to the Retail Platform MTP with select Nest and Ecobee smart thermostats available to customers served by Oncor. Much of the Program's success was due to the working relationship developed between the implementer and major market manufactures as well as participating retail partners in the Dallas/Ft. Worth area, such as Home Depot, Lowe's, Walmart and Costco. The Retail Platform MTP contributed savings of 16,962 kW and 60,628,913 kWh in 2019 as twenty-two additional retail stores were added outside of the DFW Metroplex. Claimed savings were attributed based on five percent of upstream lighting program benefits and costs allocated to commercial customers with the remaining 95 percent allocated to residential customers as recommended in the Texas Technical Reference Manual Version 5.0. Commercial savings are calculated using the 'office' building type for lighting per Tetra Tech's Guidance Memo dated April 28, 2016. Smart thermostat costs and benefits are attributed 100% to residential customers.

Retro-commissioning MTP

The Retro-commissioning MTP was launched during the second quarter of 2019. An implementer was awarded the contract in 2018 after a RFP was conducted. The implementer has managed similar programs for utilities across the United States. The program was developed to provide incentives to Oncor Commercial Customers through reimbursement of costs incurred by the customer for controls measures identified by the implementer. The Retro-commissioning MTP contributed savings of 1,787,403 kWh in 2019.



Research and Development

During 2019, Oncor collaborated with the U.S. General Services Administration Proving Ground (GSA). Annually, the GSA issues a Request for Information from vendors to submit new energy efficient technologies into the program for evaluation. The GSA, Oncor, and national laboratories review submittals and select several for installation on Federal facilities. Technologies are evaluated for equipment performance, as well as energy and demand savings for up to one year. The collaboration also allows utilities to recommend technologies for inclusion in the program. The technologies may be installed and evaluated on Federal facilities within ERCOT, or other areas with similar weather zones. In 2018 and 2019, Oncor partially funded the installation and testing of advanced lighting controls in the A. Maceo Smith Federal Building in Dallas. The project was completed in early 2019 and a final evaluation was completed.

Oncor also continued its membership in the Texas Energy Poverty Research Institute. TEPRI is a 501(c) (3) whose mission is to research the root causes of energy and fuel poverty and provide data for solutions that have an impact on low-income households.

Other organizations providing research services and data to Oncor included ESource and the Peak Load Management Alliance.

X. Current Energy Efficiency Cost Recovery Factor (EECRF)

Oncor billed \$57,621,277 during 2019 through the EECRF approved in Docket No. 48421.

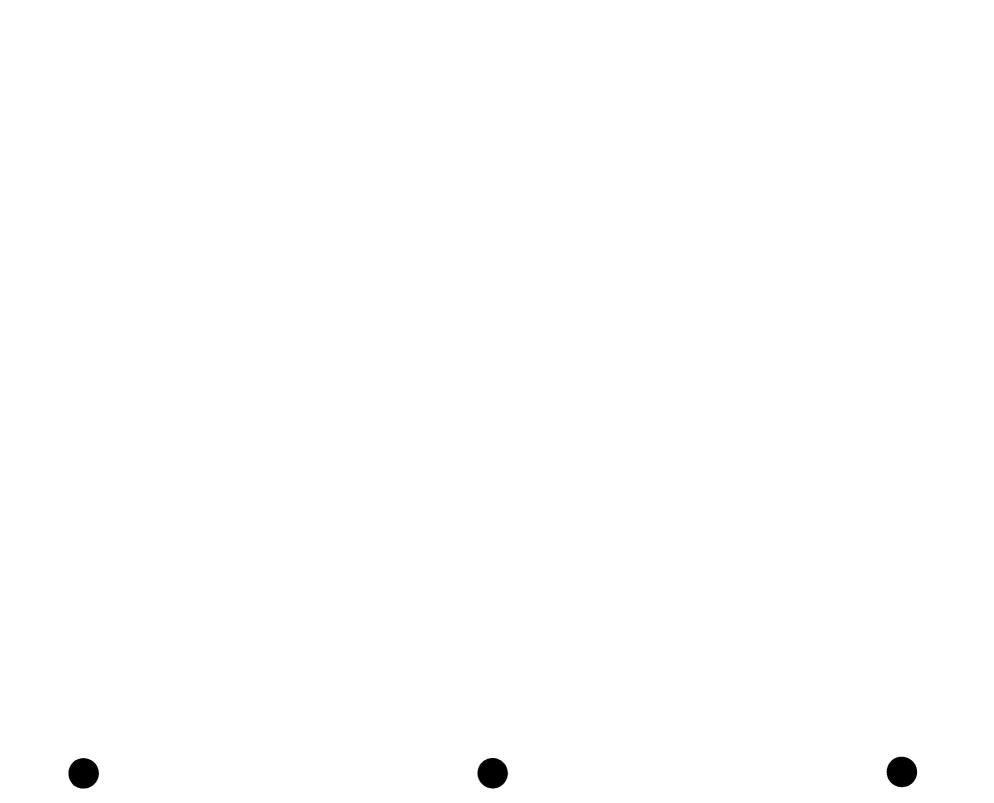
Revenue Billed \$57,621,277

Over- or Under-Recovery

\$1,756,778 (Over) - This amount will be trued-up by rate class in Oncor's EECRF filing in 2020.

EECRF Filed in 2019 in Docket No. 49594

Oncor's most recent EECRF filing was in Docket No. 49594 for the 2020 program year. The revenues to be collected as a result of the final Order in that docket will be determined at a later date after the completion of the 2020 program year and does not involve any revenues from base rates.



ACRONYMS

DR	Demand Response
DSM	Demand Side Management
EEP	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
EEPR	Energy Efficiency Plan and Report
EER	Energy Efficiency Report, which was filed as a separate document prior to April 2008
EE Rule	Energy Efficiency Rule, PUCT 16 TAC §25.181and §25.183
ERCOT	Electric Reliability Council of Texas
HTR	Hard-To-Reach
M&V	Measurement and Verification
МТР	Market Transformation Program
PUCT	Public Utility Commission of Texas
REP	Retail Electrical Provider
RES	Residential
SOP	Standard Offer Program



GLOSSARY

Actual weather adjusted -- "Actual weather adjusted" peak demand and energy consumption is the historical peak demand and energy consumption adjusted for weather fluctuations using weather data for the most recent ten years.

At meter -- Demand (kW/MW) and Energy (kWh/MWh) figures reported throughout the EEPR are reflective of impacts at the customer meter. This is the original format of the measured and deemed impacts which the utilities collect for their energy efficiency programs. Goals are necessarily calculated "at source" (generator) using utility system peak data at the transmission level. In order to accurately compare program impacts, goals and projected savings have been adjusted for the line losses that one would expect going from the source to the meter.

Average Growth -- Average historical growth in demand (kW) over the prior five years for residential and commercial customers adjusted for weather fluctuations.

Baseline -- A relevant condition that would have existed in the absence of the energy efficiency project or program being implemented, including energy consumption that would have occurred. Baselines are used to calculate program-related demand and energy savings. Baselines can be defined as either project-specific baselines or performance standard baselines (e.g. building codes).

Commercial customer -- A non-residential customer taking service at a point of delivery at a distribution voltage under an electric utility's tariff during the prior program year or a non-profit customer or government entity, including an educational institution. For purposes of Commission rules, each point of delivery shall be considered a separate customer.

Competitive energy efficiency services -- Energy efficiency services that are defined as competitive under §25.341 of the PUCT's rules.

Conservation load factor – The ratio of the annual energy savings goal, in kilowatt hours (kWh), to the peak demand goal for the year, measured in kilowatts (kW) and multiplied by the number of hours in the year.

Deemed savings calculation -- An industry-wide engineering algorithm used to calculate energy and/or demand savings of the installed energy efficiency measure that has been developed from common practice that is widely considered acceptable for the measure and purpose, and is applicable to the situation being evaluated. May include stipulated assumptions for one or more parameters in the algorithm, but typically requires some data associated with actual installed measure. An electric utility may use the calculation with documented measure-specific assumptions, instead of energy and peak demand savings determined through measurement and verification activities or the use of deemed savings.

Deemed savings value -- An estimate of energy or demand savings for a single unit of an installed energy efficiency measure that has been developed from data sources and analytical methods that are widely considered acceptable for the measure and purpose, and is applicable to the situation being evaluated. An electric utility may use deemed savings values instead of energy and peak demand savings determined through measurement and verification activities.



Demand -- The rate at which electric energy is used at a given instant, or averaged over a designated period, usually expressed in kilowatts (kW) or megawatts (MW).

Demand savings -- A quantifiable reduction in demand.

Eligible customers -- Residential and commercial customers. In addition, to the extent that they meet the criteria for participation in load management standard offer programs developed for industrial customers and implemented prior to May 1, 2007, industrial customers are eligible customers solely for the purpose of participating in such programs.

Energy efficiency -- Improvements in the use of electricity that are achieved through customer facility or customer equipment improvements, devices, processes, or behavioral or operational changes that produce reductions in demand or energy consumption with the same or higher level of end-use service and that do not materially degrade existing levels of comfort, convenience, and productivity.

Energy Efficiency Cost Recovery Factor (EECRF) -- An electric tariff provision, compliant with 16 TAC §25.182, ensuring timely and reasonable cost recovery for utility expenditures made to satisfy the goal of PURA §39.905 that provide for a portfolio of cost-effective energy efficiency programs under this section.

Energy efficiency measures -- Equipment, materials, and practices, including practices that result in behavioral or operational changes, implemented at a customer's site on the customer's side of the meter that result in a reduction at the customer level and/or on the utility's system in electric energy consumption, measured in kWh, or peak demand, measured in kW, or both. These measures may include thermal energy storage and removal of an inefficient appliance so long as the customer need satisfied by the appliance is still met.

Energy efficiency program -- The aggregate of the energy efficiency activities carried out by an electric utility under this section or a set of energy efficiency projects carried out by an electric utility under the same name and operating rules.

Energy efficiency project -- An energy efficiency measure or combination of measures undertaken in accordance with a standard offer, market transformation program, or self-delivered program.

Energy efficiency service provider -- A person or other entity that installs energy efficiency measures or performs other energy efficiency services under 16 TAC §25.181. An energy efficiency service provider may be a retail electric provider or commercial customer, provided that the commercial customer has a peak load equal to or greater than 50 kW. An energy efficiency service provider may also be a governmental entity or a non-profit organization, but may not be an electric utility.

Energy savings -- A quantifiable reduction in a customer's consumption of energy that is attributable to energy efficiency measures, usually expressed in kWh or MWh.

Estimated useful life (EUL) -- The number of years until 50% of installed measures are still operable and providing savings, and is used interchangeably with the term "measure life". The



EUL determines the period of time over which the benefits of the energy efficiency measure are expected to accrue.

Growth in demand -- The annual increase in demand in the Texas portion of an electric utility's service area at time of peak demand, as measured in accordance with 16 TAC Rule §25.181.

Hard-to-reach (HTR) customers -- Residential customers with an annual household income at or below 200% of the federal poverty guidelines.

Incentive payment -- Payment made by a utility to an energy efficiency service provider, an enduse customer, or third-party contractor to implement and/or attract customers to energy efficiency programs, including standard offer, market transformation, and self-delivered programs.

Industrial customer -- A for-profit entity engaged in an industrial process taking electric service at transmission voltage, or a for-profit entity engaged in an industrial process taking electric service at distribution voltage that qualifies for a tax exemption under Tax Code §151.317 and has submitted an identification notice under subsection (u) of 16 TAC §25.181.

Inspection -- Examination of a project to verify that an energy efficiency measure has been installed, is capable of performing its intended function, and is producing an energy savings or demand reduction equivalent to the energy savings or demand reduction reported towards meeting the energy efficiency goals of this section.

Lifetime energy (demand) savings -- The energy (demand) savings over the lifetime of an installed measure(s), project(s), or program(s). May include consideration of measure estimated useful life, technical degradation, and other factors. Can be gross or net savings.

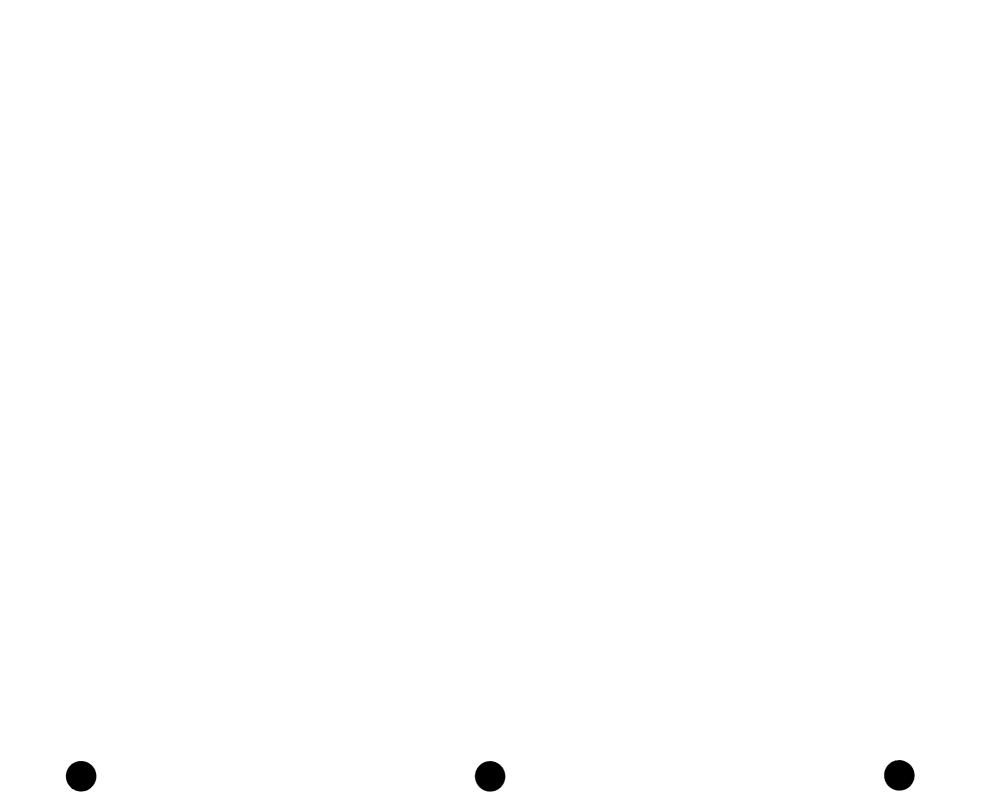
Load control -- Activities that place the operation of electricity-consuming equipment under the control or dispatch of an energy efficiency service provider, an independent system operator, or other transmission organization or that are controlled by the customer, with the objective of producing energy or demand savings.

Load management -- Load control activities that result in a reduction in peak demand, or a shifting of energy usage from a peak to an off-peak period or from high-price periods to lower price periods.

Market transformation program -- Strategic programs intended to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services, and practices, as described in 16 TAC Rule §25.181.

Measurement and verification -- A subset of program impact evaluation that is associated with the documentation of energy or demand savings at individual sites or projects using one or more methods that can involve measurements, engineering calculations, statistical analyses, and/or computer simulation modeling. M&V approaches are defined in the IPMVP.

Off-peak period -- Period during which the demand on an electric utility system is not at or near its maximum. For the purpose of this section, the off-peak period includes all hours that are not in the peak period.



Peak demand -- Electrical demand at the times of highest annual demand on the utility's system at the source. Peak demand refers to Texas retail peak demand and, therefore, does not include demand of retail customers in other states or wholesale customers.

Peak demand reduction -- Reduction in demand on the utility's system at the times of the utility's summer peak period or winter peak period.

Peak period -- For the purpose of this section, the peak period consists of the hours from one p.m. to seven p.m. during the months of June, July, August, and September, and the hours of six to ten a.m. and six to ten p.m. during the months of December, January, and February, excluding weekends and Federal holidays.

Program Year -- A year in which an energy efficiency incentive program is implemented, beginning January 1 and ending December 31.

Projected Demand and Energy Savings -- Peak demand reduction and energy savings for the current and following calendar year that Oncor is planning and budgeting for in the EEPR.

Renewable demand side management (DSM) technologies -- Equipment that uses a renewable energy resource (renewable resource), as defined in §25.173(c) (relating to Goal for Renewable Energy), a geothermal heat pump, a solar water heater, or another natural mechanism of the environment, that when installed at a customer site, reduces the customer's net purchases of energy, demand, or both.

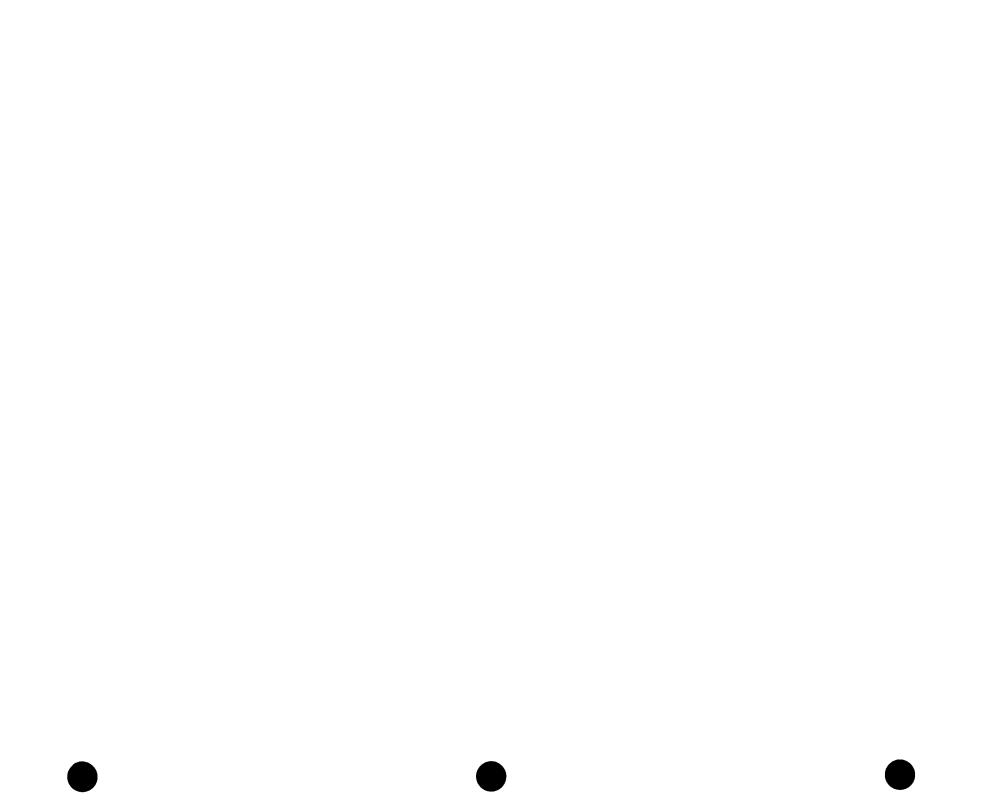
Savings-to-Investment Ratio (SIR) -- The ratio of the present value of a customer's estimated lifetime electricity cost savings from energy efficiency measures to the present value of the installation costs, inclusive of any incidental repairs, of those energy efficiency measures.

Self-delivered program -- A program developed by a utility in an area in which customer choice is not offered that provides incentives directly to customers. The utility may use internal or external resources to design and administer the program.

Standard offer contract -- A contract between an energy efficiency service provider and a participating utility or between a participating utility and a commercial customer specifying standard payments based upon the amount of energy and peak demand savings achieved through energy efficiency measures, the measurement and verification protocols, and other terms and conditions, consistent with this section.

Standard offer program -- A program under which a utility administers standard offer contracts between the utility and energy efficiency service providers.

Underserved County -- A county that did not have reported demand or energy savings through a prior year's SOP or MTP.



APPENDICES

APPENDIX A: 2019 REPORTED DEMAND AND ENERGY REDUCTION BY COUNTY

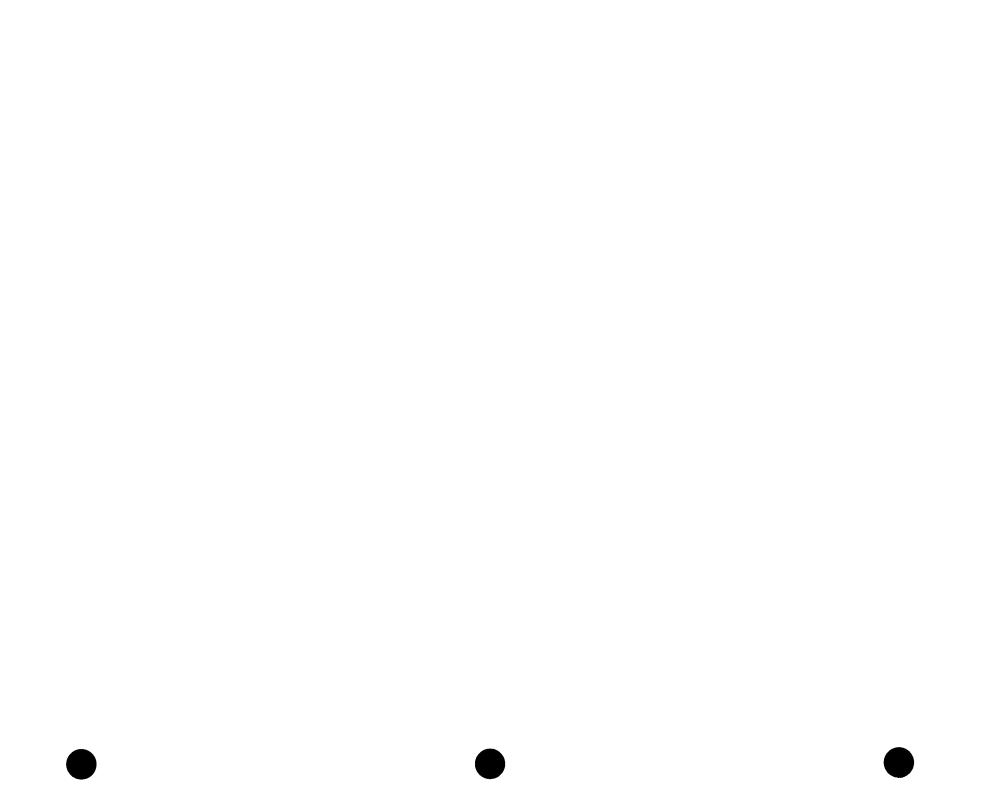
A-1



								name and	_	gynceaa	000	n by Coun	<u>y</u>									
COUNTY		I to Reach SOP	Direct Ir	Business nstall MTP	(Cusi com	mercial SOP tom) & Retro- smissioning MTP	Man	idential Load agement SOP	Lo	ommercial ad Mgmt. SOP	Eff	ome Energy iciency SOP	_	mmercial SOP (Basic)	Soli	mmercial ar PV SOP		idential Solar PV SOP	Inc	rgeted Low come SOP	L	ill Platform MTP
ANDERSON	kW kWh	178 6 361,138.4		4 4 17,211 7	ĸ₩ ĸ₩ħ		kW kWh	478 8 1,436.8	1	66 3 199 0		14 3,436 8	kW kWh		kW KWh		kW kWh	13 1 32,584.3	kW kWh		kW kWh	
ANDREWS	kW kWh		kW kWh		kW kWh	<u> </u>	kW kWh		kW kWh		kW kWh	<u> </u>	kW kWh	<u> </u>	kW kWh		kW kWh		kW kWh	98 13,1089	kW kWh	
ANGELINA	kW kWh		kW kWh	77 5 414,305 0			kW KWh	168 2 504 4		133 0 399 1		78 1 158,988 3		14 4 15,012 4	•		kW KWh	4 6 14,254 2	kW kWh	45 8 84,3214		0 0 2,5 12 0
ARCHER	kW kWh		kW kWh	· · · · · · · · · ·	kW kWh		kW KWh	266 2 797 8			kW kWh	12 8 24,000 9	kW kWh		kW kWh	4 4 16,253 6	kW kWh		kW KWh	0 7 872 5	kW kWh	
BASTROP	kW kWh		kW kWh		kW kWh		kW KWh	146 1 438 8		236.4 709 3	ł	2 5 6,858.6	kW kWh	220 7 890,503 7		83 9 285,536 1		6 5 26,74 4 .8	kW kWh	4 9 5,588 9	kW kWh	0 0 1,256 0
BAYLOR	kW kWh		kW kWh		kW kWh		kW KWh		kW kWh		kW kWh		kW kWh		kW kWh	i	kW KWh		kW KWh		kW kWh	
BELL	kW kWh	284 7 520,632 0		26 1 101,671 1			kW KWh	303.1 908 6		1,4216 4,265 1	1	269 1 527,194 2	1	414 7 1,794,698 2			kW kWh	126 6 441,626 9		102.8 185,295.5		264 5 1, 190, 543 3
BROWN	kW kWh	170 2 359,560.7		48 0 284,125.1			kW KWh	309 1 928 5	,		kW kWh	· · · · · · · · · · · · · · · · · · ·	₩ kWh	22 9 122,228 7	,		kW kWh		kW KWh	4 9 9,046 7	kW kWh	
CHEROKEE	kW kWh	30 7 60,178 4		202 8 866,087 5		· · - · ·	kW kWh	403 9 1,212 5			kW kWh		kW kWh		kW kWh		kW kWh		kW kWh		kW kWh	
CLAY	kW kWh		kW kWh		kW kWh		kW kWh	308 3 924 4	1		kW kWh	14 2,229 4	kW kWh		kW kWh		kW KWh	10 9 35,661 2	kW KWh		kW kWh	
COLEMAN	kW KWh		kW kWh		kW kWh		kW KWh	~	kW KWh	-	kW kWh		kW kWh		kW kWh		kW kWh		kW KWh		kW kWh	
COLLIN	kW KWh	249 6 277,380.6			kW kWh	64 2 98,002 4		3714 1,1 14 1	1	9,840 6 29,521.5		3,697 5 7,141,255 3	1	1, 115.7 6,082,343 3		83 8 250,713 3		265 9 850,980 1		6611 1,201,574 7		3,823 9 13,353,554 6
COMANCHE	kW kWh		kW kWh		kW kWh		kW kWh	125 8 378 6			kW kWh		kW kWh		kW kWh		kW kWh		kW kWh	50 6 88,804 2	1	
CONCHO	kW kWh		kW kWh		kW kWh	<u></u>	kW kWh	144 9 435 7			k₩ kWh		kW kWh		kW kWh		kW kWh		kW KWh		kW kWh	
COOKE	kW kWh		kW kWh	11 0 66,550 1		2 4 8,073 1		399 6 1, 197 8		64 5 193 6		4 6 8,202 3	kW kWh	73 7 298,789 5	1		kW kWh		kW kWh	2 3 2,660 3	kW kWh	0 0 1,256 0
CORYELL	kW kWh	18 3 33,398 3		6 5 27,300 3			kW kWh	194.0 582 2			kW kWh	9 1 16,389 8	kW kWh		kW kWh		kW kWh	8 7 30,4318	kW KWh	13 5 25,793 5	kW kWh	

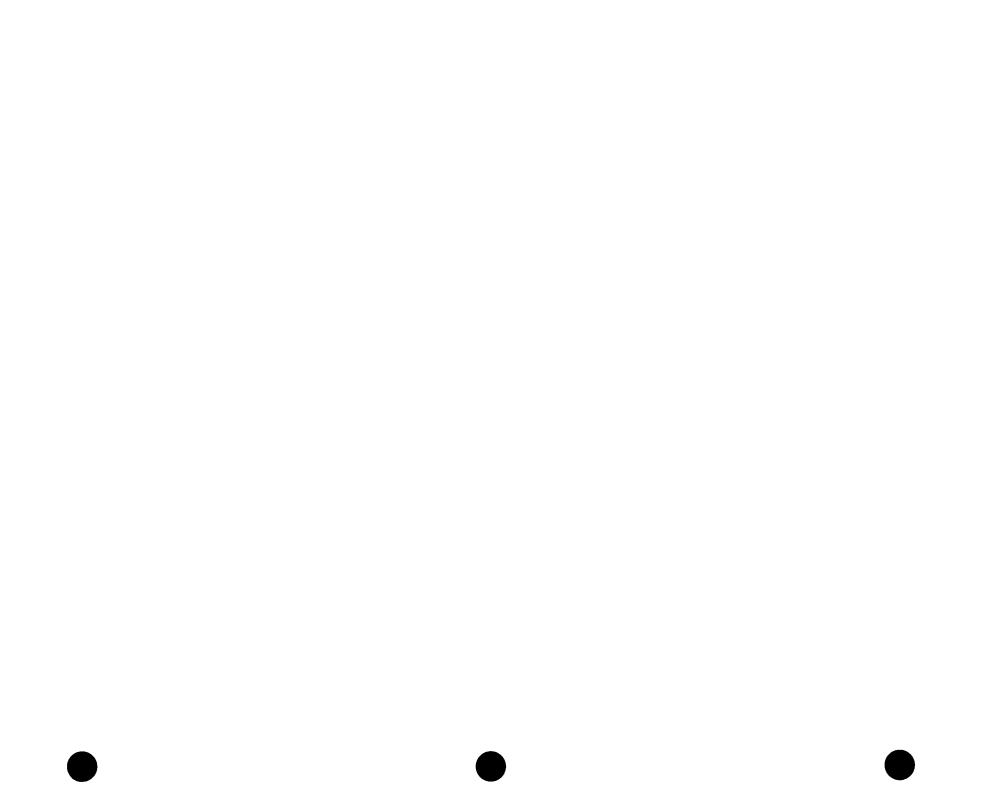
Appendix A: Demand and Energy Reduction by County

Oncor



kWh 9,945,906 kWh 24,119 kWh 3,893,715 kWh 5917 kWh 62,88 DAWSON kW kW kW kW kW 5577 kW DELTA kW 4.4 kW kW 878.3 kW	kWh 9.5 kW 4,337.5 0.0 kWh 7,890,469.6 kW kWh 13 kW 3,244.9	kWh 46,570,862 7 kW 22 5 kWh 122,483 0 kW	kWh 1,852,292 6 kW		4 kWh 3,077,3	kW kWh 26 5 kW 51 3 kWh 1.9 kW	5,270 3 18,782,800 6
kWh 9,945,906 kWh 24,119 kWh 3,893,715 kWh 5917 kWh 62,68 DAWSON kW kW kW kW 557.7 kW DAWSON kW kWh kWh kWh 1.872.0 kWh DELTA kW 4.4 kW kW 878.3 kW	0.0 kWh 7,890,469 6 kW kWh kW 13 kWh 3,244 9	kWh 46,570,862 7 kW 22 5 kWh 122,483 0 kW	kWh 1,852,292 8 kW kWh	8 kWh 778,598	4 kWh 3,077,3	513 kWh 1.9 kW	
kWh kWh kWh 1,872.0 kWh DELTA kW 4.4 kW kW 878.3 kW	kWh kW 13 kWh 3,244 9	kWh 122,483 0	kWh				
	kWh 3,244 9		1			05 3 kWh	
kWh 6,649.9 kWh kWh 2,636.5 kWh	4 4 4 4 5 9 7		kWh	kW kWh	kW kWh	kW kWh	
	0 3 kWh 901,147 9	kW 302 3 kWh 1,384,551 2	1	kW 53 kWh 185,060	5 kW 1 kWh	00 kW 410 kWh	366 3 658,651 6
EASTLAND kW kW kW 325 8 kW kWh kWh kWh kWh kWh kWh kWh kWh 976 7 kWh	kW 398 kWh 81,2169		kW kWh	kW kWh	kW kWh	kW kWh	
	00 kW 57 0 98 kWh 106,495 0		1		8 kW 0 kWh 11,9	90 kW 852 kWh	1812 783,1579
	2 2 kW 130 7 3.6 kWh 285,980 4					13 0 kW 50.3 kWh	0 0 17,584 0
ERATH kW kW kW 1,921.4 kW kWh kWh 5,764.2 kWh	kW 12 9 kWh 25,084 8		kW kWh	kW kWh	kW kWh 9,	4 7 kW 177 1 kWh	
FALLS kW kW kW 282.0 kW kWh kWh kWh 848.2 kWh		kW kWh	kW kWh	kW kWh	kW kWh 19,5	11.0 kW 10 8 kWh	0 0 1,256 0
FANNIN kW 35.4 kW kW 379.8 kW kWh 52,391.4 kWh kWh 1,140.2 kWh	kW 12 0 kWh 24,985 9		kW kWh	kW kWh	kW kWh 4,8	4.5 kW 07 1 kWh	
FREESTONE kW kW kW 228 9 kW kWh kWh kWh 681 5 kWh	kW 34.9 kWh 64,199.1		kW kWh	kW kWh	kW kWh	kW KWh	
GLASSCOCK kW kW kW 42 9 kW kWh kWh kWh 128 8 kWh 128 8 <td>1 1</td> <td>kW kWh</td> <td>kW kWh</td> <td>kW kWh</td> <td>kW kWh 1,2</td> <td>13 kW 73 1 kWh</td> <td></td>	1 1	kW kWh	kW kWh	kW kWh	kW kWh 1,2	13 kW 73 1 kWh	
	3.8 kW 16 5 D 1 kWh 34,342 6		1	1		868 kW 335 kWh	0 0 2,512 0
	1.6 kW 778 1.6 kWh 159,7018	1	kW kWh	kW 11 kWh 36,784	4 kW 7 kWh 15,3	84 kW 185 kWh	0 0 1,256 0
HILDAGO kW kW kW 12.7 kW kWh kWh kWh kWh 38.0 kWh		kW kWh	kW kWh	kW kWh	kW kWh	kW kWh	
HILL kW kW 0.6 kW 0.3 kW 1310 kW kWh kWh 2,6015 kWh 1,048.2 kWh 393.8 kWh		kW 11.3 kWh 63,504 4	kW kWh	kW kWh	1	12 9 kW 76 8 kWh	
HOOD kW 0.5 kW 57 0 kW 28 kW 1,278 6 kW kWh 850 3 kWh 376,016 5 kWh 9,980 4 kWh 3,837 3 kWh	kW 873 kWh 192,4449		kW kWh	kW kWh	k₩ k₩ħ	kW kWh	
HOPKINS KW 2035 KW KW 510 0 KW kWh 291,033 1 KWh KWh 1,529 3 KWh		kW kWh	kW 202 4 kWh 578,183 2			22 0 kW 80 1 kWh	

Oncor

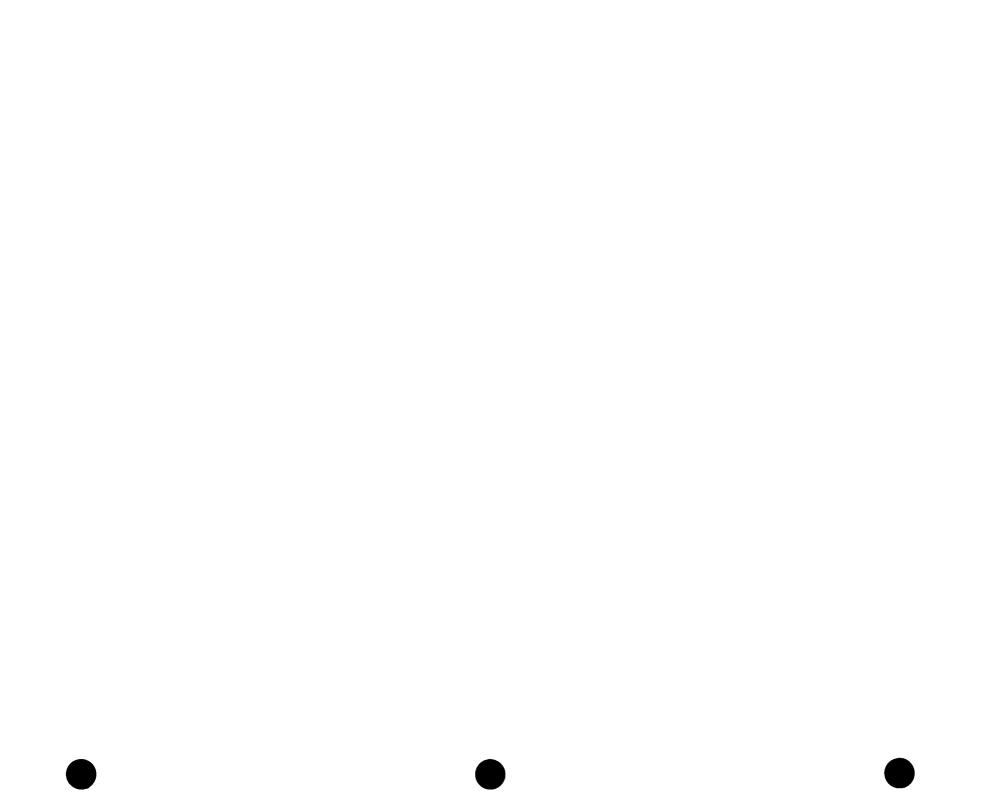


NotN														_									
NUMALE NUM STA NUM STA NUM STA NUM	HOUSTON	ĸW				κW		kW						•		кw		kW		κW			
No.N		kWh	149,955 6	kWh		kWh		kWh	532.2	kWh	3,238 8	kWh	27,909 9	kWh		kWh		kWh		kWh	11,548 8	kWh	
No.N		LW.	67.5	FW.		L W		k W	72.2	FW.		E W		1 KW		L'W		EW.		K W		F 10/	13.7
No. No. <td>IOWARD</td> <td></td> <td>(</td> <td></td> <td></td> <td>62,920 5</td>	IOWARD																			(62,920 5
No <td></td>																							
ACAC W	TUNT	kW	64 1	κW	0.9	кW		kW	474 6	κW		kW	13 2	κw	34 1	kW	788	κW	15 1	κw	92	кW	
NetN		kWh	78,325.1	kWh	5,936 6	kWh		kWh	1,423 0	kWh		k₩h	26,0418	kWh	147,455.3	kWh	218,902 2	kWh	33,0617	kWh	14,348.5	kWh	
NetN														ļ						L			
NUM N	JACK											1										1	
NM NM <td< td=""><td></td><td>kWh</td><td></td><td>кWh</td><td></td><td>kWh</td><td></td><td>kWh</td><td>1,634 3</td><td>kWh</td><td></td><td>kWh</td><td></td><td>kWh</td><td></td><td>kWh</td><td></td><td>кWh</td><td></td><td>kWh</td><td></td><td>kWh</td><td></td></td<>		kWh		кWh		kWh		kWh	1,634 3	kWh		kWh		kWh		kWh		кWh		kWh		kWh	
NM NM NM ABD B		<u> </u>				<u> </u>														1.140			0.0
Kull	JOHNSON											ł		•		•				•			1,256 0
kvn kvn <td></td> <td></td> <td>6,007 2</td> <td></td> <td>408,0 8 6</td> <td></td> <td>40,400 </td> <td>N VVII</td> <td>1,020.0</td> <td></td> <td>0,170.1</td> <td></td> <td>224,000 0</td> <td></td> <td>404,024 2</td> <td></td> <td>30,000 4</td> <td></td> <td>H,007.0</td> <td></td> <td>1,500.4</td> <td></td> <td>,2000</td>			6,007 2		408,0 8 6		40,400	N VVII	1,020.0		0,170.1		224,000 0		404,024 2		30,000 4		H,007.0		1,500.4		,2000
kvn kvn <td>AUFMAN</td> <td>κw</td> <td>35</td> <td>kW</td> <td>22 6</td> <td>kW</td> <td>46</td> <td>kW</td> <td>898 1</td> <td>κW</td> <td>869 1</td> <td>kW</td> <td>152 1</td> <td>кW</td> <td>32 2</td> <td>kW</td> <td>82.3</td> <td>κW</td> <td>58</td> <td>κw</td> <td>95</td> <td>ĸW</td> <td>0.0</td>	AUFMAN	κw	35	kW	22 6	kW	46	kW	898 1	κW	869 1	kW	152 1	кW	32 2	kW	82.3	κW	58	κw	95	ĸW	0.0
inv 748 Vin 748 Vin 748 Vin 748 Vin V							-		2,695 0	κWh			320,085.9	kWh	184,124 3	kWh	283,678 7	kWh	16,807 6	kWh	17,944 0	кwh	1,256 0
km 748 km 340 340 340 240 km 10000 1000 1000 1000<																							
LAM PASSAS IN IN <td>AMAR</td> <td>κW</td> <td>07</td> <td>κW</td> <td>76</td> <td>kW</td> <td></td> <td>kW</td> <td></td> <td>•</td> <td></td> <td></td> <td>59</td> <td>kW</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>•</td> <td></td> <td></td> <td></td>	AMAR	κW	07	κW	76	kW		kW		•			59	kW				1		•			
NM LEOM VM VM <		kWh	749 8	kWh	33,642 6	kWh		kWh	5,245.8	ĸWh	172.8	kWh	11,084 7	kWh	112,093 2	kWh		kWh	38,707 8	kWh	4,056 2	κwh	
NM <		Į												<u> </u>									
Image	AMPASSAS					F				•				E C		1							
Num LIMESTONE Num Nu		K VVN		ĸvvn		K VVN		KVVN	1,049 5	KVVN		KVVN		KVVII		KVVII		KVVN					
NM <	FON	kw/		kW.	·	kW		kW	76	κW		kW	05	kW		кW		ĸW		κw	·	кW	
LMESTONE KW <	2011																	1		kWh		kWh .	
NM KW <																							
Instruction Marcine Marcine </td <td>MESTONE</td> <td>kW</td> <td></td> <td>κW</td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td>kW</td> <td></td> <td>kW</td> <td>1,322 9</td> <td>κW</td> <td></td> <td>kW</td> <td>24 2</td> <td>kW</td> <td>28 9</td> <td>kW</td> <td>47 5</td> <td>κW</td> <td></td> <td>κw</td> <td>34</td> <td>κW</td> <td>0.0</td>	MESTONE	kW		κW	· · · · · · · · · · · · · · · · · · ·	kW		kW	1,322 9	κW		kW	24 2	kW	28 9	kW	47 5	κW		κw	34	κW	0.0
NUM KWn KWn <td></td> <td>κWh</td> <td></td> <td>kWh</td> <td></td> <td>kWh</td> <td></td> <td>kWh</td> <td>3,969 5</td> <td>kWh</td> <td></td> <td>kWh</td> <td>47,256 4</td> <td>kWh</td> <td>144,466 8</td> <td>kWh</td> <td>136,428 2</td> <td>kWh</td> <td></td> <td>kWh</td> <td>6,637 5</td> <td>кWh</td> <td>1,256 0</td>		κWh		kWh		kWh		kWh	3,969 5	kWh		kWh	47,256 4	kWh	144,466 8	kWh	136,428 2	kWh		kWh	6,637 5	кWh	1,256 0
NUM NM NM <																				<u> </u>		L	
LYNN KW K	OVING																						
NUM NUM <td></td> <td>kWh</td> <td></td> <td>ĸWh</td> <td></td>		kWh		kWh		kWh		kWh		kWh		kWh		kWh		kWh		kWh		kWh		ĸWh	
NUM NUM <td></td> <td></td> <td></td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td></td> <td></td> <td>10101</td> <td></td> <td>1434/</td> <td></td> <td>414/</td> <td></td> <td>K IN</td> <td></td> <td>ENV.</td> <td></td> <td></td> <td></td> <td>kW.</td> <td>·····</td>					· · · · · · · · · · · · · · · · · · ·					10101		1434/		414/		K IN		ENV.				kW.	·····
MARTIN MM	_YNN						i													1			
NUM KWn KWn LUD92 KWn LUD92 KWn KW		KVVA		KVVN																			
kWn kWn tuge 2 kWn	MARTIN	ĸw		кW	30	ĸw		kW	97 7	κW		кw		κw		kW		κW		kW		κW	
kWn kWn <td></td> <td>,</td> <td></td> <td>κWh</td> <td>11,098 2</td> <td>kWh</td> <td></td> <td>kWh</td> <td>293.4</td> <td>kWh</td> <td></td> <td>kWh</td> <td></td> <td>kWh</td> <td></td> <td>kWh</td> <td></td> <td>kWh</td> <td></td> <td>k₩h</td> <td></td> <td>kWh</td> <td></td>		,		κWh	11,098 2	kWh		kWh	293.4	kWh		kWh		kWh		kWh		kWh		k₩h		kWh	
kWn kWn <td></td> <td> </td> <td>. –</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td>·</td> <td></td>			. –					_														·	
Kun Kun <td>NCCULLOCH</td> <td></td>	NCCULLOCH																						
MULLININ MU 112,717 Wuh 44,842 Wuh 1580 4 Wuh 13,585 1 Wuh 1000,852 8 Wuh 197,778 8 Wuh 4,903 5 KWh 75,584 7 KWh 117,130 8 KWh 9 MENARD KW		kWh		kWh		kWh		kWh	59 6	kWh		kWh		kWh		kWh		kWh		kWh		KWh	
MULLININ MU 112,717 Wuh 44,842 Wuh 1580 4 Wuh 13,585 1 Wuh 1000,852 8 Wuh 197,778 8 Wuh 4,903 5 KWh 75,584 7 KWh 117,130 8 KWh 9 MENARD KW		ļ				Ļ																1.10/	218 7
MIN MIN <td>MCLENNAN</td> <td></td> <td></td> <td></td> <td></td> <td>ł</td> <td></td> <td>+</td> <td></td> <td></td> <td>≥ 18 7 902,314 1</td>	MCLENNAN					ł														+			≥ 18 7 902,314 1
MILAND MW MW MW MW MW MW WM		kWh	112,7177	kWh	44,848 2	kWh		κwh	1,580 4	K VVN	13,565 1	K VVN	1,000,652 8	KVVN	1,107,7780	KVVN	4,803.5	KVVN	75,584 7		10,630	N N	502,5 H 1
MILAND MW MW MW MW MW MW WM		11100		k)0(1210/		F 10/		kW		kw		kW		kW		κw		κw		ĸw	
Image: Normal and the second secon	VIENARD	1																				ĸwn	
Milland kw Za Kw		1																					
kWh kWh 7,656 g kWh 2917 kWh 552 7 kWh 274,778 4 kWh 494,800 g kWh 23,718 kWh 9,242 6 kWh 91 MILAM kW kW kW kW 437.5 kW kW 12 kW 480.0 g kW kW 9,242 6 kWh 60 kWh kWh 60 kWh 60 kWh 60 kWh 60	MIDLAND	κw		κW	2.4	κw		kW	97 1	κw	184 3	кW	144 9	kW	114 9	kW							146 9
MLAM KW KW KW 1312 KW KW 3,088 KW 226,518 KW KW 616 KW MITCHELL KW KW KW 1854 KW KW<				kWh	7,656 9	kWh		kWh	2917	kWh	552 7	kWh	274,778 4	kWh	494,800 9	kWh		kWh	23,7116	kWh	9,242 5	кWh	667,108 7
MLAM KW KW KW 1312 KW KW 3,088 KW 226,518 KW KW 616 KW MITCHELL KW KW KW 1854 KW KW<		ļ		L		ļ				ļ		ļ		<u> </u>	<u> </u>	<u> </u>		L		<u> </u>		<u> </u>	
MITCHELL kW <							-															ł	
MINCHELL KW <		k Wh		kWh		KWh		κWh	1,312 5	KVVh		K VVh	3,088 2	K Wh	226,518.2	KVVn		K VVN			662		
MINCHELL KW <		1-10/		k101	·	k)0/		+ \v/	185.4	kW/		kW/	, <u>,, ,, ,</u>	kW		κW		κW		κw	3.5	κw	
MONTAGUE kW <	NACHELL	1				1																ł	
		1												1						1			
	NONTAGUE	κW		kW		кW		κw		ĸW		k₩		kW		κW		kW	······	kW		κw	
		kWh		kWh		kWh		kWh		k₩h		kWh		kWh		kWh		kWh		kWh		kWh	
		1																L		L		L	

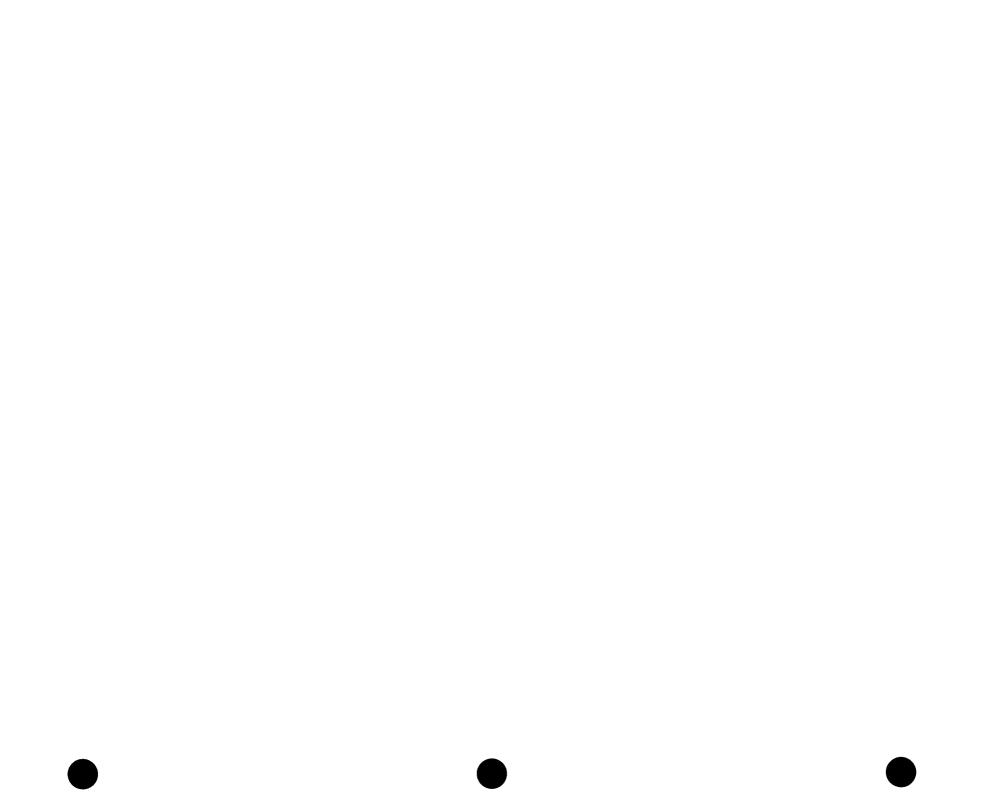
Oncor



NACOGDOCHES	1.14/		кW	23 5			kW	1,2012	1.14/		κW	46 5			kW		κW		kW	1214		00
NACOGDOCHES	kWh		kWh	97,469 3		1	kWh	3,605 8			k₩h			18,302.6		257,755 6			kWh	234,689 3		1,256 0
NAVARRO	kW kWh	172 1 205,818 1	k₩ kWh	67 7 3515215		7 8 29,217 9		384 6 1,154 5		1,570 3 4,7111		5.6 10,403 8	kW kWh	273 5 2,049,327 8			kW KWh		kW kWh	3 1 4,690 4	kW kWh	
	kW kWh	·····	kW kWh	·	k₩ k₩h		kVV kVVh	4519 1,355.5			k₩ k₩ħ		kW kWh	111 O 541,845 9	k₩ kWh		kW kWh		kW kWh	0 1 194.4	kW KWh	8 4 37,976 6
	kW kWh		k₩ k₩ħ	9 7 57,020.8	kW kWh	2 8 9,657 3		152 8 458 7		639 1918		19 5,814 6	kW kWh		kW kWh		kW KWh		kW kWh		kW kWh	
PARKER	kW kWh		kW kWh		kW kWh	5.7 22,207 8		340 0 1,020 8			kW kWh	204 1 414,645 3			kW KWh		kW kWh	5 7 14,7114			k₩ kWh	0 0 2,512 0
	k₩ kWh		k₩ kWh	<u></u> <u></u>	kW kWh		kW kWh	11.8 35 4	k₩ kWh		kW kWh		kW kWh		kW KWh		kW kWh		kW kWh		kW KWh	
	kW kWh		kW kWh		k₩ kWh		kW kWh		kW kWh		k₩ kWh		kW kWh		k₩ kWh		kW KWh		k₩ kWh		kW kWh	
RED RIVER	k₩ kWh		kW kWh		ikW kWh		kW kWh	223 2 669 6			k₩ kWħ		kW kWh		kW kWh		kW KWh		kW KWh	7 0 11,283 9	κ₩ ĸ₩ħ	
	kW kWh		kW kWh		k₩ kWh		kW KWh		kW kWh		kW KWh		kW kWh		kW kWh		kW kWh		kW KWh		kW kWh	
ROCKWALL	kW kWh	5 8 6,747 3	kVV kVVh		kW kWh	2.6 9,420 0		1,364 5 4,095 5		403 8 1,211.1		158 8 336,585 3		2115 1,262,590.1	1		kW KWh	12 8 45,660 2		7 8 11,796 2	k₩ kWh	7153
RUSK	k₩ kWh		kW kWh		k₩ k₩ħ		kVV kVVh	351.6 1,055.0		300 1 900 5		0.9 1,488 0	kW kWh		kW kWh		kW kWh		kW kWh		kW kWh	<u> </u>
SAN SABA							kW kWh	43 5 129.9										<u></u>				
SCURRY	k₩ kWh		k₩ kWh	83 5 535,880 7			kVV kVVh	552 5 1,657 1	1	,	ĸ₩ ĸ₩ħ	· · · · · · · · · · · · · · · · · · ·	kW kWh	130 0 2 14,433 6	1		kW KWh		kW KWh	18 2,090 2	kW kWh	
SHACKLEFORD	k₩ kWh		kW kWh		kW kWh		kvv kvvh		k₩ kWh		kW kWh	·	kW kWh		kW KWh		kW kWh		kW kWh	.	k₩ kWh	
	k₩ kWh	110 S 220,747.5		92 6 383,899 4			kW kWh	1,065 6 3,198 3		2411 723 5		14.7 30,034 1	k₩ kWh	124 0 1,322,9418			kW kWh	38.8 104,857 0		2 3 4,620 5	kW kWh	0 0 5,024.0
STEPHENS	kW kWh	· · · · · · · · · · · · · · · · · · ·	kW kWh		kW kWh		kVV kVVh	243 8 7312		· · · · · · · · · · · · · · · · · · ·	kW kWh	07 1,1160	k₩ KWh		kW KWh		kW kWh	7 1 25,936 4	kWh	118 21,449 9	kW kWh	
	kW kWh	2,859 1 4,612,332 2	kW kWh	34 6 156,079.0		66 4 419,745 8		943 2 2,8312		13,934 8 41,804 5		7,582 0 14,383,074 2		3,913 3 21,821,878 6		5167 1,669,1217		225 0 732,375 3		1,114 9 2,264,435 9		5,953 4 20,867,036 3
	k₩ kWh		kW kWh	<u> </u>	k₩ kWh	<u> </u>	k₩ kWh		k₩ kWh		kW kWh		kW kWh		kW KWh		kW kWh		kW kWh		kW KWh	
	k₩ kWh		kW kWh		kW kWh		kW kWh		ĸ₩ ĸ₩ħ	1	kW kWh		kW kWh		kW KWh		kW KWh		kVV kVVh		kW kWh	
TRAVIS	kW kWh		kW kWh		k₩ kWh		kW KWh	541.7 1,624 B		72.9 1 218.7		78 4 163,059 2		273 1 1,017,196 7	1	36 5 116,910 8		55 7 186,174 4	kW kWh		kW kWh	0 0 5,024 0



TRINITY	kW		kW		kW		kW	57 8	kW		кw		kW		kW		kW		kW		kW	
	kWh		kWh		kWh		kWh				kWh		kWh		kWh		kWh		kWh		kWh	
		i																			KVVII	
UPTON	kW		κW		κw		κw		kW		κW		kW	· · · · · ·	kW		kW		кW		kW	
	kWh		kWh		k₩h		k₩h		кwh		k₩h		kWh		kWh		kWh		kWh		k₩h	
VAN ZANDT	ĸw	260 6	kW	25 0	кW		kW	542 6	κw	<u></u>	ĸw	11.5	κW	10 8	κw	82 0	kW		kW		κw	
	kWh	478,242 9	kWh	79,873 6	kWh		k₩h	1,628 2	k₩ħ		kWh	25,523.1	kWh	60,615.5	kWh	273,952 8	kWh		kWh		kWh	
WARD	кW		кW	4 9	кW		ĸw	87 7	кW		κw		κw		κw		kW		kW	4 8	kW	
	kWh		k₩h	31,0129	k₩ħ		kWh	262 6	кWh		kWh		kWh		kWh		k₩h		kWh	6,792 5	kWh	
WICHITA	κW	12 3	κw	329.7	kW		кW	225 6	кW	97.1	kW	176 2	kW	133 8	κw	6 5	kW	57 5	кw	0.9	kW	0.0
	k₩h	21,7186	k₩h	1,637,383 8	k₩h		k₩h	676 4	k₩h	2913	k₩h	357,716 3	kWh	736,967 8	k₩ħ	20,847 4	k₩h	200,878 4	кWh	1,580 5	k₩ħ	2,512 0
WILLIAMSON	ĸW		κW	17 7	κW		kW	236 6	kW	192 4	ĸW	250 0	kW	64 7	κW	90 8	kW	2130	kW	60	kW	0.0
	kWh		k₩h	73,159 1	k₩h		kWh	709.9	кWh	577 3	k₩ħ	495,969 0	kWh	288,752 2	kWh	274,588 2	kWh	728,455 1	kWh	9,694.6	kWh	30,144 0
WINKLER	kW		κw		kW		kW	104 9	кW		kW		kW		кW		kW		kW		kW	
	k₩h		kWh		k₩h		kWh	314 8	кWh		kWh		kWh		kWh		kWh		kWh		k₩h	
WISE	ĸW		ĸw	23 8	kW	80	kW	880 6	кW	122 9	kW	20 4	ĸw	82 1	кW	37 4	kW	2 7	ĸw	66 7	κw	0.0
	k₩ħ		kWh	139,814 8	kWh	29,4119	k₩ħ	2,642.5	кWh	368 7	kWh	41,7818	k₩h	408,008 3	k₩h	105,538 5	kWh	15,453.7	kWh	119,1614	kWh	1,256 0
WOOD	кW		ĸW		κW		kW		кW		κw		ĸw		кW		kW		κw		κw	
	kWh		kWh		kWh		kWh		kWh		kWh		kWh		k₩ħ		kWh		kWh		kWh	
YOUNG	kW		ĸW	29 4	κW		kW	142 1	kW		κW	2 1	ĸW		кW		kW	4 7	kW		kW	
	k₩h		kWh	151,900 4	k₩h		kWh	426 3	kWh		k₩ħ	6,626.8	кWh		kWh		kWh	15,0712	kWh		kWh	
Total Sum of kW		13,173		1,892		572		29,426		60,000		18,860		18,669		2,141		1,508	<u> </u>	4,249		16,962
Total Sum of kWh		19,638,109		9,150,313		4,552,558		88,294		180,000		35,959,167	1	93,296,463	1	6,724,377		4,901,773	1	8,031,890		60,628,913



APPENDIX B: PROGRAM TEMPLATES

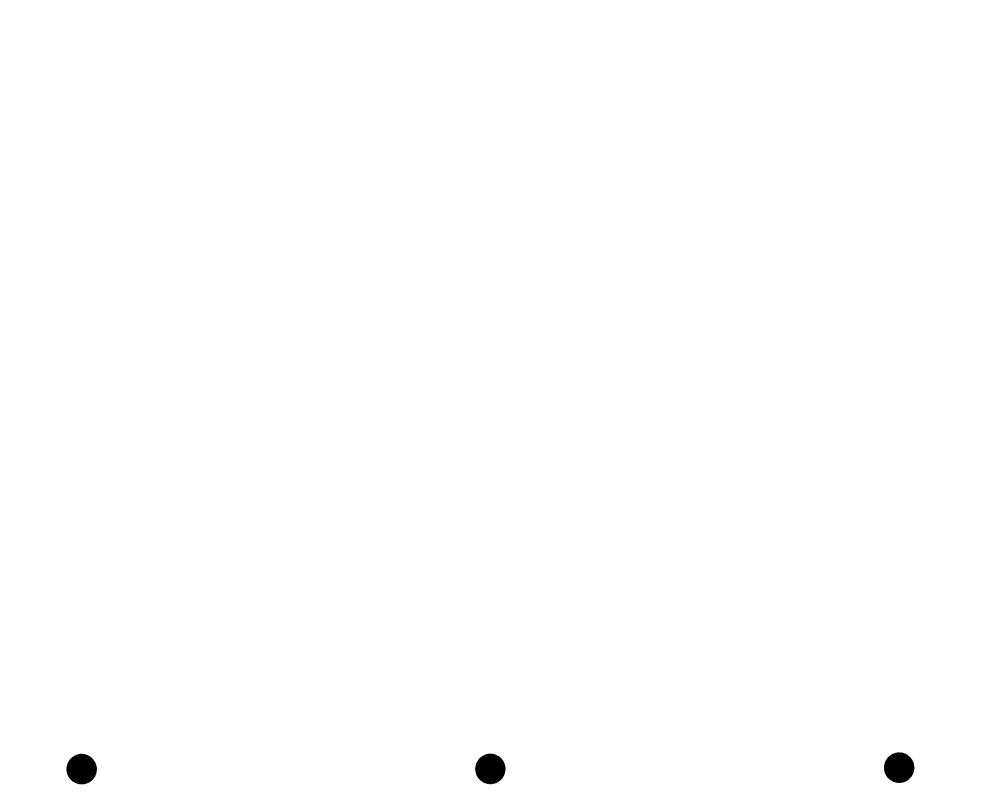
Oncor has no new Program Templates for 2020.

B-1



APPENDIX C: LIST OF 2019 ENERGY EFFICIENCY SERVICE PROVIDERS

C-1



Commercial SOP (Custom)

Lamar Advantage Holding Company Ex3 Facility Solutions, LLC Facility Solutions Group Superior Solutions Group Trane US Energy Management

Retail Platform MTP

CLEARESULT Consulting

Commercial SOP (Basic)

24 HOUR LTD 7-Eleven Inc. Agape electrical services LLC Air Performance Service, Inc. Ally Energy Solutions, LLC Ameresco Dallas LLC Andersen Regional Manufacturing, Inc. Angiel Electrical Construction Corporation Aquila Environmental LLC Archway LED of Houston, Inc. Aries Corporation ASG Energy, LLC Bambu Energy Boxer Property Management Corp Bridgevue Energy Services, LLC BriteSwitch, LLC. Cain Electrical Supply **Carrier** Corporation City of Killeen City Park Construction, LLC Cole Air Conditioning Company Inc. DFW International Airport DFW LED Lights LLC E Sam Jones Distributor, Inc. Eco Engineering Encentiv Energy, Inc. EnerChoice, LLC Energy Management Collaborative, LLC **Energy Solutions of Texas** Engie Services U.S. Inc. Enoch Electric LLC Entech Sales & Service Estes, McClure & Associates, Inc. Expert Services, LLC **Express Light-Tech** Facility Solutions Group **Facility Matrix** General Services Administration Graybar Electric Company, Inc. Greenleaf Energy Solutions LLC Groom Energy Solutions LLC Hargis Electric LLC. Harvey Reed Enterprises, LLC DBA LED Source Heat Transfer Solutions, Inc. Home Improvement Systems, Inc. Hulen Mall, LLC Hurst Electric, LP

JKD Construction Co.Inc. dba Mr E Electric of Grand Prairie Johnson Controls Inc. Just Energy New York Corp. Kevco Electrical Construction. Inc. Landlord Utility Mgmt LLC dba JEC Energy Savings LED of Houston Lighting Expertise and Design Services, LLC Lime Energy Services Company Lochridge-Priest, Inc. Lowe's Home centers, Inc. LUNA Energy Partners Maintenance Resource, Inc. McKinstry Essention, LLC Monterey Energy, Inc. NexRev. Inc. Niagara Bottling, LLC NORDCO, INC. **On-Site Lighting & Survey LLC** Overwraps Packaging, Inc. Pacific Energy Concepts LLC Plan B Remodeling Systems ProSource Power LLC Putnam Air & Electric, LLC RaceTrac Petroleum, Inc. Rebate Bus, LLC Redaptive Services, LLC Regency Enterprises Inc. dba Regency Lighting Rexel Holdings USA Corp Richardson ISD Shelton Companies Inc. SmartWatt Energy Inc. Southpoint Solutions, LLC Spark Lighting, LLC Sports Interiors Summit Electric Supply Co., Inc. Summit Energy Services, Inc. Sundog LED, LLC Sydmor, Inc. dba Batteries Plus Bulbs Sylvania Lighting Services Target Corp Texas AirSystems LLC **Texas Maintenance Solutions** Texas Turnkey Energy Solutions, LLC. Trane Trinity Lighting and Electrical Services, LLC Tri-State LED **TTESCO** TXU Energy Retail Company LLC US Energy Recovery Vanguard Building Solutions, LLC Vivid Energies Corp Voss Lighting Welsco LLC Whatabrands LLC WLS Lighting Systems



Residential Solar PV SOP

Allegiance Solar, LLC Alternativesolar LLC Awake Solar, LLC Axium Solar Inc. Aztec Renewable Energy, Inc. Byrd Electric Circle L Solar Claud Elsom dba North Texas Solar **CRsolar Energy Solutions / CR-Invent LLC** Davis Electric Co. **DKD** Advertising **Ecolectrics LLC** Electric Distribution & Design Systems **Elevation Solar LLC** Escape 2 Renewables Inc. Fisher Renewables LLC Freedom Solar LLC Good Faith Energy GoSolarGo, Inc. Green NRG, Inc. Greenbelt Solar LLC Greenhouse Solar LLC, DBA Infinity Solar GreenLife Technologies, Inc. Greenstar Power LLC Holtek Enterprises Inc. dba Holtek Solar I.E.S. Residential Infinity Solar Solutions LLC James Showalter Kosmos Solar Lighthouse Solar Austin Longhorn Solar Marc Jones Construction LLC Native Inc. Nia Power LLC O3 Home Solar Pro Custom Solar LLC RISE power, LLC Ron Rush Investment DBA Universal Solar System S&H Solar & Electric, LLC Second Energy LLC Silver Electric and Solar Solar CenTex LLC Solar Club LLC Solar SME, Inc. Solergy, LLC Speir Innovations LLC Sun City Solar Energy-North Texas LLC Sunfinity Solar-TX, LLC Sunshine Renewable Solutions Sunzyne LLC Texas Energy Experts Texas Solar Guys LLC Texoma Solar Solutions LLC The Energy Shop, Inc. Tower Association Crue West Texas Solar, LLC Wright-Way Solar Technologies, LLC

Commercial Solar PV SOP

1 Solar Solution, LLC Alba Energy LLC Amos Electric Supply, Inc. Axium Solar Inc. Byrd electric Circle L Solar Davis Electric Co. Daybreak Solar Power, LLC Elliott Electric Supply, Inc. Ennis Products, Inc. Estes, McClure & Associates, Inc. Freedom Solar LLC Good Faith Energy Greenbelt Solar LLC Holtek Enterprises Inc. dba Holtek Solar James Showalter Kingdom Consulting Services, LLC DBA Elite Energy Partner Lighthouse Solar Austin Longhorn Solar McKinstry Essention, LLC Native Inc. Nia Power LLC Renewvia Energy Corporation Ron Rush Investment DBA Universal Solar System Sunfinity Solar-TX, LLC Tower Association Crue W Energies Group Solar One, LLC.

Residential Load Management SOP

EnergyHub Ecobee Inc. Reliant Energy Retail Services, LLC Whisker Labs, Inc

Retro-commissioning MTP

Michaels Energy, Inc.

Targeted Low-Income

EnerChoice LLC Texas Assoc. of Community Action Agencies, Inc.

Small Business Direct Install

Lime Energy Services Company



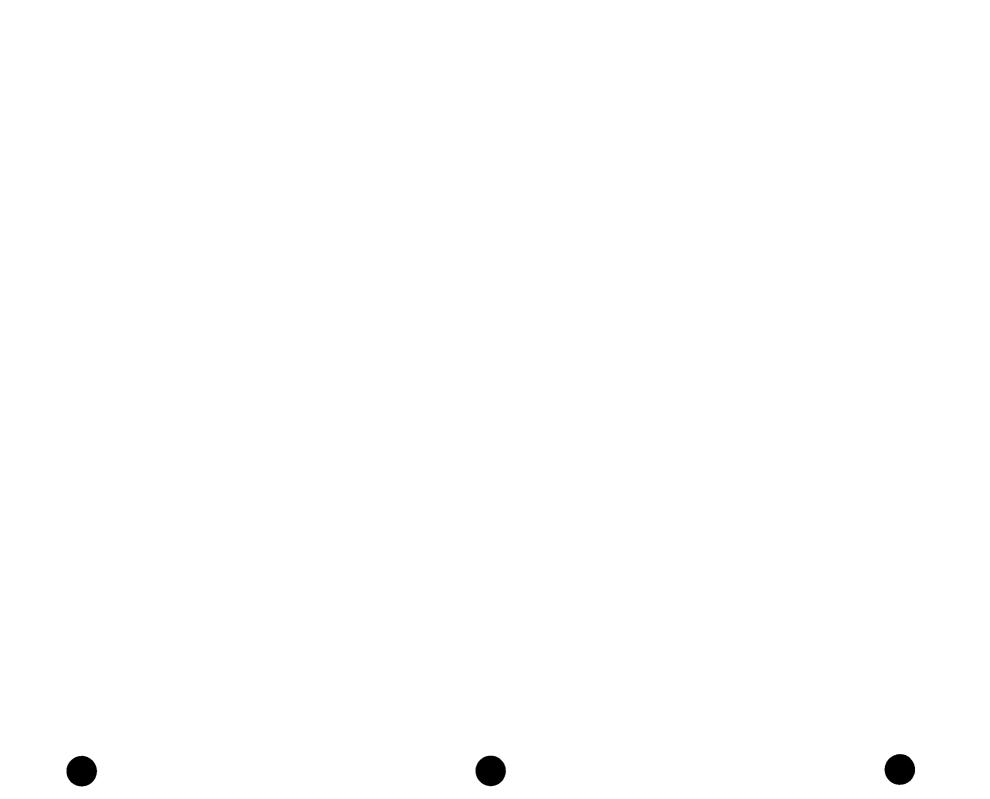
Hard-to-Reach SOP

A Better Insulation A&E Home Insulation A-K Home Energy **B & B Texas Contractors** Better Than Lights Conergy D & R Insulation **Dallas Insulation LLC** E2 Conservation **Ecogreen Energy Solutions** EnerChoice LLC Energy Audits of Texas **Energy Efficiency Resources** Garden of Eden **GNS Energy Efficiency** GS Conservation LLC Home Improvement Systems, Inc. Lu and Sons NRG Pros Plan B Remodeling Systems River Builders & Associates, LLC San Miguel and Associates, Inc. Saving Energreen Houses, LLC

Home Energy Efficiency SOP

1st Choice Air Solutions, LLC **5 Star HVAC Contractors** A Better Insulation **A&E HOME INSULATION** A-Anderson Air, Inc. ABC heating & Air Conditioning, Inc. ABC Pest Control of Austin Inc. dba ABC Home & **Commercial Service** AC & Heat Solutions LLC Adon Complete Property Solutions Advent Air Conditioning Inc. Aguilar's Heating & Air Air Clinic Air Conditioning and Heating Inc. Air patrol Air Conditioning Airborne Texas Air LLC. AirCo Ltd. Aire Care Metro Energy Savers, Inc. Aire Texas Residential Services Inc. Airview A/C & Heating All Tech Services, Inc. Angel AC & Refrigeration Arthur Hagar Corp A Star Heat and Air Inc. Awesome Air & Heat Service Baker Brothers Plumbing & Air Batjer Service, LLC. Bell County Universal Service Berkeys LLC Bill Cody and Sons Plumbing Company, LLC Bill Joplin's Air Conditioning and Heating Blue Star Heating and Air, LLC **Bock Services LLC** Bolt Hold Co. II Service Experts

Bon Air Service Co. Inc. Bradley Air Conditioning Burnside AC Heating and Indoor Air Quality C&R Sales and Repairing, Inc. CandelTech Inc. Chrome Heating & Air Conditioning, LLC Cole Air Conditioning Company Inc. Compass Air Services, Inc. Complete Cool Air Cool Tech Mechanical Cotes Mechanical Coventry & Gattis Air Conditioning, Inc. Crawford Services D & R Insulation D T Air Conditioning & Heating Inc. D. Penguin Services, INC Dallas Insulation LLC Dallas Plumbing Company Dallas Unique Indoor Comfort dba On Time Experts Danco Comfort Services Daniels Air, Inc. Dial One Johnson Plumbing, LLC Domani Comfort Partners LLC EEAccess, LLC Ellis Air LLC EnerChoice, LLC Energy Audits of Texas Energy Efficiency Resources Enoch Electric LLC Evenaire LLC Evergreen Heating and Air, Inc. Extreme Comfort Air Conditioning & Heating, LLC Extreme Mechanical Service Inc. Ferguson Veresh Inc. Firehouse Heating and Air Forney Air LLC Freedom Heating & Air LLC. Garden of Eden Garza & Sotka Enterprises LLC dba Air Masters Glenn Aire Company **GNS Energy Efficiency** Gorman Mechanical, Inc. Green Leaf Corporation Green Medal Energy Corp Hargrove-Neel, Inc. Harris Air Services, LLC Hightower Service, Inc. Hobbs Heating & Air Inc. Hobson Air Conditioning Inc. Homeland Energy Resource Center, Inc. Honest Air Conditioning LLC Houk Air Conditioning Inc. HSA, LLC Hufsey Mechanical Inc., DBA One Hour A/C and Heating Infinity Texas Mechanical Inc. Integrity Air Conditioning, LLC



HEE continued-Intelligent Air Services, LLC J & J Air Conditioning, Inc. J&S Air. Inc. JAK Services James Lane Air Conditioning Company Inc. Johns Heating & Air Conditioning Jomira LLC K Saunders Company KCG Enterprizes, LLC Keller Heating and Air Conditioning Services, LLC LaRu Energy Solutions dba Air Conditioning Pros Lex Services Inc. Lu and Sons Mascot Mechanical LLC Master Tech Service Corp Matco of Texas, Inc. Mathis Air & Heat LLC McDaniel & Son Plumbing, Inc. McWilliams & Son, Inc. Metro Environmental Services Co., Inc. Metro Express Service LLC MGR Enterprises Michael Watkins DBA Four Seasons Air Systems Milestone Electric Inc. North Texas Air, LLC. Northside A/C GP, LLC NRG Pros On The Spot HVAC Peregrino Enterprises, LLC dba Daffan Mechanical Performance Heat and Air Inc. Plan B Remodeling Systems Plano Maintenance Inc. Polansky Sales and Service Inc. Putnam Air & Electric, LLC Ouigley Heating and Air Conditioning of Dallas Ratterree Heat & Air Reliant Heating & Air Conditioning, Inc. Rescue Air. LLC Robert Berry Rohde A/C & Heating, LLC SA&H Western Holdings, LLC Samm's Heating and Air Conditioning Sarif LLC Saving Energreen Houses, LLC Serveway Heating and Air Conditioning Service Experts Heating & Air Conditioning Service WIzard, Inc. SOS Mechanical, LLC Southern Air Services LLC SRM Service LLC Stark Dedicated Service, LLC / dba Sunny Service State AC, Inc. dba Air Control Taylormade Heat and Air **Tempo Mechanical Services** Texas Air Doctors Texas Airzone LLC. The Bosworth Co, Ltd dba The Darville Company The Right Choice Heating & Air Inc.

Toler Air Care Today LLC Tom's Mechanical, Inc. Total Air and Heat Co Tri-County Air Care, LLC Triple A Air Conditioning Tuffy's Air Conditioning & Heating Service Inc. TXE Solutions LLC DBA Service City Electric Ugotem LLC DBA Texas Ace Heating & Air Veterans AC & Heating W&B, Inc. dba All Service Heating and Air Walker Air Conditioning and Heating, Inc. Weston Company A/C & Heat Willard Heating and Air Conditioning Company Inc. Wortham A/C, Inc. Xtreme Air Services

Commercial Load Management

Amerex Brokers LLC Bridgevue Energy Services, LLC Cenveo Corporation Christ United Methodist Church **Dal-Tile** Corporation Doskocil Manufacturing Company, Inc. Enel X North America Inc. Enerwise Global Technologies, Inc. D/B/A CPower L5E. LLC MJB Wood Group MP2 Energy, LLC NCH Corporation North Texas Municipal Water District NRG Curtailment Solutions Inc. Target Corp **Tierpoint Texas LLC** Verdigris Energy Voltus, Inc.



ATTESTATION STATEMENT

Pursuant to P.U.C. Subst. R. 25.71(d), I attest that the information provided in this Amended 2020 Energy Efficiency Plan and Report has been reviewed internally for accuracy and I have the authority to make this report on behalf of Oncor Electric Delivery.

Darryi Nelson

May 18, 2020

Date



Oncor's Energy Efficiency Expenses by Rate Code for 2019 Program Year

а	ь	c	ď	е	f	g	h
	Residential	Secondary <u><</u> 10 kW	Secondary > 10 kW	Primary > 10 kW Distribution Line	Primary > 10 kW Substation	Transmission Service Non-Profit	
		Rate Code B0, B1, B4	Rate Code D0, D1, D4, D6, DC, DJ, DK, DQ, DR, E0, E1, E4, E6, EC, EJ, EQ	Rate Code J0, K0, K1, K4	Rate Code L0	Rate Code N0, N4	Total
Home Energy Efficiency SOP	\$9,491,930	\$0	\$0	\$0	\$0	\$0	\$9,491,930
Solar PV - Residential	\$2,322,517	\$0	\$0	\$0	\$0	\$0	\$2,322,517
Residential Load Management SOP	\$1,222,459	\$0	\$0	\$0	\$0	\$0	\$1,222,459
Hard-to-Reach SOP	\$6,800,012	\$0	\$0	\$0	\$0	\$0	\$6,800,012
Targeted Weatherization Low-Income SOP (SB 712)	\$4,843,623	\$0	\$0	\$0	\$0	\$0	\$4,843,623
Retail Platform MTP - Residential	\$3,108,634	\$0	\$0	\$0	\$0	\$0	\$3,108,634
Commercial Load Management SOP	\$0	\$0	\$1,524,219	\$940,818	\$48,435	\$0	\$2,513,472
Commercial SOP (Basic)	\$0	\$94,121	\$10,153,932	\$918,495	\$371,798	\$482,267	\$12,020,613
Commercial SOP (Custom)	\$0	\$162	\$385,538	\$0	\$0	\$0	\$385,700
Solar PV - Commercial	\$0	\$115,404	\$3,001,947	\$0	\$0	\$0	\$3,117,351
Small Business Direct Install	\$0	\$0	\$2,071,849	\$0	\$0	\$0	\$2,071,849
Retail Platform MTP - Commercial	\$0	\$0	\$161,275	\$0	\$0	\$0	\$161,275
Retro-Commissioning MTP	\$0	\$0	\$193,638				\$193,638
Program Expenses by Rate Code	\$27,789,175	\$209,687	\$17,492,398	\$1,859,313	\$420,233	\$482,267	\$48,253,073
Evaluation, Measurement & Verification (EM&V) Costs for Evaluation of Program Year 2018	\$323,112	\$9,657	\$324,107	\$72,424	\$5,587	\$1,102	\$735,989
Total Program Expenses + EM&V Costs by Rate Code	\$28,112,287	\$219,344	\$17,816,505	\$1,931,737	\$425,820	\$483,369	\$48,989,062

Program totals include incentives, administration costs and research and development costs as shown in workpaper WP/GDJ/3 (total program costs are shown in column (g))

EM&V Costs by rate class for PY2018 with costs recovered in the 2019 EECRF can be found in workpaper WP/GDJ/5

Commercial program rate class allocations are based on rate codes found in WP/GDJ/1

Exhibit GDJ-2 Page1 of 1