



# Entergy Louisiana: Analysis of Long- Term Achievable Energy Efficiency Potential

Draft Report

October 12, 2018

## TABLE OF CONTENTS

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<b>I. EXECUTIVE SUMMARY.....</b>	<b>1</b>
<b>II. STUDY APPROACH.....</b>	<b>2</b>
Overview.....	2
Data Review and Gap Analysis.....	3
Measure Analysis.....	4
Program Modeling.....	8
Scenario Development.....	14
<b>III. UTILITY SERVICE AREA CHARACTERISTICS.....</b>	<b>15</b>
Residential.....	16
Commercial.....	16
Industrial.....	17
<b>IV. ACHIEVABLE ENERGY EFFICIENCY POTENTIAL.....</b>	<b>18</b>
Incremental savings increase by three- to four-fold in the mid-term.....	18
Cumulative savings reach of up to 3% of system sales in the long-run.....	19
Cost-effectiveness.....	22
<b>V. IRP INPUTS.....</b>	<b>24</b>
<b>VI. APPENDICES.....</b>	<b>24</b>

## I. EXECUTIVE SUMMARY

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ICF was retained by Entergy Louisiana, LLC (ELL) to conduct an energy efficiency potential study, and to develop energy efficiency program inputs for the company's 2019 integrated resource plan. This report complements a report on a demand response potential analysis that was conducted by ICF for the same purpose.

Achievable energy efficiency potential forecasts for the 2019–2038 period for 14 programs covering the residential, commercial, and industrial sectors under **current programs** and **expanded programs** scenarios were developed through a bottom-up process. The key results are:

- ▶ **Total incremental (annual) savings increase by three- to four-fold in the mid-term.** In the expanded programs scenario, annual savings achieved by ELL programs grow by a factor of four above savings achieved by ELL programs in Program Year 2, in 2015–2016. The growth in annual savings is due to increased budgets for existing ELL programs, and to savings achieved by new (expanded) programs, which contribute an additional 45% to savings above the current programs scenario level in 2023.
- ▶ **Residential and commercial programs account for more than 90% of cumulative savings.** Cumulative program savings impacts in the residential sector reach 6% of residential electric sales in 2038 in the expanded programs scenario; cumulative program savings impacts in the commercial sector reach 8% of commercial electric sales. Since the savings impacts in the industrial sector are comparatively low, and because the share of the load that is industrial is high (56%), total savings potential is 3% of total ELL system sales in 2038. If industrial programs and industrial load were removed from the equation, total savings potential would increase to 7% of system sales in 2038 in the expanded programs scenario.
- ▶ **In the current programs scenario, whole home efficiency retrofits become the largest residential savings opportunity, replacing lighting as the most important measure type.** New programs could increase residential sector savings by two-thirds in the mid-term, driven largely by Appliances Recycling.
- ▶ **Midstream Lighting and RetroCommissioning drive expanded program savings in the commercial and industrial (C&I) sectors.** Expanded programs could increase C&I savings by a third above the current programs scenario.
- ▶ **The combined portfolio of residential, commercial and industrial programs has a Total Resource Cost test ratio of 2.3 in the current programs scenario, and 2.4 in the expanded programs scenario.**

## II. STUDY APPROACH

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### Overview

This bottom-up analysis began with collecting data on all relevant inputs, including baseline data, measure data, and program data, followed by estimating the eligible stock of energy efficiency measures. The eligible stock is the size of the market for efficiency measures, in measure units, such as bulbs, tons of cooling, or number of homes. ICF estimated the eligible stock for measures within each end use and sector. This task required data on the number on customer types in ELL's service area, the number and types of buildings, the types of energy-using equipment that are in each building type, and the current saturation of efficient equipment.

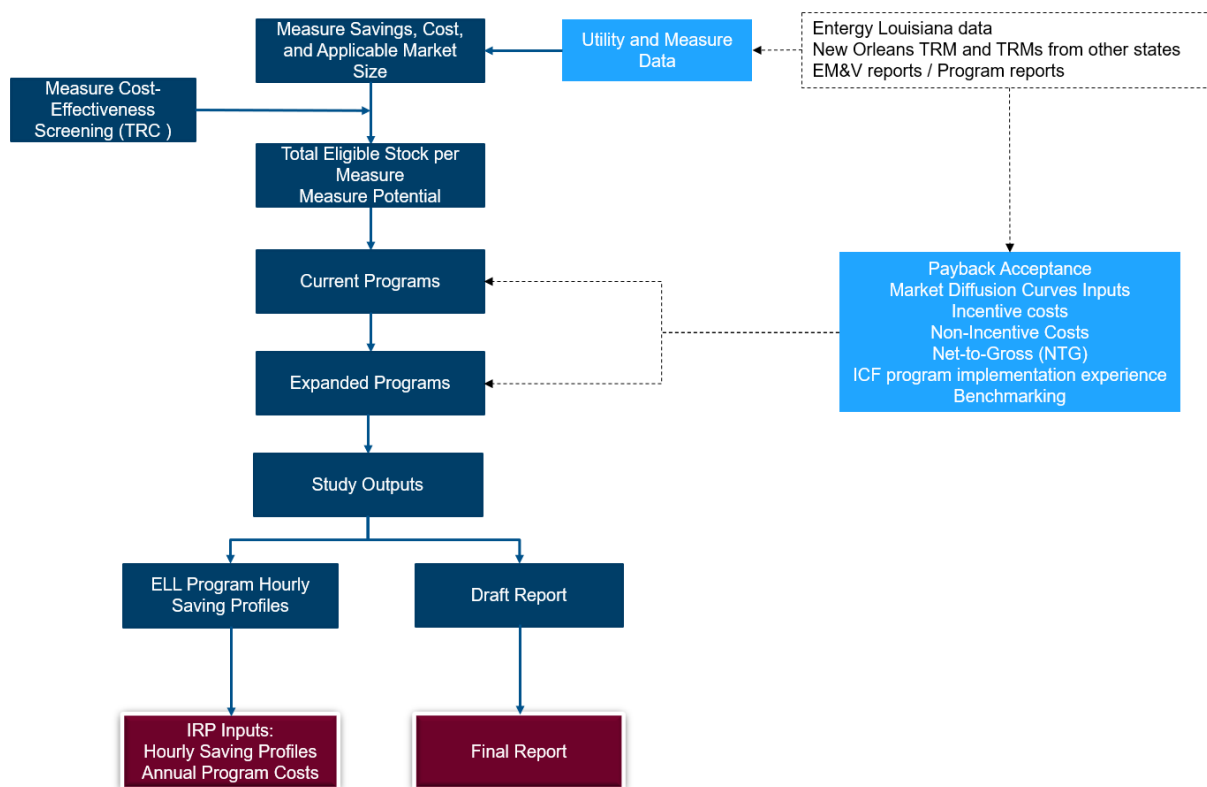
We then screened measures for cost-effectiveness using the TRC test. In most cases, measures with a TRC test result of 1.0 or better passed to the next stage of the analysis.

With the eligible stock and cost-effective measures defined, ICF then conducted the achievable potential analysis, which required developing savings forecasts for demand-side management (DSM) programs for the 2019–2038 period under two scenarios: (1) a **current programs scenario** where ELL programs were modeled based on program designs implemented by ELL in Program Years one through three, but with larger budgets; and (2) an **expanded programs scenario**, which includes the programs in the current programs scenario plus new best practice programs. Other assumptions that varied between these cases included participation rates, program marketing costs, and net-to-gross (NTG) ratios. We held constant utility assumptions such as retail rates, avoided costs, and discount rates in both scenarios.

Finally, ICF provided ELL with the data inputs required for its integrated resource plan (IRP). These included hourly load shapes for each program, which reflect savings forecasted for every hour of every year of the analysis, annual program costs, and program benefit-cost results. We produced these inputs for reference and high cases.

Figure 1 shows our bottom-up approach to this study.

Figure 1. Overview of Bottom-up Approach to Potential Study



## Data Review and Gap Analysis

ICF gathered data on utility characteristics, measure baselines and parameters, and programs using ELL and Louisiana-specific data, where possible (Figure 2). Standard industry sources for the West South-Central region and national data supplemented local data. ICF developed some of the data specifically for this study, performing engineering calculations and building simulations to develop energy-savings estimates for some measures. ICF experts also informed program participation rates. Figure 2 presents data sources for this study.

Figure 2. Study Data Sources

Data/Information Type	Source	Primary Purpose in This Study
<b>Utility Data</b>		
Avoided costs	ELL data	Cost-effectiveness testing
Other planning assumptions, such as ELL discount rates, line losses, or growth rates	ELL data	Cost-effectiveness testing
Customer counts (residential, commercial, and industrial)	ELL data	Calculating eligible stock
Load forecast/Sales data	ELL data	Calculating load impacts of DSM potential
Retail rates for all rate classes	ELL data	Calculating Participant Cost Test and participation for achievable potential analysis
<b>Baseline Data</b>		

Residential building characteristics and efficiency saturation	Entergy Residential Appliance Saturation Surveys U.S. DOE Residential Energy Consumption Survey (RECS, 2015) U.S. Census Data (2010)	Calculating eligible stock
Commercial building characteristics and efficiency saturation	Commercial Building Inventory (CBI) data for Louisiana Air-Conditioning Heating and Refrigeration Institute U.S. DOE 2012 Commercial Buildings Energy Consumption Survey (CBECS, 2016)	Calculating eligible stock
Industrial subsector characteristics and efficiency saturation	ELL Industrial Customer Consumption Data ELL Industrial Customer Segments based on SIC or NAICS U.S. DOE 2010 Manufacturing Energy Consumption Survey (MECS, 2013)	Calculating eligible stock
<b>Measure Data</b>		
Residential and commercial measure data	New Orleans Technical Reference Manual (TRM) v. 1.0 Additional TRMs, such as Arkansas TRM, Illinois TRM, Texas TRM PNNL Residential Prototype Models (2013)	Measure database development
Industrial measure data	U.S. DOE studies U.S. EPA studies LBNL studies ICF expert knowledge	Measure database development
<b>Program Data</b>		
ICF program data and expert judgment	ICF	Estimating achievable potential
Historical program savings (evaluation) data	ELL	Calculating eligible stock; Estimating achievable potential
Energy efficiency program savings and costs data run by other utilities	ESource Database	Estimating achievable potential

## Measure Analysis

### Measure Database

ICF developed a comprehensive measure database for this study, including commercially available measures covering each relevant savings opportunity within each end use and sector. The database includes prescriptive or “deemed” type measures, whole building options (e.g., commercial custom and new construction projects), and behavioral measures (e.g., residential home energy use benchmarking and retroCommissioning measures). Measure end uses covered include:

- ▶ Residential
  - Appliances
  - Consumer electronics
  - Envelope (building shell)
  - Hot water

- Heating, ventilation, and air conditioning (HVAC)
- Lighting
- Other (e.g., benchmarking)
- ▶ Commercial
  - Envelope (building shell)
  - Food services equipment
  - Hot water
  - HVAC
  - Lighting
  - Miscellaneous
  - Refrigeration
- ▶ Industrial
  - Machine drive
  - Compressors
  - Fans
  - Pumps
  - Motor, other applications
  - Facility HVAC
  - Facility lighting
  - Process cooling and refrigeration
  - Process heating
  - Other non-process uses
  - Other process and non-process uses

Figure 3 shows the illustrative characteristics of each measure modeled.

**Figure 3. Illustrative Characteristics of Measures**

Measure Characteristic	Value*
1. Applicable sector	Commercial
2. Applicable subsector	Grocery
3. Building type	All grocery
4. End use	Refrigeration
5. Measure name	Night covers for open refrigerated display cases
6. Measure definition	Curtains or covers on top of open refrigerated or freezer display cases
7. Baseline definition	No night cover, average of vertical, semi-vertical, and horizontal units from Arkansas (AR) TRM definitions
8. Measure unit	Per linear foot of display case
9. Measure delivery type	Retrofit
10. Incremental cost	\$42
11. Baseline unit effective useful life	N/A
12. Efficient unit effective useful life (years)	5
13. Incremental (annual) kilowatt-hour (kWh) savings	145
14. Incremental kW savings	0

In total, ICF analyzed 228 measure types and 971 measure permutations for this study. An example of a measure type is residential central air conditioners (CACs). Many measures required

permutations for different applications, such as different building types, lamp wattages, efficiency levels, and decision types. For example, there are permutations of CACs by seasonal energy efficiency ratio (SEER) level, subsector, and building type. Descriptions of each measure type and permutation appear in the Appendix as well as measure cost-effectiveness results.

We analyzed all measures for cost-effectiveness using the measure TRC test.<sup>1</sup> In most cases, only measures with a TRC of 1.0 or higher (in their representative test years) passed to the next stage of the analysis. A measure with a TRC result of 1.0 indicates that the measure is cost-effective on a stand-alone basis (before consideration of program costs or NTG ratios). We made exceptions to this rule for non-economic measure permutations when most of the permutations of that measure type were cost-effective. For example, if a measure type was cost-effective for a majority of, but not all, applicable building types, we included the measure type for all building types in the achievable potential analysis. Excluding participation by customers in a specific building type can be impractical in implementation.

ICF also applied the converse principal in a small number of cases. For example, if a measure was cost-effective for a minority of building types, ICF excluded all permutations of the measure in the achievable potential analysis, because it can be impractical in implementation to limit participation to certain building types.

Figure 4 shows the number of measures evaluated for cost-effectiveness and the number that were economic. About 70% of the measures evaluated were found to be economic and were therefore included in energy efficiency programs.

**Figure 4. Number of Measures Tested for Cost-effectiveness and Included in the Analysis**

Subsector	Measure Types Tested for Cost-effectiveness	Total Measure Permutations Tested for Cost-effectiveness	Number of Measure Types Passing Cost-effectiveness Screening Included in the Analysis	Number of Measure Permutations Passing Cost-effectiveness Screening Included in the Analysis
Residential	50	235	35	108
Commercial	78	420	64	329
Industrial	100	316	79	238
<b>Total</b>	<b>228</b>	<b>971</b>	<b>178</b>	<b>675</b>

The key measure baseline changes accounted for in this study are as follows:

- ▶ Standard light bulbs
  - Included Energy Independence and Security Act of 2007 (EISA) backstop provisions (improved baselines from Tier 2 taking effect in 2020).
  - Removed compact fluorescent lamps (CFLs) as an energy-savings measure.

<sup>1</sup> Measure TRC benefits include avoided energy and avoided capacity costs due to the measure over the measure lifetime. Measure TRC costs are measure incremental costs; these include the difference in equipment and labor costs between the efficient and baseline units.



- ▶ Commercial new construction code
  - Included current code, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2007, enacted in 2011.
  - Assumed adoption of 90.1-2010 in 2019, 90.1-2013 in 2024, and 90.1-2016 in 2031.
- ▶ C&I unitary HVAC
  - Changed to Institute for Energy and Environmental Research (IEER) and higher baselines in 2018 and 2023.

**Eligible Stock**

The eligible stock is the size of the market for efficiency measures, in measure units, such as bulbs, tons of cooling, or homes. ICF estimated the eligible stock for each measure within each end use and sector. Key data from the baseline sources noted previously include items such as:

- ▶ Percent of homes with an equipment type (e.g., light bulbs, central AC, refrigerator)
- ▶ Equipment counts (e.g., number of bulbs per home, tons of cooling per home, refrigerators per home)
- ▶ Equipment efficiency level (e.g., bulb type, SEER rating, ENERGY STAR® rating)
- ▶ Equipment age

A simple example of an eligible stock calculation for residential AC tune-ups is shown in Figure 5. This example shows that there are 199,560 ACs eligible for tune-ups (row h). Because this is a retrofit measure, the eligible stock does not account for stock turnover. Stock turnover is the rate at which existing equipment expires and requires replacement. It is the inverse of equipment age, or 1 divided by the equipment’s effective useful life (EUL). If this were a replace-on-burnout AC measure, the eligible stock would equal 1/10 years (1/a) times row h, which equals 19,900 ACs burning out every year and eligible for replacement.

**Figure 5. Illustrative Measure Eligible Stock Calculation**

	Variable	Value	Source or Calculation
	Efficient unit	Central AC tune-up (5% improvement in efficiency of existing unit)	AR TRM
	Baseline unit	System with demonstrated imbalances of refrigerant charge	AR TRM
a	Baseline unit EUL (years)	10	AR TRM
b	Single family homes	783,121	ELL
c	Homes with central AC (%)	78%	ELL RASS Survey, 2006
d	Number of measure units per home	1	1 central AC unit per home
e	Applicability (% of homes with AC units older than 8 years)	33%	RECS 2015, West South-Central region data
f	Efficient unit saturation	1.1%	Assuming all units older than 8 years have lost at least 5% charge since EUL of measure is 10 years
g	Not yet adopted rate	98.9%	1 – f
h	Total eligible stock in 2017 (number of potential AC tune-ups)	199,560	b × c × d × e × g

## Program Modeling

### Program Types Modeled

ICF modeled 14 program types for this study, as described briefly below, by sector.

#### Residential Programs

- **Appliances Recycling** – Promotes the retirement and recycling of inefficient, working refrigerators and freezers, as well as room ACs, from households by offering incentives and free pick-up of the equipment.
- **Lighting, Appliances, and Electronics** – Provides rebates for qualifying ENERGY STAR® lighting, appliances, and electronics sold through retail channels, as well as information to increase customer awareness of energy efficiency appliances.
- **Home Audit and Retrofit** – Conducts audits of single-family homes to understand home energy consumption and identify opportunities to save energy and money. Direct install measures, including light-emitting diode (LED) bulbs and faucet aerators, are installed for free. Participants receive incentives for more comprehensive measures installed that are identified during the audit, such as duct sealing and ceiling insulation.
- **HVAC and Tune-up** – Promotes investment in long-term savings by providing rebates for the purchase and installation of high-efficiency home HVAC equipment. Also conducts AC tune-ups for customers with functioning ACs.
- **Income-Qualified Weatherization** – Conducts free energy audits and installs free weatherization measures, such as air sealing, duct sealing and home insulation, in homes occupied by income-qualified customers.
- **ENERGY STAR® New Homes** – Increases awareness and understanding among Home Energy Rating System (HERS) rating companies and home builders of the benefits of energy-efficient building practices with a focus on capturing energy efficiency opportunities available during the design and construction of new single-family homes. Incentives are provided to HERS-certified consultants who certify homes and builders who construct homes that are at least 20% more energy efficient than the baseline (state building energy code).
- **Home Energy Use Benchmarking** – Uses load disaggregation to estimate electricity use and costs for individual household devices. The data is communicated to the customer on a real-time basis, along with customized energy efficiency and bill-savings advice, including behavioral measures and energy efficiency program promotions for equipment. Primary communication is via smartphone. Other communication options include smart speakers, on-line portals, and paper mail. Customers with smart devices can program them to respond to program data automatically in order to save energy and money.

#### Commercial & Industrial Programs

- **Commercial Prescriptive and Custom** – The prescriptive element of the program provides incentives to customers on a “deemed” per-unit basis. The custom element identifies and implements site-specific and unique cost-effective energy efficiency opportunities that are not available via the prescriptive element. Customized incentives, based on calculated savings for specific customer projects, are offered.
- **Midstream Commercial Lighting** – Provides instant incentives to customers purchasing pre-qualified efficient lighting technologies.
- **RetroCommissioning (RCx)** – Provides detailed engineering analysis of building operations designed to identify energy-savings operational improvements. Incentives are provided to customers who commit to implementing agreed-upon energy-savings improvements.

Common measures include equipment scheduling, optimization of economizer operations, and adjustment of HVAC set points.

- **Commercial New Construction** – Provides technical assistance and incentives for efficient designs and measure implementation to influence building design practices during the design and construction of new buildings, major renovations of existing buildings, and tenant build-outs in the commercial sector.
- **Small Business Solutions** – Implements energy efficiency projects for customers under 100-kW peak demand. These customers include convenience stores, offices, garages, warehouses, restaurants, and other smaller businesses. Primary measures include lighting, refrigeration, and hot water measures.
- **Industrial Prescriptive and Custom** – Provides prescriptive and custom incentives for measures implemented on industrial facilities, such as lighting and HVAC. Custom incentives for measures implemented on industrial plant equipment include motors and compressed air.
- **Strategic Energy Management** – Helps businesses reduce their energy costs with tools, coaching, and technical resources to support energy goals through a year-long series of workshops and one-on-one coaching. Draws on the principles of continuous improvement and organizational change and integrates cost savings and operational excellence initiatives. The offering helps implement organizational structures, behavior changes, and systematic practices that can lead to significant energy and cost savings.

## Program Assumptions

This section describes how ICF developed key assumptions for programs, including costs, participation rates, and NTG ratios.

### Program Costs

ICF estimated program costs to reflect average annual costs over the long run; incentive and non-incentive program cost estimates were developed. Incentives are program payments to customers, contractors, retailers, or manufacturers that lower the cost of efficient products and services. Non-incentive costs include administration, marketing, education and training, and evaluation costs. ICF did not estimate individual non-incentive cost categories for this study. We did consider ICF program experience and program costs in other territories in developing program costs for this potential study. Cost estimates by program appear in the Appendix.

### Participation

A participation rate is the percentage of eligible stock or applicable customer population predicted to install an efficiency measure each year. The approach to developing participation rates in this potential study was like the approach used in most potential studies. It involves:

1. Developing a maximum market acceptance rate, or ( $S_{max}$ ), which is the maximum annual participation rate for a given measure.
2. Estimating a participation rate in Year 1 of the forecast.
3. Developing a ramp-up schedule from Year 1 to the year in which  $S_{max}$  is predicted to occur.
4. Forecasting participation for the years after the year in which  $S_{max}$  is expected to be achieved.

The shape of a participation curve can take a variety of forms, depending on the nature of the measure, the program in which it is being delivered, the relevant market barriers, baseline changes, and the size and nature of the eligible stock. ICF assessed achievable participation on a measure-by-measure basis. Because such a wide variety of measures is included in this study, we could not apply just one formulaic approach to estimating program participation for all measures. Each

measure was put in a group<sup>2</sup> with similar measures for assigning participation approaches and payback curves; these assignments are shown in the Appendix.

### *Participation Approach A*

This approach to estimating participation combines research on customers' financial decision making with research on the diffusion of innovative technologies in the marketplace.

One way that programs motivate customers to participate is by improving the financial attractiveness of the efficient option over the standard, or baseline, option. Financial attractiveness in Approach A is a function of how much the incentive lowers customer simple payback. Customer payback is the amount of time it takes for a customer to recover the costs of investing in the efficient unit instead of the standard unit. Customer payback equals the difference in cost between the efficient and standard units (commonly known as the incremental cost) divided by the utility bill savings due to the efficient unit.<sup>3</sup> Payback before the incentive is applied is calculated as:

$$\text{Pre-incentive Customer payback (years)} = \frac{\text{Incremental cost}}{\text{Utility bill savings}}$$

And payback after the incentive is applied is calculated as:

$$\text{Post-incentive Customer payback (years)} = \frac{(\text{Incremental cost} - \text{Incentive cost})}{\text{Utility bill savings}}$$

Incentive levels for measures included in the study that are also currently offered by ELL were estimated based on ELL's current incentive levels and ICF expert judgement. Incentive levels for measures not currently offered by ELL were initially estimated based on measure simple payback and adjusted on a case-by-case basis by ICF program experts. Incentive levels ranged from 25% to 100% of measure incremental costs, with incentive levels for most measures falling between 25% and 75% of measure incremental costs. An incentive calculation for an illustrative measure is shown in Figure 6.<sup>4</sup>

For this illustrative measure, the payback target is two years, the pre-incentive payback is 4.5 years (row 8), and the post-incentive payback is two years (row 12). Not all incentives bring down the payback to two years. This occurs when the maximum incentive is reached, when the pre-incentive payback is already less than two years, or when the incentive would need to be greater than the incremental cost to bring the payback down to two years.

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<sup>2</sup> Most programs have multiple measure groupings, or bundles. Some, such as Home Energy Use Benchmarking, only have one group.

<sup>3</sup> Incremental costs include the difference in the cost of equipment, labor and operations, and maintenance.

<sup>4</sup> Values indicated in Figure 6 are generic and are shown only to demonstrate the approach. The values should not be construed as actual assumptions used in this study. Actual assumptions are noted as such in the body of this report and in the Appendix

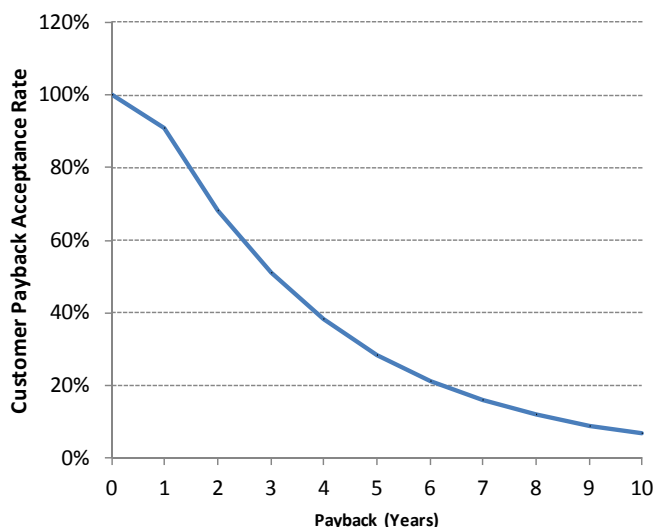
**Figure 6. Illustrative Measure Incentive Calculations**

Incentive Calculations	Value	Source/Calculation
1 Retail Electricity Rate—kWh	\$ 0.11	Utility
2 Retail Capacity Charge—kW	\$ 0.00	Utility
3 Base Measure Life	10	Deemed Savings
4 Total Incremental Cost <sup>1</sup>	\$200	Deemed Savings
5 Annual kWh Savings	400	Deemed Savings
6 Annual kWh Summer-Peak Savings	0.1	Deemed Savings
7 Annual Bill Savings	\$44	Annual Energy Savings by Participant
8 Pre-incentive Payback (Years)	4.5	Total Incremental Cost/Annual Bill Savings
<b>Incentive Assumptions</b>		
10 Minimum Incentive Level	25%	Reference Case Assumption
11 Maximum Incentive Level	75%	Reference Case Assumption
12 Post-incentive Payback Target (Years)	2.0	Reference Case Assumption
13 Incentive as % of Incremental Cost	56%	MAX [MIN (Minimum Incentive Level, 1-Post-rebate Payback Target/Pre-rebate Payback)]
14 Incentive	\$112	Incentive as % of Incremental Cost x Total Incremental Cost
15 Post-incentive Payback (Years)	2	(Total Incremental Cost-Incentive) / Annual Bill Savings

Incentives are used to calculate program costs and to forecast participation. ICF uses the post-incentive payback to estimate the fraction of customers who may choose the efficient unit over the standard unit. We conduct this estimation using payback acceptance curves, an example of which is shown in Figure 7. Different payback curves were utilized for each sector. All payback curves utilized in this study are shown in the Appendix.

The curve below plots the results from a residential survey on payback acceptance.<sup>5</sup> The curve shows that 68% of eligible residential customers stated that they are willing to accept a two-year measure payback. However, people tend to overstate their payback acceptance in surveys, which is known as survey response bias. When customers are making actual decisions about installing equipment, they are usually willing to accept much shorter payback levels than they stated they would in a survey.

**Figure 7. Illustrative Payback Acceptance Curve**



<sup>5</sup> Surveys were conducted prior to this study outside of Entergy’s service area.

In Approach A, three variables determine the shape of the participation curve for a measure:

1. *Maximum market acceptance rate*, or Smax (row 2 in Figure 8), is used to estimate the maximum annual participation rate.<sup>6</sup>
2. *Ramp-up rate* (row 3 in Figure 8) is used to estimate first year participation.
3. *Ramp-up shape* (row 4 in Figure 8) is applied to reflect how quickly a program could reach the maximum annual participation rate.

The maximum annual market acceptance (Smax)<sup>7</sup> is the product of the customer-stated payback acceptance and the program market acceptance rate (row 8 in Figure 8):

$$\text{Maximum annual market acceptance rate (Smax)} = \text{Customer-stated payback acceptance} \times \text{Program market acceptance rate}$$

Moreover, the first-year participation rate (row 9 in Figure 8) is the maximum annual market acceptance rate divided by the ramp-up rate. To summarize:

$$\text{First year participation rate} = \text{Maximum annual market acceptance rate} \div \text{Program ramp-up rate}$$

**Figure 8. Illustrative Market Diffusion Assumptions**

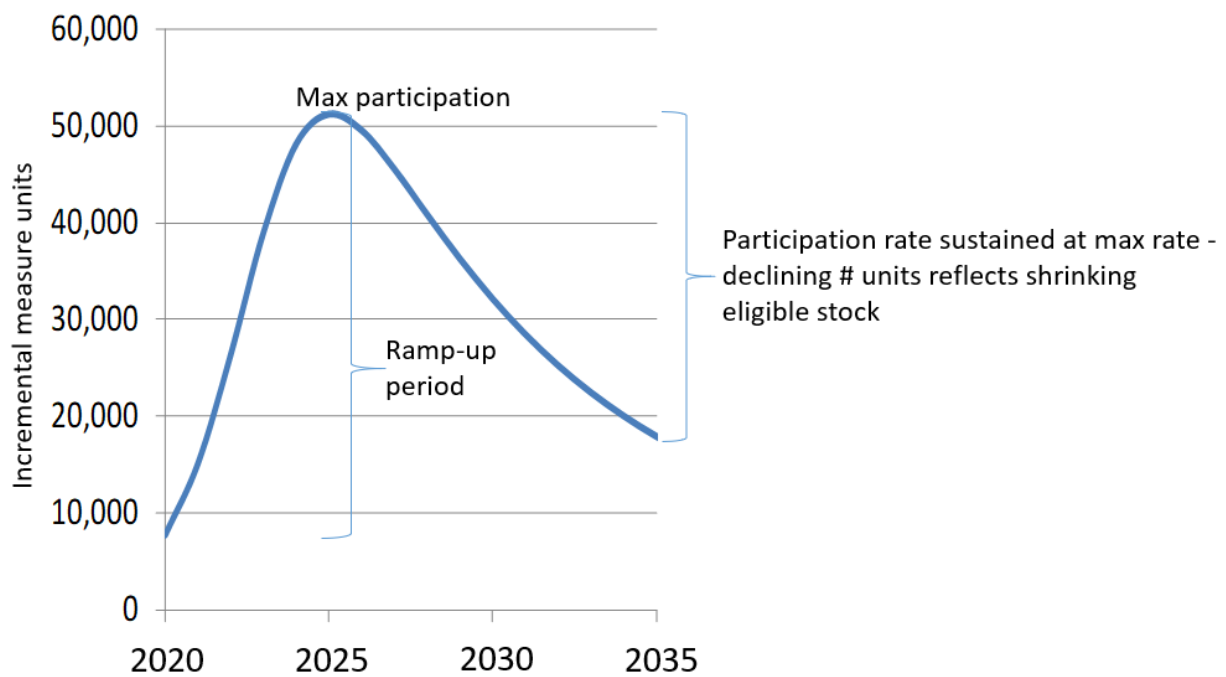
	Program Assumptions	Value	Source/Calculation
1	Customer Stated Payback Acceptance	68%	Payback Acceptance Calculation
2	Program Market Acceptance Rate	30%	ICF Program Assumption
3	Ramp-up Rate (years)	5	ICF Program Assumption
4	Ramp-up Shape	100%	ICF Program Assumption
5	Program Start Year	2019	
6	Study Period (years)	20	
7	First Year Participation Estimates		
8	Maximum Annual Market Acceptance (S <sub>max</sub> )	20.4%	Program Market Rate Acceptance x Customer Stated Payback Acceptance
9	First Year Share of Installations (S <sub>0</sub> )	4.1%	Maximum Annual Market Acceptance (Smax)/ Ramp-Up Rate

Figure 9 illustrates the outcome of Approach A. Program participation in the first year is 4%. The participation rate in each year grows until it reaches the maximum estimated level of 20%. Increasing the ramp-up shape steepens the curve, and decreasing it makes the curve more gradual. This figure is an example of “market diffusion,” or an s-curve.

<sup>6</sup> The program participation rate in the year the program reaches maturity.

<sup>7</sup> The highest estimated level of program market penetration in each year.

Figure 9. Market Diffusion Curve



This approach to modeling DSM program participation is only applicable to measure and program types where payback acceptance is relevant to customer financial decision making.

*Participation Approach B*

Participation Approach A, described above, is not applicable to energy efficiency measure and program types where payback acceptance is a less relevant proxy for customer financial decision making. This is the case for residential new homes programs, for example, where qualified homebuilders are the target market, not homebuyers. Nor does the payback acceptance survey data apply to customer decisions about participating in demand response programs. For such measures Approach B was used – participation rates were individually inputted for each year based on program experience. Participation approaches by measure type are documented in the Appendix.

**Net-to-Gross Ratios**

Program evaluators use different evaluation methods, such as randomized control trials (RCTs) and quasi-experimental designs, surveys, market sales data analysis, or case studies, to estimate the net program savings associated with energy efficiency programs. The ratio of net savings to gross savings is called the program NTG ratio. Gross savings are changes in energy consumption that result directly from program-related actions taken by participants of an energy efficiency program, regardless of why they participated. Net savings refer to changes in energy use that are attributable

to a particular energy efficiency program. These changes may implicitly or explicitly include the effects of free-ridership,<sup>8</sup> spillover,<sup>9</sup> and induced market effects.<sup>10</sup>

Applying the NTG ratio to gross savings results in net savings. Net savings estimates are reflected in the loadshapes provided to ELL for this potential study.

Reference case NTG ratios were estimated based on program impact evaluation results from similar utility energy efficiency programs in other jurisdictions, including Louisiana, Arkansas, Texas, Maryland, South Dakota, Arizona, California, and Illinois, and are shown in the Appendix.

## Scenario Development

ICF forecasted achievable energy efficiency potential for the above programs under two scenarios, which are defined in the points that follow. ICF first developed the current programs estimates by measure for each program using the approaches described previously; then we developed the estimates for the expanded programs.

- ▶ **Current programs** – where ELL programs were modeled based on program designs implemented by ELL in Program Years one through three, but with larger budgets.
- ▶ **Expanded programs** – Includes programs in the current programs scenario plus new best practice programs.

The names of the current programs (included in both scenarios) and new best practice programs (included only in the expanded programs scenario) are shown below:

Current Programs (based on ELL programs implemented in PY1-PY3)	Expanded (New) Programs
<ul style="list-style-type: none"> <li>• Lighting, Appliances, and Electronics</li> <li>• Residential HVAC and Tune-up</li> <li>• Home Audit and Retrofit</li> <li>• Income-Qualified Weatherization</li> <li>• Commercial Prescriptive and Custom</li> <li>• Small Business Solutions</li> <li>• Industrial Prescriptive and Custom</li> </ul>	<ul style="list-style-type: none"> <li>• ENERGY STAR® New Homes</li> <li>• Appliances Recycling</li> <li>• Home Energy Use Benchmarking</li> <li>• Midstream Commercial Lighting</li> <li>• Commercial RetroCommissioning</li> <li>• Commercial New Construction</li> <li>• Industrial Strategic Energy Management</li> </ul>

<sup>8</sup> Free ridership is the program savings attributable to free riders (program participants who would have implemented a program measure or practice in the absence of the program).

<sup>9</sup> Spillover refers to additional reductions in energy consumption or demand that are due to program influences beyond those directly associated with program participation. As a result, these savings may not be recorded in the program tracking system and credited to the program.

<sup>10</sup> National Renewable Energy Laboratory, Chapter 17, Estimating Net Savings: Common Practices, September 2014, <https://energy.gov/sites/prod/files/2015/01/f19/UMPCChapter17-Estimating-Net-Savings.pdf>.

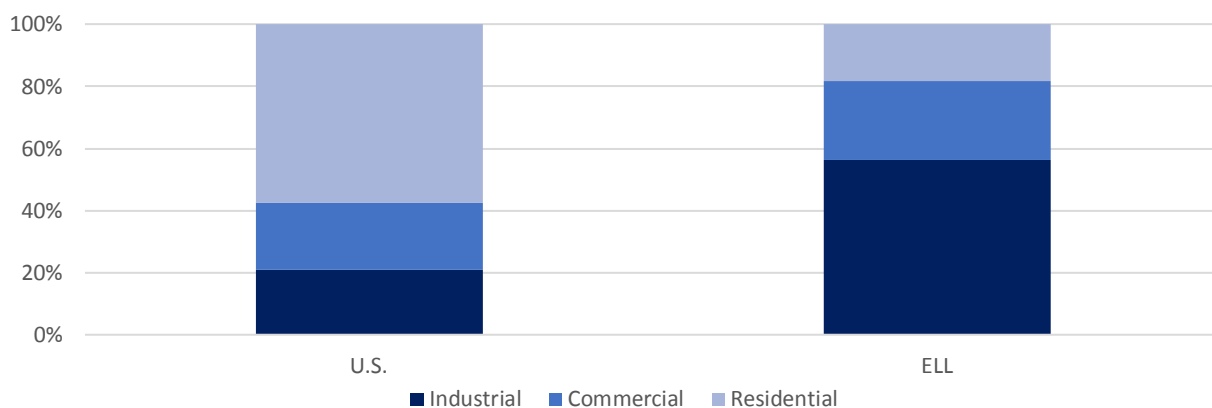


Assumptions about customer preferences and decision-making criteria, utility assumptions (e.g., avoided costs, discount rates), and exogenous economic factors (e.g., growth, inflation) were all held constant for both scenarios.<sup>11</sup>

### III. UTILITY SERVICE AREA CHARACTERISTICS

Electricity use in the ELL service area is 18% residential, 25% commercial, and 56% industrial; ELL’s industrial share of the load is 2.7 times the share in the United States as a whole (Figure 10).<sup>12</sup> This indicates that the achievable energy efficiency potential is lower in ELL’s service area than in an average service area because industrial customers have different market barriers to participation than commercial and residential customers, and participation rates tend to be lower. During the 2014–2016 period, the industrial sector accounted for just 7% of total energy efficiency program savings in the United States.<sup>13</sup>

**Figure 10. Contribution to Electricity Use by Sector in the United States and in the ELL Service Area (2016)**



In the base case,<sup>14</sup> the total load is forecasted to grow 14% during the forecast period (using a 2018 baseline),<sup>15</sup> as shown in Figure 11. The compound annual growth rate (CAGR) over the same period is 0.7%, driven largely by a 1.1% CAGR in the industrial sector.

<sup>11</sup> One reason that these factors are held constant in ICF’s model is that ICF’s DSM forecasts are used as inputs to ELL’s integrated resource planning model, which is a dynamic model that varies utility, macroeconomic, and other assumptions.

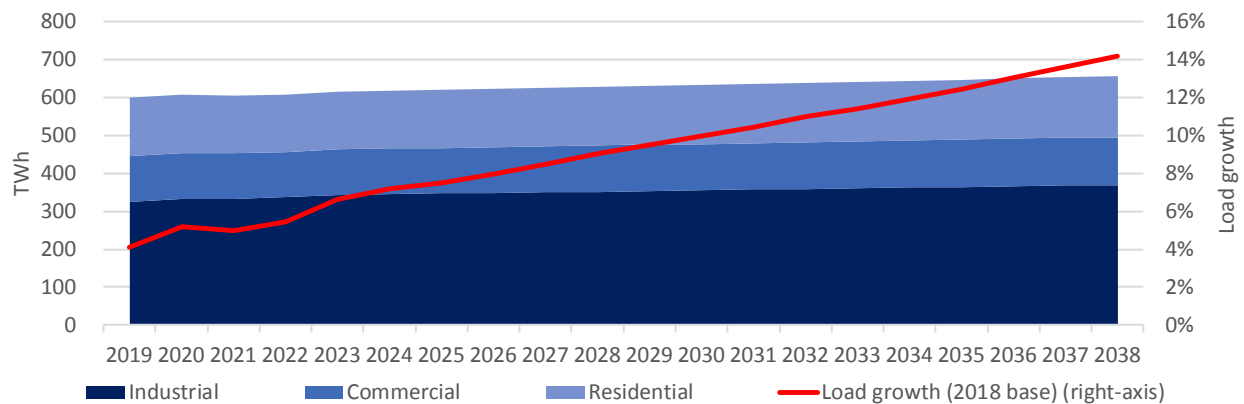
<sup>12</sup> U.S. Energy Information Administration (EIA), Retail sales of electricity, <https://www.eia.gov/electricity/data/browser>, 2018.

<sup>13</sup> Based on ICF analysis of U.S. EIA Form 861 data for 2014-16.

<sup>14</sup> The base case is the load as forecasted by Entergy for the forecast period (2019-2038) prior to the energy efficiency potential forecast conducted in this study.

<sup>15</sup> Calculated as the compound annual growth rate (CAGR) over the 2019–2038 period.

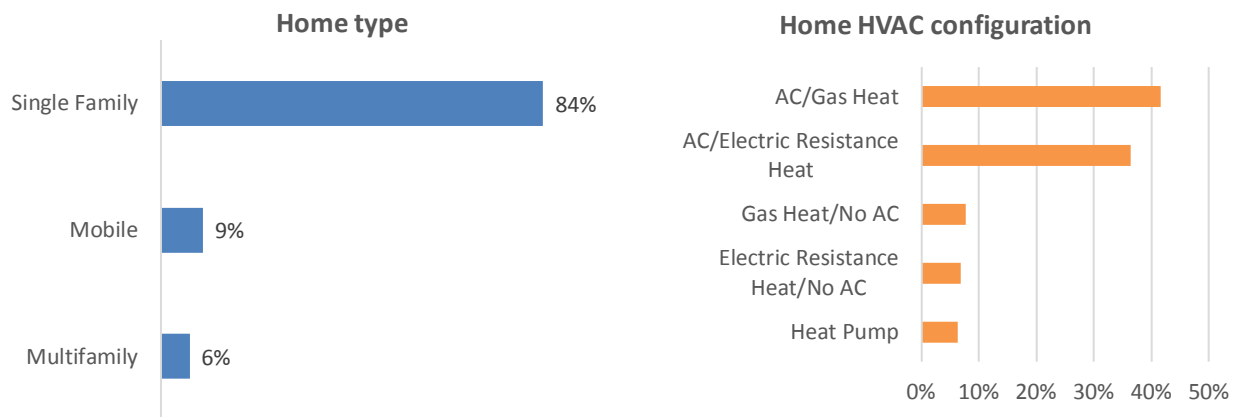
Figure 11. System Load (left axis) and Load Growth (right axis) in the Base Case



## Residential

Single-family homes are a large majority of the residential building stock. This means that we would expect targeted residential efficiency programs to focus on this subsector. Three out of four homes have central AC, and another 6% have a heat pump; 15% of homes have heating but no air conditioning. Most homes have a gas water heater (56%). Figure 12 shows home types and home HVAC configurations.<sup>16</sup>

Figure 12. Distribution of Home Types and Home HVAC Configurations in the ELL Service Area (Total = 929,264 homes)



## Commercial

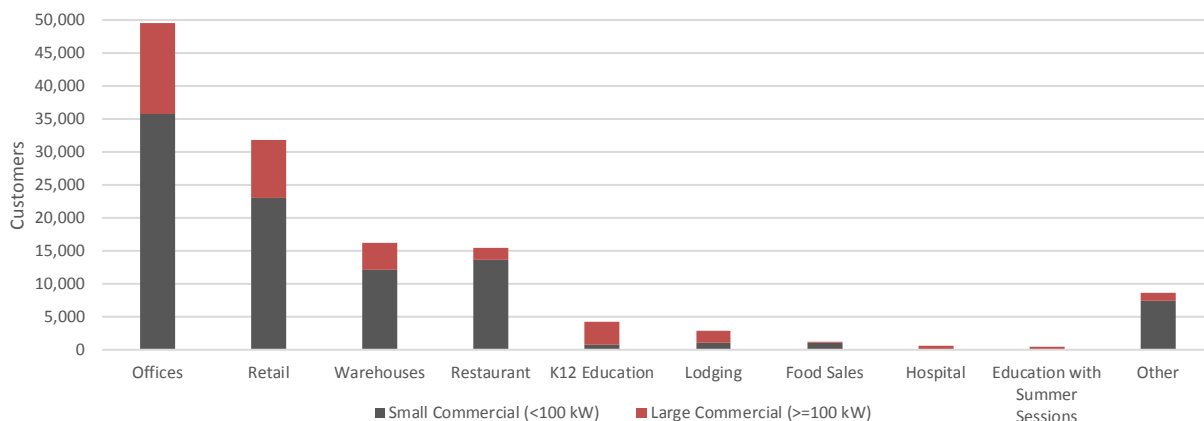
Seven out of ten, or 70%, of commercial customers are categorized as small, with a demand of less than 100 kW. Offices and retail account for 62% of these locations; warehouses and restaurants

<sup>16</sup> Energy Residential Appliance Saturation Survey, 2006; ICF assumptions.

account for 13% and 14%, respectively. The remaining 11% are K–12 schools, lodging, food sales, and other building types.

Thirty percent of commercial customers are categorized as large, with a demand of 100 kW or more. As with small customers, office (38%) and retail (24%) are the most common large commercial building types, followed by warehouses (12%) and K–12 schools (10%). There are some important differences between the small and large customer populations. For example, there are 10 times as many schools in the large commercial category. Furthermore, the kW demand distribution for large buildings is right-skewed because there are a small number of buildings in this category with high demand, such as hospitals. Figure 13 shows frequency counts for large and small commercial customer types.

**Figure 13. Commercial Customer Counts, by Building Type (Total = 130,833)**

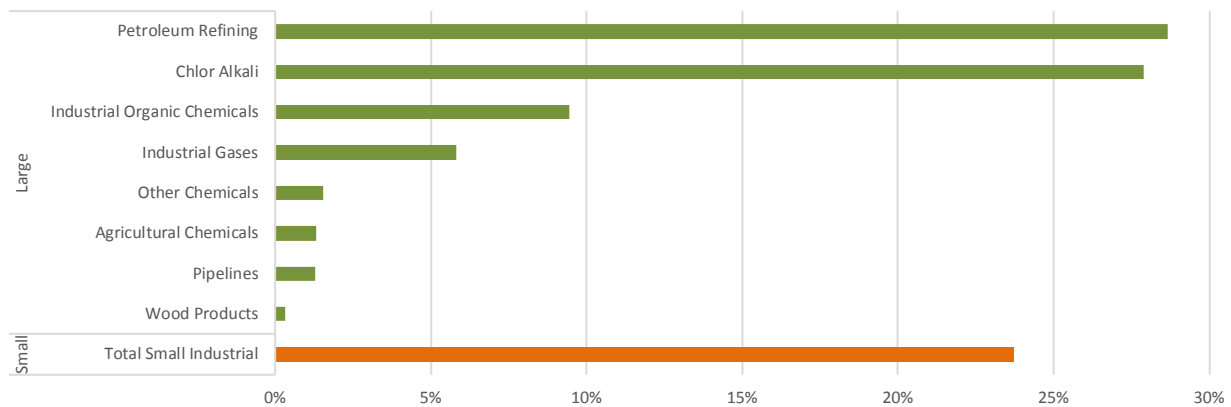


## Industrial

The petroleum refining and chlor alkali industries account for 57% of total industrial energy use, followed by small industry (24%) and industrial organic chemicals (9%).<sup>17</sup> Machine drive applications consume 48% of electric energy in large industrial facilities, and 35% is used in electro-chemical processes, solely in the chlor alkali industry; it is important to note that there are no known efficiency upgrades for electro-chemical processes. The combined share of electricity used by facility lighting and facility HVAC is 4% in large industrial plants, and 15% in small industrial plants; industrial achievable potential within these end uses is relatively high because these efficiency measure types are lower risk than measures affecting production processes. Figure 14 shows the distribution of industrial electricity use by subsector, and Figure 15 shows industrial electricity use by end use in small and large facilities.

<sup>17</sup> Based on Standard Industrial Classification (SIC) data provided by ELL and U.S. EIA Manufacturing Energy Consumption Survey (MECS) data for Louisiana.

**Figure 14. Distribution of Industrial Electricity Use by Subsector (Total = 26,953 GWh)**



**Figure 15. Industrial Electricity Use by End Use (Total = 26,953 GWh)**

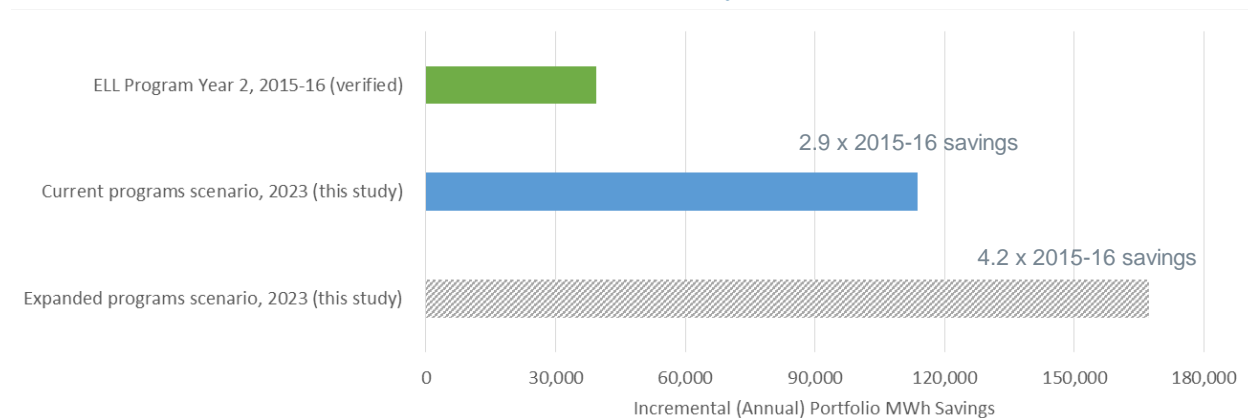
End Use	% kWh Use	
	Large Industrial	Small Industrial
<b>Machine Drive</b>	<b>46.7%</b>	<b>52.3%</b>
Pumps	26.3%	13.8%
Fans	4.4%	7.6%
Compressed Air	7.1%	8.8%
Motors – Other Applications	8.9%	22.0%
<b>Process Heating</b>	<b>2.9%</b>	<b>11.4%</b>
<b>Process Cooling and Refrigeration</b>	<b>3.2%</b>	<b>7.5%</b>
<b>Other Process Uses</b>	<b>1.2%</b>	<b>2.1%</b>
<b>Electro-Chemical</b>	<b>35.1%</b>	<b>9.5%</b>
<b>Facility HVAC</b>	<b>2.6%</b>	<b>8.5%</b>
<b>Facility Lighting</b>	<b>1.9%</b>	<b>6.4%</b>
<b>Other Non-process Use</b>	<b>0.5%</b>	<b>2.4%</b>
<b>Other</b>	<b>3.8%</b>	<b>0.0%</b>

## IV. ACHIEVABLE ENERGY EFFICIENCY POTENTIAL

### Incremental savings increase by three- to four-fold in the mid-term

In the expanded programs scenario, annual savings achieved by ELL programs grow by a factor of four above the savings achieved by ELL programs in Program Year 2, in 2015–2016 (Figure 16). Annual, or “incremental,” savings are achieved in a program year from measures installed by programs during the same year. The growth in annual savings is due to increased budgets for existing ELL programs, and to savings achieved by new (expanded) programs, which contribute an additional 45% to savings above the current programs scenario level in 2023.

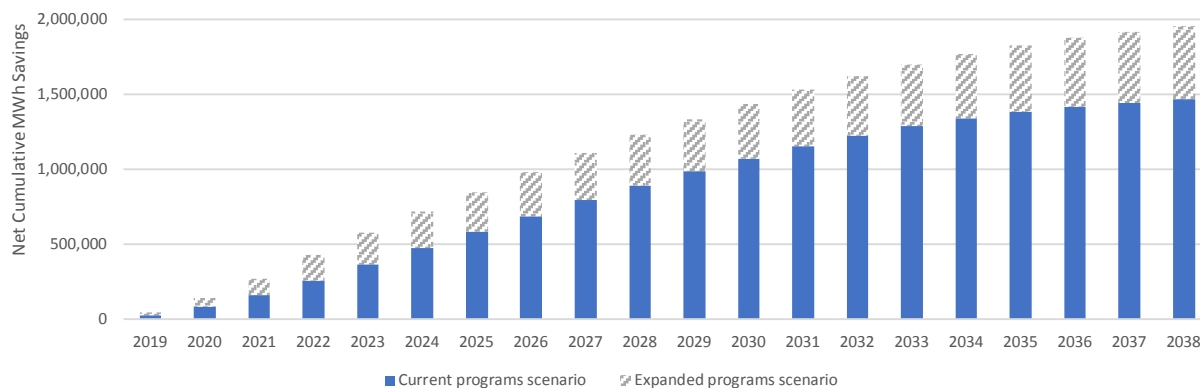
**Figure 13. Incremental (annual) MWh Savings in ELL Program Year 2 (2015–2016) (verified) and as Forecasted for This Study for 2023**



### Cumulative savings reach of up to 3% of system sales in the long-run

Cumulative savings grow from 50 GWh in 2019 to nearly 2,000 GWh by 2038 in the expanded programs scenario (Figure 17). Cumulative savings include the savings achieved in one program year plus savings from measures installed in previous program years that are still functioning. In the current programs scenario, ELL programs offset 20% of base case load growth between 2019 and 2038 (2018 base); the portfolio offsets one-quarter of load growth in the expanded programs scenario.

**Figure 14. Net Cumulative Portfolio MWh Savings**

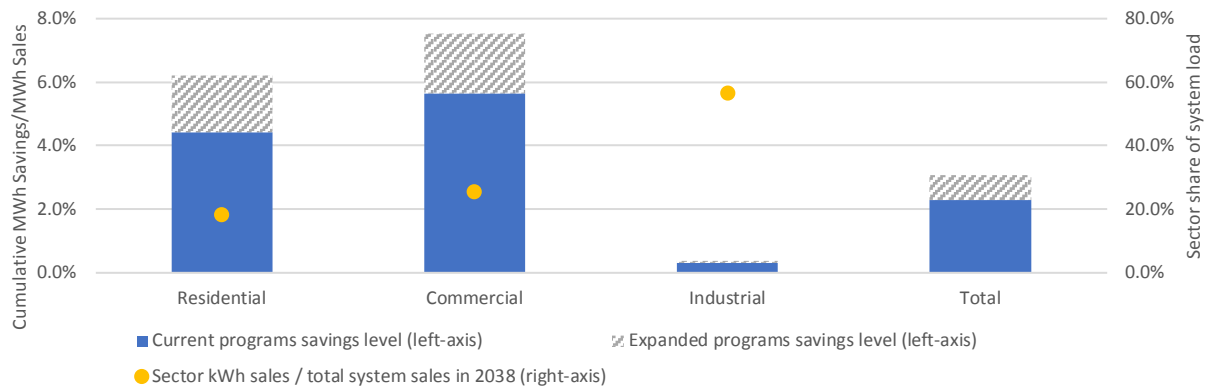


### Residential and commercial programs account for 90% of savings

Cumulative program savings impacts in the residential sector reach 6% of residential electric sales in 2038 in the expanded programs scenario; cumulative program savings impacts in the commercial sector reach 8% of commercial electric sales (Figure 18). Since the savings impacts for the industrial sector are comparatively low, and because the share of the load that is industrial is high, as indicated by the yellow dot above the industrial bar in Figure 18, the total savings potential, calculated as the sum of cumulative savings for all programs in 2038 divided by the total load for ELL in 2038, is 3% of sales in 2038. If industrial programs and industrial load were removed from the

equation, the total savings potential would increase to 7% of the load in 2038 in the expanded programs scenario.<sup>18</sup>

**Figure 15. Net Cumulative MWh Savings in 2038 as a % of MWh Sales, by Sector and in Total**



**Whole home retrofits are the biggest residential savings opportunity**

In the current programs scenario, whole home efficiency retrofits become the largest residential savings opportunity. Residential programs savings have historically been driven by CFLs and LEDs; however, new federal minimum energy performance standards for general service lamps have gradually decreased the need for programs to provide incentives for efficient standard screw-in light bulbs. In this study, EISA-compliant screw-in LED bulbs were included in the forecast for 2019, but were eliminated from 2020 forward, consistent with EISA 2007 Tier 2.

There are many significant opportunities to improve the energy efficiency of existing homes in Louisiana, including duct sealing, air sealing, and insulation, which can be delivered through the Home Audit and Retrofit program, and, for income-qualified customers, the Income-Qualified Weatherization program. Home retrofit programs are not as “scalable” as residential lighting programs, meaning that they do not achieve high savings through volumetric sales, but savings per project tend to be significant. Further, the savings are long-lived, and there are many non-energy benefits to whole home efficiency projects (e.g., improvements to occupant comfort and health).

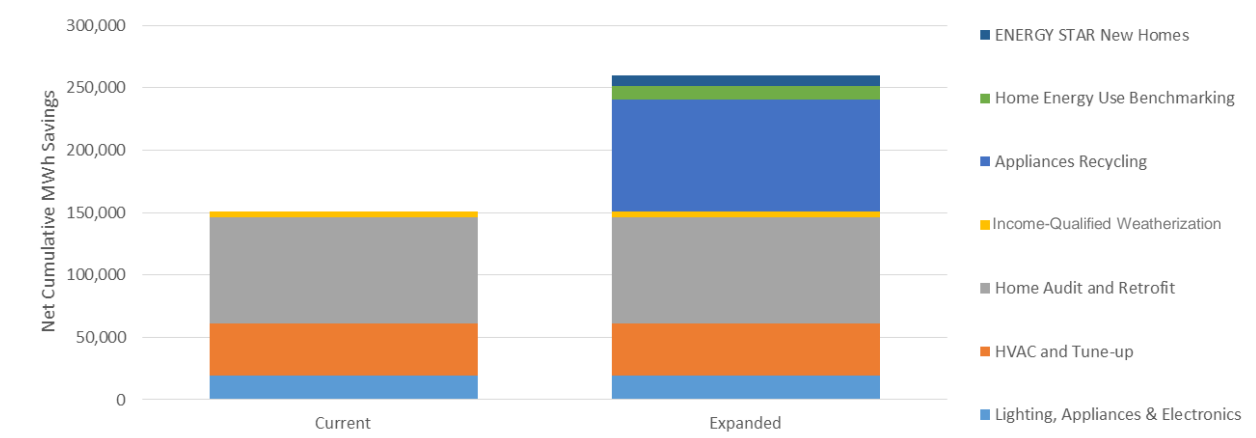
New programs could increase residential sector savings by two-thirds, driven largely by Appliances Recycling, which provides a bounty fee for collecting old, inefficient refrigerators, freezers, and window air conditioners. Appliances Recycling programs are scalable, but the eligible stock can be depleted quickly because there are a limited number of older appliances that can be cost-effectively harvested. Home Energy Benchmarking can be easily scaled to increase incremental savings. However, for this behavioral program, we assumed a measure life of one year, which means that savings do not accumulate over time as they do with equipment measures. Therefore, the program is more effective in helping to meet short-term energy-savings goals, rather than meeting long-term resource needs.

The cumulative savings potential for the residential sector in the fifth year of the forecast (2023) is

<sup>18</sup> Computed as the sum of cumulative residential and commercial program savings in 2038 in the expanded programs scenario divided by the sum of the forecasted load for the residential and commercial sectors in 2038 in the expanded programs scenario.

shown in Figure 19, with the current programs scenario on the left, and the expanded portfolio on the right.

**Figure 16. Residential Program Savings in 2023**



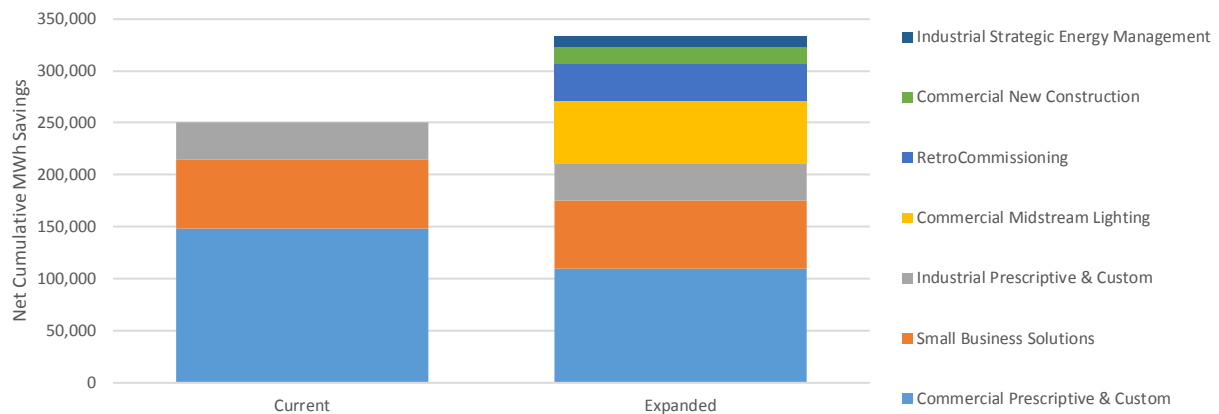
Note: Duct sealing is included in the HVAC and Tune-up program and in New Homes. Air sealing is included in Home Audit and Retrofit and in New Homes. Insulation is in the Home Audit and Retrofit program and in New Homes.

**Midstream Lighting and RetroCommissioning drive expanded programs savings in the C&I Sectors**

Expanded programs could increase C&I savings by a third above the current programs scenario (Figure 20). A Midstream Lighting program was modeled in the expanded programs scenario. Many utilities are currently implementing midstream programs, which pay incentives to lighting distributors, instead of to customers on a prescriptive basis. One advantage of the midstream approach is that it increases the volume of efficient lighting in the marketplace. Another advantage is that it can facilitate participation for businesses, because they do not have to fill out an application to receive an incentive for midstream lighting measures, which is required for the prescriptive approach.

In the expanded programs scenario, all non-fixture-based lighting, including the linear florescent lighting and the LED bulbs, was moved from the Prescriptive and Custom program to a Midstream program, which resulted in a net increase in savings for these lighting measure types. However, because these measures were removed from the Prescriptive and Custom program, the overall savings for that program is lower in the expanded programs scenario than in the current programs scenario. This avoids double-counting savings for the same measures: If ELL were to pay distributors to reduce the cost of efficient lighting, they could not also pay an incentive for the same measures through the Prescriptive and Custom program and claim savings for both programs.

Figure 7. C&I Program Savings in 2023



### Cost-effectiveness

The residential portfolio of programs is cost-effective in both scenarios, as shown in Figure 21. On the left, you can see the annual program costs, in millions. These include all program costs, including incentive and non-incentive costs. To be clear, these costs are not cumulative. They are the estimated costs that are due to that program during that year. On the right in Figure 21 are the levelized cost per kWh and the TRC test results. Levelized costs range from 1.0 to 7.0 cents per kWh. Levelized costs were calculated as the present value of the stream of program costs over the period of analysis divided by the stream of savings, which is also discounted using the same discount rate used to calculate the present value of the costs. TRC benefits include all energy and capacity savings over the lifetime of the measures installed by the programs; TRC costs include program non-incentive costs and measure incremental costs. In the expanded programs scenario, or Residential program, TRC benefits outweigh TRC costs by a factor of 3.0.

Commercial programs are also cost-effective, with total benefits outweighing total costs by a factor of 1.9 in the expanded programs scenario; the Industrial sector TRC ratio is 3.2 in the expanded programs scenario (Figure 22).

The combined portfolio of residential, commercial and industrial programs has a TRC ratio of 2.3 in the current programs scenario, and 2.4 in the expanded programs scenario.

Figure 8. Residential Program Costs and Cost-effectiveness Results

Program	Annual Program Costs (2018 \$ mil)				Levelized \$ / kWh	TRC Test
	2023	2028	2033	2038		
Lighting, Appliances and Electronics	\$ 1.0	\$ 0.9	\$ 0.9	\$ 1.0	\$ 0.04	1.7
HVAC and Tune-up	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.8	\$ 0.01	4.0
Home Audit and Retrofit	\$ 8.0	\$ 8.1	\$ 7.9	\$ 7.7	\$ 0.03	2.9
Income-Qualified Weatherization	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.07	1.9
<b>Total Residential Programs – Current Programs Scenario</b>	<b>\$ 11.4</b>	<b>\$ 11.5</b>	<b>\$ 11.3</b>	<b>\$ 11.2</b>	<b>\$ 0.03</b>	<b>3.0</b>
ENERGY STAR New Homes	\$ 0.4	\$ 1.6	\$ 1.7	\$ 1.7	\$ 0.01	4.2
Appliances Recycling	\$ 2.3	\$ 1.7	\$ 1.9	\$ 2.0	\$ 0.03	1.9
Home Energy Use Benchmarking	\$ 0.4	\$ 0.1	\$ 0.2	\$ 0.3	\$ 0.02	5.1
<b>Grand Total Residential Programs – Expanded + Current Programs Scenarios</b>	<b>\$ 14.5</b>	<b>\$ 15.0</b>	<b>\$ 15.0</b>	<b>\$ 15.2</b>	<b>\$ 0.02</b>	<b>3.0</b>

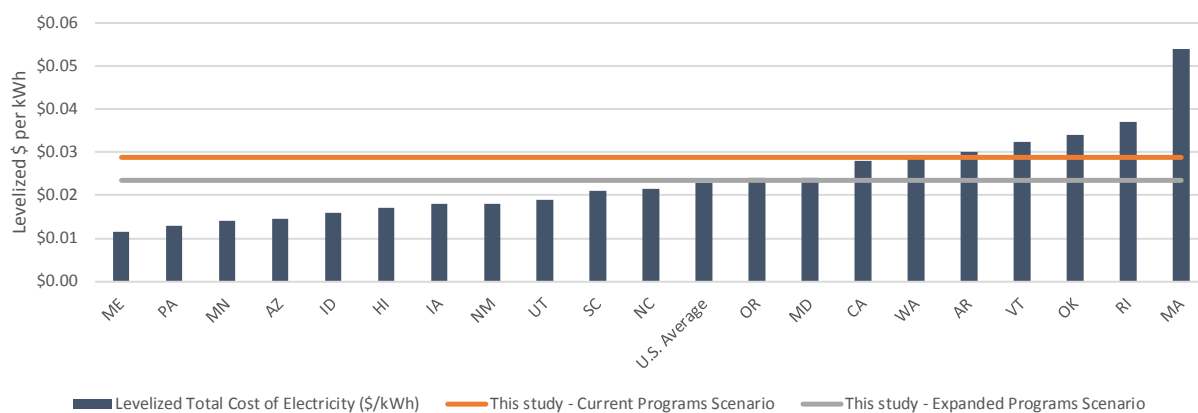


Figure 22. C&I Program Costs and Cost-effectiveness Results

Program	Annual Program Costs (2018 \$ mil)				Levelized \$ / kWh	TRC Test
	2023	2028	2033	2038		
Small Business Solutions	\$ 3.2	\$ 2.7	\$ 2.3	\$ 2.4	\$ 0.02	2.2
Current Commercial Prescriptive & Custom	\$ 13.5	\$ 13.0	\$ 12.9	\$ 12.9	\$ 0.04	1.8
<b>Total Commercial Programs – Current Programs Scenario</b>	<b>\$ 16.6</b>	<b>\$ 15.7</b>	<b>\$ 15.2</b>	<b>\$ 15.3</b>	<b>\$ 0.03</b>	<b>1.9</b>
RetroCommissioning	\$ 0.3	\$ 0.3	\$ 0.3	\$ 0.3	\$ 0.01	3.6
Commercial New Construction	\$ 0.7	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.01	2.3
Commercial Prescriptive & Custom	\$ 8.4	\$ 8.7	\$ 8.4	\$ 8.4	\$ 0.03	2.3
Midstream Commercial Lighting	\$ 7.0	\$ 6.2	\$ 6.2	\$ 6.3	\$ 0.06	1.1
<b>Grand Total Commercial Programs – Expanded + Current Programs Scenarios</b>	<b>\$ 19.6</b>	<b>\$ 18.7</b>	<b>\$ 18.1</b>	<b>\$ 18.3</b>	<b>\$ 0.03</b>	<b>1.9</b>
Industrial Prescriptive & Custom	\$ 2.0	\$ 2.0	\$ 1.9	\$ 1.8	\$ 0.03	3.2
<b>Industrial Programs – Current Programs Scenario</b>	<b>\$ 2.0</b>	<b>\$ 2.0</b>	<b>\$ 1.9</b>	<b>\$ 1.8</b>	<b>\$ 0.03</b>	<b>3.2</b>
Industrial Strategic Energy Management	\$ 0.6	\$ 0.5	\$ 0.5	\$ 0.4	\$ 0.03	3.3
<b>Grand Total Industrial Programs – Expanded + Current Programs Scenario</b>	<b>\$ 2.6</b>	<b>\$ 2.5</b>	<b>\$ 2.3</b>	<b>\$ 2.3</b>	<b>\$ 0.03</b>	<b>3.2</b>
<b>Portfolio Total – Current Programs Scenario</b>	<b>\$ 30.0</b>	<b>\$ 29.2</b>	<b>\$ 28.3</b>	<b>\$ 28.3</b>	<b>\$ 0.03</b>	<b>2.3</b>
<b>Portfolio Total – Expanded Programs Scenario</b>	<b>\$ 36.7</b>	<b>\$ 36.2</b>	<b>\$ 35.5</b>	<b>\$ 35.7</b>	<b>\$ 0.03</b>	<b>2.4</b>

Program costs estimated for this study are reasonable compared to recent program costs incurred by efficiency program administrators across the country (Figure 23). The levelized cost of 2.4 cents per kWh saved in the reference case for this study is close to the national average and similar to the levelized cost in Maryland and California. The high case cost of 2.9 cents per kWh is similar to the spending level in Arkansas, and lower than in states with high energy efficiency performance standards, such as Massachusetts and Rhode Island.<sup>19</sup>

Figure 29. Levelized Program Administrator Cost per Gross Unit Saved Across 20 States and the United States



<sup>19</sup> Lawrence Berkeley National Laboratory (LBNL). The Total Cost of Saving Electricity through Utility Customer-Funded Energy Efficiency Programs, April 2015, <https://emp.lbl.gov/sites/all/files/total-cost-of-saved-energy.pdf>.

To summarize, there is significant cost-effective, achievable savings potential in both the residential and commercial sectors in the ELL service area. We expect residential savings to move away from lighting and toward whole home retrofit projects and air conditioning. And commercial program savings could be expanded by adding new program types, such as Midstream Lighting and RetroCommissioning. The potential in the industrial sector is lower, but there is still room for expansion above current programs performance, which could be achieved by the addition of program elements such as Strategic Energy Management.

## V. IRP INPUTS

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Using the outputs of this study, ICF developed the energy efficiency inputs for ELL's IRP, including load shapes, annual program costs, and benefit-cost results. We aggregated measure level load shapes to the program level and used these program-level load shapes in the IRP analysis.

## VI. APPENDICES

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- A. Measure Assumptions
- B. Payback Acceptance Curves and Participation Approaches Utilized, and Net-to-Gross Assumptions
- C. Avoided Costs



# Residential Measures

MEASURE DESCRIPTION								
Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name	Efficient Measure Definition	Baseline Definition
1	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	TOP LOADING - MEF >=2.06;WF<=4.3	TOP LOADING - Current federal minimum efficiency levels ; Gas WH, Gas Dryer
2	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	TOP LOADING - MEF >=2.06;WF<=4.3	TOP LOADING - Current federal minimum efficiency levels ; Gas WH, Elec Dryer
3	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	TOP LOADING - MEF >=2.06;WF<=4.3	TOP LOADING - Current federal minimum efficiency levels ; Elec WH, Gas Dryer
4	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	TOP LOADING - MEF >=2.06;WF<=4.3	TOP LOADING - Current federal minimum efficiency levels ; Elec WH, Elec Dryer
5	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Gas WH, Gas Dryer
6	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Gas WH, Elec Dryer
7	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Elec WH, Gas Dryer
8	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Elec WH, Elec Dryer
9	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Gas WH, Gas Dryer
10	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Gas WH, Elec Dryer
11	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Elec WH, Gas Dryer
12	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® clothes washer	FRONT LOADING - MEF>=2.38,WF<=3.7	FRONT LOADING - Current federal minimum efficiency levels ; Elec WH, Elec Dryer
13	NWS	Residential	All	All	Appliances	ENERGY STAR® Dryers	Vented Electric, Standard; (4.4 ft³ or greater capacity)	Current federal minimum efficiency levels
14	NWS	Residential	Mobile	All	Appliances	ENERGY STAR® Dryers	Vented Electric, Compact (120V) ; < 4.4 ft³ capacity	Current federal minimum efficiency levels
15	NWS	Residential	Mobile	All	Appliances	ENERGY STAR® Dryers	Vented Electric, Compact (240V) < 4.4 ft³	Current federal minimum efficiency levels
16	NWS	Residential	Mobile	All	Appliances	ENERGY STAR® Dryers	Ventless Electric, Compact (240V) < 4.4 ft³	Current federal minimum efficiency levels
17	NWS	Residential	All	All	Appliances	ENERGY STAR® Dryers	Heat Pump Clothes Dryer	Current federal minimum efficiency levels
18	NWS	Residential	All	Gas Water Heater	Appliances	ENERGY STAR® Dishwashers	ENERGY STAR® Dishwashers -Standard Gas	<3.5 Gallons/Cycle-Standard
19	NWS	Residential	All	Electric Water Heater	Appliances	ENERGY STAR® Dishwashers	ENERGY STAR® Dishwashers -Standard Electric	<3.5 Gallons/Cycle-Standard
20	NWS	Residential	All	All	Appliances	Efficient Refrigerator	Full-Size (7.75 ft³ or greater) ENERGY STAR® refrigerator	Federal Standard Refrigerator
21	NWS	Residential	All	All	Appliances	Efficient Refrigerator	ENERGYSTAR Most Efficient Refrigerator / CEE Tier 2	Federal Standard Refrigerator
22	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 1 APS - 5 Plug Average	Regular Power Strip
23	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 1 APS - 7 Plug Average	Regular Power Strip
24	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 2 APS - 5 plug Average	Regular Power Strip
25	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 1 APS - 5 Plug Average	Regular Power Strip
26	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 1 APS - 7 Plug Average	Regular Power Strip
27	NWS	Residential	All	All	Consumer Electronics	Advanced Power Strips	Tier 2 APS - 5 plug Average	Regular Power Strip
28	NWS	Residential	SingleFamily&Duplex	All	Appliances	ENERGY STAR® Ceiling Fans	ENERGY STAR Ceiling Fan and Lighting-3 LED 9 W bulbs	Non-Energy Star Fan;3 bulbs 43 W Lighting
29	NWS	Residential	All	All	Appliances	ENERGY STAR® Dehumidifiers	ENERGY STAR >=1.85 L/kWh	Federal Standard -1.50 L/kWh
30	NWS	Residential	All	All	Appliances	ENERGY STAR® Dehumidifiers	ENERGY STAR >=2.80 L/kWh	Federal Standard 2.5 L/kWh
31	NWS	Residential	SingleFamily&Duplex	All	Other	ENERGY STAR® Pool Pumps	ENERGY STAR® certified variable speed (0.5-3) HP - Average	Single Speed Pool Pump (0.5-3) HP
32	NWS	Residential	SingleFamily&Duplex	All	Other	ENERGY STAR® Pool Pumps	ENERGY STAR® certified Multi speed (0.5-3) HP - Average	Single Speed Pool Pump (0.5-3) HP
33	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; AC with Electric Resistance
34	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; Heat Pump
35	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; AC with Gas Furnace
36	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; Unconditioned space
37	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; AC with Electric Resistance
38	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; Heat Pump
39	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; AC with Gas Furnace
40	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 50 Gal - EF 2.75	Electric Water heater 50 Gal - EF 0.95 ; Unconditioned space
41	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; AC with Electric Resistance
42	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; Heat Pump
43	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; AC with Gas Furnace
44	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; Unconditioned space
45	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; AC with Electric Resistance
46	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; Heat Pump
47	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; AC with Gas Furnace
48	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Heat Pump Water Heater 80 Gal	Electric Water heater 80 Gal - EF 1.97 ; Unconditioned space
49	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Solar Water Heater 40 Gal	Electric Water heater 80 Gal - EF 0.95
50	NWS	Residential	All	Electric Water Heater	Hot Water	Water Heater Replacement	Solar Water Heater 40 Gal	Electric Water heater 80 Gal - EF 0.95
51	NWS	Residential	SingleFamily&Duplex	Electric Water Heater	Hot Water	Water Heater Jackets	Minimum insulation of R-6.7 ; 2" WHJ - 40 gal	Post 1991 Uninsulated Storage type water heater
52	NWS	Residential	SingleFamily&Duplex	Electric Water Heater	Hot Water	Water Heater Jackets	Minimum insulation of R-6.7 ; 3" WHJ - 40 Gal	Post 1991 Uninsulated Storage type water heater
53	NWS	Residential	SingleFamily&Duplex	Electric Water Heater	Hot Water	Water Heater Pipe Insulation	R-value 3 ; Pipe Dia 1/2"	Un-insulated hot water pipes
54	NWS	Residential	SingleFamily&Duplex	Electric Water Heater	Hot Water	Water Heater Pipe Insulation	R-value 3 ; Pipe Dia 3/4"	Un-insulated hot water pipes
55	NWS	Residential	All	Electric Water Heater	Hot Water	Faucet Aerators	<=1.5 GPM	2.2 GPM
56	NWS	Residential	All	Electric Water Heater	Hot Water	Faucet Aerators	<=1.0 GPM	2.2 GPM
57	NWS	Residential	All	Electric Water Heater	Hot Water	Low-Flow Showerheads	2.0 GPM	2.5 GPM
58	NWS	Residential	All	Electric Water Heater	Hot Water	Low-Flow Showerheads	1.75 GPM	2.5 GPM

# Residential Measures

MEASURE DESCRIPTION								
Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name	Efficient Measure Definition	Baseline Definition
59	NWS	Residential	All	Electric Water Heater	Hot Water	Low-Flow Showerheads	1.5 GPM	2.5 GPM
60	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 15	SEER 14
61	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 16	SEER 14
62	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 17	SEER 14
63	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 18	SEER 14
64	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 19	SEER 14
65	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 20	SEER 14
66	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 21	SEER 14
67	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 15	SEER 14
68	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 16	SEER 14
69	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 17	SEER 14
70	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 18	SEER 14
71	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 19	SEER 14
72	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 20	SEER 14
73	WS	Residential	All	AC	HVAC	Central Air Conditioner Replacement	SEER 21	SEER 14
74	WS	Residential	All	Gas Heat (No AC)	HVAC	Window Air Conditioner Replacement	12 CEER 9000 BTU	10.9 CEER 9000 BTU
75	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 15	SEER 14
76	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 16	SEER 14
77	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 17	SEER 14
78	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 18	SEER 14
79	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 19	SEER 14
80	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 20	SEER 14
81	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 21	SEER 14
82	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 15	SEER 14
83	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 16	SEER 14
84	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 17	SEER 14
85	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 18	SEER 14
86	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 19	SEER 14
87	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 20	SEER 14
88	WS	Residential	All	Heat Pump	HVAC	Heat Pump Replacement	SEER 21	SEER 14
89	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Ground Source Heat Pump Replacement	Energy Star Water to Air ground source heat pump	Air-source heat pump;11.8 EER;8.2 and 8.0 HSPF
90	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Ground Source Heat Pump Replacement	Energy Star Water to Air ground source heat pump	Air-source heat pump;11.8 EER;8.2 and 8.0 HSPF
91	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Ductless Heat Pump	SEER 21.17; HSPF 10.43	14 SEER; 8.0 HSPF
92	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Ductless Heat Pump	SEER 21.17; HSPF 10.43	14 SEER; 8.0 HSPF
93	WS	Residential	SingleFamily&Duplex	AC	HVAC	MiniSplit AC	SEER 21.17	14 SEER
94	WS	Residential	SingleFamily&Duplex	AC	HVAC	MiniSplit AC	SEER 21.17	14 SEER
95	WS	Residential	All	AC	HVAC	Central Air Conditioner Tune-Up	System functioning at the manufacture specified EER	System with demonstrated imbalances of refrigerant charge
96	WS	Residential	All	Heat Pump	HVAC	Central Heat Pump Tune-Up	System functioning at the manufacture specified EER	System with demonstrated imbalances of refrigerant charge
97	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
98	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
99	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
100	WS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
101	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
102	WS	Residential	SingleFamily&Duplex	Heat Pump	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
103	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
104	WS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	HVAC	Duct Sealing	Average leakage reduction 307	unsealed ductwork, with a maximum pre-installation leakage rate of 40% of total fan flow
105	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Attic Knee Wall Insulation	R-30	No Insulation
106	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Attic Knee Wall Insulation	R-30	No Insulation
107	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Attic Knee Wall Insulation	R-30	No Insulation
108	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Attic Knee Wall Insulation	R-30	No Insulation
109	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Ceiling Insulation	R-30	R-0 to R-22
110	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Ceiling Insulation	R-30	R-0 to R-22
111	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Ceiling Insulation	R-30	R-0 to R-22
112	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Ceiling Insulation	R-38	R-0 to R-22
113	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Ceiling Insulation	R-38	R-0 to R-22
114	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Ceiling Insulation	R-38	R-0 to R-22
115	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Ceiling Insulation	R-49	R-0 to R-22
116	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Ceiling Insulation	R-49	R-0 to R-22
117	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Ceiling Insulation	R-49	R-0 to R-22
118	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Ceiling Insulation	R-38	R-30
119	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Ceiling Insulation	R-38	R-30
120	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Ceiling Insulation	R-38	R-30
121	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Ceiling Insulation	R-49	R-30
122	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Ceiling Insulation	R-49	R-30

# Residential Measures

MEASURE DESCRIPTION								
Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name	Efficient Measure Definition	Baseline Definition
123	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Ceiling Insulation	R-49	R-30
124	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Wall Insulation	R-13	Uninsulated wall Cavity
125	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Wall Insulation	R-13	Uninsulated wall Cavity
126	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Wall Insulation	R-13	Uninsulated wall Cavity
127	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Wall Insulation	R-23	Uninsulated wall Cavity
128	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Wall Insulation	R-23	Uninsulated wall Cavity
129	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Wall Insulation	R-23	Uninsulated wall Cavity
130	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Floor Insulation	R-19	No Insulation
131	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Floor Insulation	R-19	No Insulation
132	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Floor Insulation	R-19	No Insulation
133	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Window Film	Solar Film with SHGC <0.50	Single-pane window with no existing solar films - Average
134	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Window Film	Solar Film with SHGC <0.50	Single-pane window with no existing solar films - Average
135	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Window Film	Solar Film with SHGC <0.50	Single-pane window with no existing solar films - Average
136	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Window Film	Solar Film with SHGC <0.50	double-pane window with no existing solar films - Average
137	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Window Film	Solar Film with SHGC <0.50	double-pane window with no existing solar films - Average
138	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Window Film	Solar Film with SHGC <0.50	double-pane window with no existing solar films - Average
139	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Air Infiltration	Avg leakage reduction: 2.045 CFM	existing leakage rate of the residence to be treated
140	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Air Infiltration	Avg leakage reduction: 2.045 CFM	existing leakage rate of the residence to be treated
141	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Air Infiltration	Avg leakage reduction: 2.045 CFM	existing leakage rate of the residence to be treated
142	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - A-type Omni-directional General Purpose Lighting	43W EISA compliant lamp
143	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - Generic Specialty Lamp	60W EISA-exempt incandescent generic specialty lamp
144	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - A-type Omni-directional General Purpose Lighting	15 W CFL
145	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - A-type Omni-directional General Purpose Lighting	60W Inc
146	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - Generic Specialty Lamp	60W EISA-exempt incandescent generic specialty lamp
147	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - A-type Omni-directional General Purpose Lighting	43W EISA compliant lamp
148	NWS	Residential	All	All	Lighting	Residential Lighting Efficiency	12 W LED - Generic Specialty Lamp	60W EISA-exempt incandescent generic specialty lamp
149	NWS	Residential	SingleFamily&Duplex	All	Lighting	Residential Exterior Lighting Efficiency	Outdoor 12 W LED - A-type Omni-directional General Purpose Lighting	Outdoor 43W EISA compliant lamp
150	NWS	Residential	SingleFamily&Duplex	All	Lighting	Residential Exterior Lighting Efficiency	Outdoor 12 W LED - A-type Omni-directional General Purpose Lighting	Outdoor 43W EISA compliant lamp
151	NWS	Residential	SingleFamily&Duplex	All	Lighting	Residential Exterior Lighting Efficiency	Outdoor 12 W LED - A-type Omni-directional General Purpose Lighting	Outdoor 15W CFL
152	NWS	Residential	SingleFamily&Duplex	All	Lighting	Residential Exterior Lighting Efficiency	Lighting	Outdoor 60W Inc
153	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	single pane
154	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	single pane
155	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	single pane
156	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	single pane
157	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	double pane
158	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	double pane
159	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	double pane
160	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Energy Star Windows	U-0.35 and SHGC 0.3	double pane
161	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
162	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
163	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
164	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
165	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
166	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
167	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
168	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Radiant Barriers	Ceiling insulation > R-19w/radiant barrier	Ceiling insulation > R-19w/o radiant barrier
169	WS	Residential	Mobile	AC/Gas Heat	Shell	Belly Insulation	R-19	No Insulation
170	WS	Residential	Mobile	Gas Heat (No AC)	Shell	Belly Insulation	R-19	No Insulation
171	WS	Residential	Mobile	AC/Electric Resistance Heat	Shell	Belly Insulation	R-19	No Insulation
172	WS	Residential	Mobile	Heat Pump	Shell	Belly Insulation	R-19	No Insulation
173	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Roof Deck Insulation	R-19	R-4 to R-7
174	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Roof Deck Insulation	R-19	R-4 to R-7
175	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Roof Deck Insulation	R-19	R-4 to R-7
176	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Roof Deck Insulation	R-19	R-4 to R-7
177	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Energy Star Windows	Energy Star Southern Climate Zone Windows (U = 0.4, SHGC = 0.25)	IECC Climate Zone 2 Standard Windows (U = 0.65, SHGC = 0.3)
178	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Energy Star Windows	Energy Star Southern Climate Zone Windows (U = 0.4, SHGC = 0.25)	IECC Climate Zone 2 Standard Windows (U = 0.65, SHGC = 0.3)
179	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Energy Star Windows	Energy Star Southern Climate Zone Windows (U = 0.4, SHGC = 0.25)	IECC Climate Zone 2 Standard Windows (U = 0.65, SHGC = 0.3)
180	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Energy Star Windows	Energy Star Southern Climate Zone Windows (U = 0.4, SHGC = 0.25)	IECC Climate Zone 2 Standard Windows (U = 0.65, SHGC = 0.3)
181	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Wall Insulation	R20 Wall Insulation	IECC Standard Wall Insulation CZ 2 & 3 (R13)
182	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Wall Insulation	R20 Wall Insulation	IECC Standard Wall Insulation CZ 2 & 3 (R13)
183	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Wall Insulation	R20 Wall Insulation	IECC Standard Wall Insulation CZ 2 & 3 (R13)
184	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Wall Insulation	R20 Wall Insulation	IECC Standard Wall Insulation CZ 2 & 3 (R13)
185	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Shell	Air Infiltration	IECC 2012 Standard Air Leakage 3 ACH 50	IECC 2009 Standard Air Leakage 7 ACH 50
186	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Shell	Air Infiltration	IECC 2012 Standard Air Leakage 3 ACH 50	IECC 2009 Standard Air Leakage 7 ACH 50
187	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Shell	Air Infiltration	IECC 2012 Standard Air Leakage 3 ACH 50	IECC 2009 Standard Air Leakage 7 ACH 50
188	WS	Residential	SingleFamily&Duplex	Heat Pump	Shell	Air Infiltration	IECC 2012 Standard Air Leakage 3 ACH 50	IECC 2009 Standard Air Leakage 7 ACH 50

# Residential Measures

MEASURE DESCRIPTION								
Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name	Efficient Measure Definition	Baseline Definition
189	WS	Residential	SingleFamily&Duplex	All	HVAC	High Efficiency Bathroom Exhaust Fan	Exhaust fan, 8.3 CFM/W, <2.0 sones (quiet),ASHRAE 62.2	Exhaust fan, 3.1 CFM/W, <2.0 sones (quiet),ASHRAE 62.2
190	NWS	Residential	All	All	Appliances	Refrigerator/Freezer Recycling	Recycling Secondary Refrigerator	Functioning Secondary Refrigerator
191	NWS	Residential	All	All	Appliances	Refrigerator/Freezer Recycling	Recycling Secondary Freezer	Functioning Secondary Freezer
192	WS	Residential	All	Gas Heat (No AC)	HVAC	Room Air Conditioner Recycling	Recycling of non-efficient window AC unit	Inefficient window AC unit
193	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR 6.0 TV + 35% (41-50")	ENERGY STAR 6.0 TV + 35% (41-50")	ENERGY STAR 4.0 TV (41-50")
194	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR + 10% Display	ENERGY STAR + 10% Display	ENERGY STAR Display
195	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR PC	ENERGY STAR PC	Conventional PC
196	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR 6.0 TV + 35% (41-50")	ENERGY STAR 6.0 TV + 35% (41-50")	ENERGY STAR 4.0 TV (41-50")
197	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR + 10% Display	ENERGY STAR + 10% Display	ENERGY STAR Display
198	NWS	Residential	All	All	Consumer Electronics	ENERGY STAR PC	ENERGY STAR PC	Conventional PC
199	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 15	Existing system, electric resistance heating
200	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 16	Existing system, electric resistance heating
201	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 17	Existing system, electric resistance heating
202	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 18	Existing system, electric resistance heating
203	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 19	Existing system, electric resistance heating
204	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 20	Existing system, electric resistance heating
205	WS	Residential	All	Electric Resistance Heating	HVAC	Heat Pump Replacement	SEER 21	Existing system, electric resistance heating
206	NWS	Residential	SingleFamily&Duplex	All	Other	Home Energy Audit	Duct and Envelope Test-in/Test-out	Duct and Envelope Test-in/Test-out
207	NWS	Residential	Multifamily	All	Other	Home Energy Audit	MF Energy Audit	Direct Install
208	WS	Residential	All	All	Other	Low-Income Weatherization Package	Existing LI Home	0
209	NWS	Residential	All	All	Other	Online Audit / Behavioral	Online Audit / Behavioral	0
210	NWS	Residential	All	All	Other	Benchmarking	2% Energy savings on average	0
211	NWS	Residential	All	AC/Gas Heat	Other	Smart Homes	Smart Homes	Regular home
212	NWS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Other	Smart Homes	Smart Homes	Regular home
213	NWS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Other	Smart Homes	Smart Homes	Regular home
214	NWS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	Other	Smart Homes	Smart Homes	Regular home
215	NWS	Residential	SingleFamily&Duplex	Heat Pump	Other	Smart Homes	Smart Homes	Regular home
216	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Other	Smart Thermostat	Smart Thermostat	Traditional thermostat
217	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Other	Smart Thermostat	Smart Thermostat	Traditional thermostat
218	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Other	Smart Thermostat	Smart Thermostat	Traditional thermostat
219	WS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	Other	Smart Thermostat	Smart Thermostat	Traditional thermostat
220	WS	Residential	SingleFamily&Duplex	Heat Pump	Other	Smart Thermostat	Smart Thermostat	Traditional thermostat
221	WS	Residential	All	AC/Gas Heat	Other	Home Energy Report	Home Energy Report	No report
222	WS	Residential	All	Gas Heat (No AC)	Other	Home Energy Report	Home Energy Report	No report
223	WS	Residential	All	AC/Electric Resistance Heat	Other	Home Energy Report	Home Energy Report	No report
224	WS	Residential	All	Electric Resistance Heat/No CAC	Other	Home Energy Report	Home Energy Report	No report
225	WS	Residential	All	Heat Pump	Other	Home Energy Report	Home Energy Report	No report
226	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Other	Real-Time Feedback (In-Home Displays)	Real-Time Feedback (In-Home Displays)	No feedback
227	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Other	Real-Time Feedback (In-Home Displays)	Real-Time Feedback (In-Home Displays)	No feedback
228	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Other	Real-Time Feedback (In-Home Displays)	Real-Time Feedback (In-Home Displays)	No feedback
229	WS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	Other	Real-Time Feedback (In-Home Displays)	Real-Time Feedback (In-Home Displays)	No feedback
230	WS	Residential	SingleFamily&Duplex	Heat Pump	Other	Real-Time Feedback (In-Home Displays)	Real-Time Feedback (In-Home Displays)	No feedback
231	WS	Residential	SingleFamily&Duplex	AC/Gas Heat	Other	Real-Time Feedback (Online Platform)	Real-Time Feedback (Online Platform)	No feedback
232	WS	Residential	SingleFamily&Duplex	Gas Heat (No AC)	Other	Real-Time Feedback (Online Platform)	Real-Time Feedback (Online Platform)	No feedback
233	WS	Residential	SingleFamily&Duplex	AC/Electric Resistance Heat	Other	Real-Time Feedback (Online Platform)	Real-Time Feedback (Online Platform)	No feedback
234	WS	Residential	SingleFamily&Duplex	Electric Resistance Heat/No CAC	Other	Real-Time Feedback (Online Platform)	Real-Time Feedback (Online Platform)	No feedback
235	WS	Residential	SingleFamily&Duplex	Heat Pump	Other	Real-Time Feedback (Online Platform)	Real-Time Feedback (Online Platform)	No feedback

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
1	Per Appliance	ROB	14	14	190.00	23.0	0.005	9.90	0.0	0.000
2	Per Appliance	ROB	14	14	190.00	192.0	0.045	4.10	0.0	0.000
3	Per Appliance	ROB	14	14	190.00	114.0	0.027	5.80	0.0	0.000
4	Per Appliance	ROB	14	14	190.00	282.0	0.067	0.00	0.0	0.000
5	Per Appliance	ROB	14	14	190.00	38.0	0.009	12.40	0.0	0.000
6	Per Appliance	ROB	14	14	190.00	198.0	0.047	7.00	0.0	0.000
7	Per Appliance	ROB	14	14	190.00	191.0	0.045	5.40	0.0	0.000
8	Per Appliance	ROB	14	14	190.00	351.0	0.083	0.00	0.0	0.000
9	Per Appliance	ROB	14	14	190.00	6.0	0.002	4.10	0.0	0.000
10	Per Appliance	ROB	14	14	190.00	93.0	0.022	1.20	0.0	0.000
11	Per Appliance	ROB	14	14	190.00	32.0	0.008	3.00	0.0	0.000
12	Per Appliance	ROB	14	14	190.00	119.0	0.028	0.00	0.0	0.000
13	Per Appliance	ROB	12	12	40.00	152.4	0.023	0.00	0.0	0.000
14	Per Appliance	ROB	12	12	40.00	55.7	0.008	0.00	0.0	0.000
15	Per Appliance	ROB	12	12	40.00	61.7	0.009	0.00	0.0	0.000
16	Per Appliance	ROB	12	12	40.00	77.7	0.012	0.00	0.0	0.000
17	Per Appliance	ROB	12	12	278.37	431.6	0.064	0.00	0.0	0.000
18	Per Appliance	ROB	15	15	10.00	5.0	0.001	0.30	0.0	0.000
19	Per Appliance	ROB	15	15	10.00	12.0	0.001	0.00	0.0	0.000
20	Per Appliance	ROB	17	17	40.00	62.3	0.014	0.00	0.0	0.000
21	per appliance	ROB	17	17	140.00	110.4	0.016	0.00	0.0	0.000
22	Per strip	RET	10	10	16.00	48.9	0.006	0.00	0.0	0.000
23	Per strip	RET	10	10	26.00	58.4	0.007	0.00	0.0	0.000
24	Per strip	RET	10	10	65.00	204.2	0.019	0.00	0.0	0.000
25	Per strip	ROB	10	10	11.13	48.9	0.006	0.00	0.0	0.000
26	Per strip	ROB	10	10	21.13	58.4	0.007	0.00	0.0	0.000
27	Per strip	ROB	10	10	60.13	204.2	0.019	0.00	0.0	0.000
28	Per Appliance	ROB	20	20	46.00	89.6	0.011	0.00	0.0	0.000
29	Per Appliance	ROB	12	12	60.00	183.0	0.045	0.00	0.0	0.000



Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
30	Per Appliance	ROB	12	12	60.00	180.0	0.045	0.00	0.0	0.000
31	Per Appliance	RET	10	10	549.00	2,431.6	0.451	0.00	0.0	0.000
32	Per Appliance	RET	10	10	235.00	1,989.2	0.422	0.00	0.0	0.000
33	Per Appliance	ROB	13	13	1,027.00	1,415.0	0.124	0.00	0.0	0.000
34	Per Appliance	ROB	13	13	1,027.00	1,700.0	0.149	0.00	0.0	0.000
35	Per Appliance	ROB	13	13	1,027.00	2,371.0	0.208	0.00	0.0	0.000
36	Per Appliance	ROB	13	13	1,027.00	2,483.0	0.218	0.00	0.0	0.000
37	Per Appliance	NEW	13	13	1,027.00	1,415.0	0.124	0.00	0.0	0.000
38	Per Appliance	NEW	13	13	1,027.00	1,700.0	0.149	0.00	0.0	0.000
39	Per Appliance	NEW	13	13	1,027.00	2,371.0	0.208	0.00	0.0	0.000
40	Per Appliance	NEW	13	13	1,027.00	2,483.0	0.218	0.00	0.0	0.000
41	Per Appliance	ROB	13	13	1,027.00	440.0	0.039	0.00	0.0	0.000
42	Per Appliance	ROB	13	13	1,027.00	529.0	0.046	0.00	0.0	0.000
43	Per Appliance	ROB	13	13	1,027.00	738.0	0.065	0.00	0.0	0.000
44	Per Appliance	ROB	13	13	1,027.00	712.0	0.062	0.00	0.0	0.000
45	Per Appliance	NEW	13	13	1,027.00	440.0	0.039	0.00	0.0	0.000
46	Per Appliance	NEW	13	13	1,027.00	529.0	0.046	0.00	0.0	0.000
47	Per Appliance	NEW	13	13	1,027.00	738.0	0.065	0.00	0.0	0.000
48	Per Appliance	NEW	13	13	1,027.00	712.0	0.062	0.00	0.0	0.000
49	Per Appliance	ROB	15	15	8,401.00	1,832.0	0.161	0.00	0.0	0.000
50	Per Appliance	NEW	15	15	8,401.00	1,832.0	0.161	0.00	0.0	0.000
51	Per Unit	RET	13	13	35.00	68.0	0.005	0.00	0.0	0.000
52	Per Unit	RET	13	13	35.00	94.0	0.007	0.00	0.0	0.000
53	Installed Units	RET	13	13	18.00	151.9	0.017	0.00	0.0	0.000
54	Installed Units	RET	13	13	18.00	227.9	0.026	0.00	0.0	0.000
55	per faucet	RET	10	10	8.00	26.5	0.003	0.00	0.0	0.000
56	per faucet	RET	10	10	8.00	44.2	0.005	0.00	0.0	0.000
57	per showerhead	RET	10	10	12.00	101.0	0.011	0.00	0.0	0.000
58	per showerhead	RET	10	10	12.00	164.0	0.017	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
59	per showerhead	RET	10	10	12.00	226.0	0.024	0.00	0.0	0.000
60	Per home	ROB	19	19	434.35	318.3	0.044	0.00	0.0	0.000
61	Per home	ROB	19	19	726.35	596.8	0.246	0.00	0.0	0.000
62	Per home	ROB	19	19	1,087.70	842.6	0.419	0.00	0.0	0.000
63	Per home	ROB	19	19	1,449.05	1,061.1	0.568	0.00	0.0	0.000
64	Per home	ROB	19	19	1,814.05	1,256.5	0.700	0.00	0.0	0.000
65	Per home	ROB	19	19	2,076.85	1,432.4	0.815	0.00	0.0	0.000
66	Per home	ROB	19	19	2,536.75	1,591.6	0.918	0.00	0.0	0.000
67	Per home	NEW	19	19	434.35	318.3	0.044	0.00	0.0	0.000
68	Per home	NEW	19	19	726.35	596.8	0.246	0.00	0.0	0.000
69	Per home	NEW	19	19	1,087.70	842.6	0.419	0.00	0.0	0.000
70	Per home	NEW	19	19	1,449.05	1,061.1	0.568	0.00	0.0	0.000
71	Per home	NEW	19	19	1,814.05	1,256.5	0.700	0.00	0.0	0.000
72	Per home	NEW	19	19	2,076.85	1,432.4	0.815	0.00	0.0	0.000
73	Per home	NEW	19	19	2,536.75	1,591.6	0.918	0.00	0.0	0.000
74	Per Appliance	ROB	10.5	11	50.00	69.2	0.042	0.00	0.0	0.000
75	Per home	ROB	16	16	1,105.95	1,149.0	0.044	0.00	0.0	0.000
76	Per home	ROB	16	16	1,598.70	2,092.0	0.246	0.00	0.0	0.000
77	Per home	ROB	16	16	2,642.60	2,881.4	0.419	0.00	0.0	0.000
78	Per home	ROB	16	16	2,642.60	3,553.0	0.568	0.00	0.0	0.000
79	Per home	ROB	16	16	3,072.60	4,131.8	0.700	0.00	0.0	0.000
80	Per home	ROB	16	16	3,502.60	4,636.3	0.815	0.00	0.0	0.000
81	Per home	ROB	16	16	3,932.60	5,080.3	0.918	0.00	0.0	0.000
82	Per home	NEW	16	16	1,105.95	1,149.0	0.044	0.00	0.0	0.000
83	Per home	NEW	16	16	1,598.70	2,092.0	0.246	0.00	0.0	0.000
84	Per home	NEW	16	16	2,642.60	2,881.4	0.419	0.00	0.0	0.000
85	Per home	NEW	16	16	2,642.60	3,553.0	0.568	0.00	0.0	0.000
86	Per home	NEW	16	16	3,072.60	4,131.8	0.700	0.00	0.0	0.000
87	Per home	NEW	16	16	3,502.60	4,636.3	0.815	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
88	Per home	NEW	16.0	16	3,932.60	5,080.3	0.918	0.00	0.0	0.000
89	Per home	ROB	25.0	25	9,402.40	4,806.8	1.389	0.00	0.0	0.000
90	Per home	NEW	25.0	25	9,402.40	4,806.8	1.389	0.00	0.0	0.000
91	Per home	ROB	18.0	18	1,757.82	2,093.9	0.129	0.00	0.0	0.000
92	Per home	NEW	18.0	18	1,757.82	2,093.9	0.129	0.00	0.0	0.000
93	Per home	ROB	18.0	18	1,287.25	656.1	0.129	0.00	0.0	0.000
94	Per home	NEW	18.0	18	1,287.25	656.1	0.129	0.00	0.0	0.000
95	Per Home	RET	10.0	10	175.00	854.9	0.304	0.00	0.0	0.000
96	Per Home	RET	10.0	10	175.00	1,243.3	0.304	0.00	0.0	0.000
97	Per Home	RET	18.0	18	368.00	1,496.4	0.704	232.00	0.0	0.000
98	Per Home	RET	18.0	18	368.00	2,674.9	0.704	0.00	0.0	0.000
99	Per Home	RET	18.0	18	368.00	4,155.2	0.704	0.00	0.0	0.000
100	Per Home	RET	18.0	18	368.00	2,658.8	0.000	0.00	0.0	0.000
101	Per Home	NEW	18.0	18	368.00	1,496.4	0.704	232.00	0.0	0.000
102	Per Home	NEW	18.0	18	368.00	2,674.9	0.704	0.00	0.0	0.000
103	Per Home	NEW	18.0	18	368.00	4,155.2	0.704	0.00	0.0	0.000
104	Per Home	NEW	18.0	18	368.00	2,658.8	0.000	0.00	0.0	0.000
105	per home	RET	20.0	20	1,028.00	399.1	0.365	11.45	0.0	0.000
106	per home	RET	20.0	20	1,028.00	15.2	0.005	11.45	0.0	0.000
107	per home	RET	20.0	20	1,028.00	667.6	0.365	0.00	0.0	0.000
108	per home	RET	20.0	20	1,028.00	475.3	0.362	0.00	0.0	0.000
109	Per home	RET	20.0	20	1,715.00	3,570.8	1.781	142.83	0.0	0.000
110	Per home	RET	20.0	20	1,715.00	10,717.9	2.802	0.00	0.0	0.000
111	Per home	RET	20.0	20	1,715.00	6,158.7	2.589	0.00	0.0	0.000
112	Per home	RET	20.0	20	2,172.00	3,638.9	1.815	145.55	0.0	0.000
113	Per home	RET	20.0	20	2,172.00	10,922.8	2.855	0.00	0.0	0.000
114	Per home	RET	20.0	20	2,172.00	6,276.9	2.638	0.00	0.0	0.000
115	Per home	RET	20.0	20	2,801.00	3,695.7	1.843	147.83	0.0	0.000
116	Per home	RET	20.0	20	2,801.00	11,096.9	2.901	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
117	Per home	RET	20.0	20	2,801.00	6,376.5	2.680	0.00	0.0	0.000
118	Per home	NEW	20.0	20	457.00	68.1	0.034	2.72	0.0	0.000
119	Per home	NEW	20.0	20	457.00	204.8	0.054	0.00	0.0	0.000
120	Per home	NEW	20.0	20	457.00	118.1	0.050	0.00	0.0	0.000
121	Per home	NEW	20.0	20	1,086.00	124.9	0.062	5.00	0.0	0.000
122	Per home	NEW	20.0	20	1,086.00	379.0	0.099	0.00	0.0	0.000
123	Per home	NEW	20.0	20	1,086.00	217.8	0.092	0.00	0.0	0.000
124	Per home	RET	20.0	20	1,381.00	1,095.5	0.462	199.81	0.0	0.000
125	Per home	RET	20.0	20	1,381.00	5,779.1	0.462	0.00	0.0	0.000
126	Per home	RET	20.0	20	1,381.00	1,589.9	0.462	0.00	0.0	0.000
127	Per home	RET	20.0	20	1,381.00	1,155.6	0.840	228.61	0.0	0.000
128	Per home	RET	20.0	20	1,381.00	6,514.2	0.840	0.00	0.0	0.000
129	Per home	RET	20.0	20	1,381.00	1,714.5	0.714	0.00	0.0	0.000
130	Per home	RET	20.0	20	1,567.68	0.0	0.000	62.56	366.6	0.000
131	Per home	RET	20.0	20	1,567.68	246.3	0.000	0.00	0.0	0.000
132	Per home	RET	20.0	20	1,567.68	1,099.9	0.000	0.00	0.0	0.000
133	per Total sqft	RET	10.0	10	660.00	1,296.9	0.308	0.00	0.0	0.000
134	per Total sqft	RET	10.0	10	660.00	0.0	0.308	0.00	668.2	0.000
135	per Total sqft	RET	10.0	10	660.00	246.5	0.308	0.00	0.0	0.000
136	per Total sqft	RET	10.0	10	660.00	758.0	0.308	0.00	0.0	0.000
137	per Total sqft	RET	10.0	10	660.00	0.0	0.308	0.00	326.5	0.000
138	per Total sqft	RET	10.0	10	660.00	98.5	0.308	0.00	0.0	0.000
139	Per home	RET	11.0	11	441.00	783.1	0.631	442.44	0.0	0.000
140	Per home	RET	11.0	11	441.00	2,300.0	0.633	0.00	0.0	0.000
141	Per home	RET	11.0	11	441.00	1,557.5	0.633	0.00	0.0	0.000
142	per lamp	ROB	2.0	20	1.96	23.4	0.004	0.00	0.0	0.000
143	per lamp	ROB	2.0	20	2.71	36.2	0.006	0.00	0.0	0.000
144	per lamp	RET	2.0	20	3.21	2.3	0.000	0.00	0.0	0.000
145	per lamp	RET	2.0	20	3.21	26.5	0.004	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
146	per lamp	RET	2.0	20	6.24	36.2	0.006	0.00	0.0	0.000
147	per lamp	NEW	2.0	20	1.96	23.4	0.004	0.00	0.0	0.000
148	per lamp	NEW	2.0	20	2.71	36.2	0.006	0.00	0.0	0.000
149	per bulb	ROB	2.0	20	1.96	23.3	0.000	0.00	0.0	0.000
150	per bulb	NEW	2.0	20	1.96	23.3	0.000	0.00	0.0	0.000
151	per bulb	RET	2.0	20	3.21	2.3	0.000	0.00	0.0	0.000
152	per bulb	RET	2.0	20	3.21	26.5	0.000	0.00	0.0	0.000
153	per home	RET	20.0	20	3,310.00	1,631.2	1.120	120.51	0.0	0.000
154	per home	RET	20.0	20	3,310.00	83.4	0.034	120.51	0.0	0.000
155	per home	RET	20.0	20	3,310.00	4,385.2	1.192	0.00	0.0	0.000
156	per home	RET	20.0	20	3,310.00	2,961.7	1.223	0.00	0.0	0.000
157	per home	ROB	20.0	20	728.20	1,243.7	0.830	60.87	0.0	0.000
158	per home	ROB	20.0	20	728.20	37.7	0.015	60.87	0.0	0.000
159	per home	ROB	20.0	20	728.20	2,634.7	0.900	0.00	0.0	0.000
160	per home	ROB	20.0	20	728.20	1,970.1	0.928	0.00	0.0	0.000
161	per home	RET	25.0	25	683.80	473.3	0.221	26.54	0.0	0.000
162	per home	NEW	25.0	25	683.80	473.3	0.221	26.54	0.0	0.000
163	per home	RET	25.0	25	683.80	2.2	0.001	26.54	0.0	0.000
164	per home	NEW	25.0	25	683.80	2.2	0.001	26.54	0.0	0.000
165	per home	RET	25.0	25	683.80	1,079.8	0.221	0.00	0.0	0.000
166	per home	NEW	25.0	25	683.80	1,079.8	0.221	0.00	0.0	0.000
167	per home	RET	25.0	25	683.80	851.9	0.221	0.00	0.0	0.000
168	per home	NEW	25.0	25	683.80	851.9	0.221	0.00	0.0	0.000
169	Per home	RET	20.0	20	1,120.00	0.0	0.028	13.85	108.1	0.000
170	Per home	RET	20.0	20	1,120.00	10.5	0.000	13.85	0.0	0.000
171	Per home	RET	20.0	20	1,120.00	216.4	0.028	0.00	0.0	0.000
172	Per home	RET	20.0	20	1,120.00	5.3	0.028	0.00	0.0	0.000
173	per home	RET	20.0	20	467.08	1,480.5	0.822	65.61	0.0	0.000
174	per home	RET	20.0	20	467.08	54.0	0.000	65.61	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
175	per home	RET	20.0	20	467.08	3,018.4	0.822	0.00	0.0	0.000
176	per home	RET	20	20	467.08	1,882.7	0.822	0.00	0.0	0.000
177	per home	NEW	20	20	430.00	147.8	0.101	41.14	0.0	0.000
178	per home	NEW	20	20	430.00	7.6	0.003	41.14	0.0	0.000
179	per home	NEW	20	20	430.00	1,087.9	0.108	0.00	0.0	0.000
180	per home	NEW	20	20	430.00	523.8	0.111	0.00	0.0	0.000
181	per home	NEW	20	20	1,732.22	308.8	0.223	28.90	0.0	0.000
182	per home	NEW	20	20	1,732.22	28.0	0.000	28.90	0.0	0.000
183	per home	NEW	20	20	1,732.22	969.3	0.223	0.00	0.0	0.000
184	per home	NEW	20	20	1,732.22	573.0	0.223	0.00	0.0	0.000
185	per home	NEW	11	11	598.90	350.6	0.283	58.82	0.0	0.000
186	per home	NEW	11	11	598.90	47.2	0.000	58.82	0.0	0.000
187	per home	NEW	11	11	598.90	1,694.8	0.283	0.00	0.0	0.000
188	per home	NEW	11	11	598.90	888.3	0.283	0.00	0.0	0.000
189	per unit	RET	19	19	43.50	88.6	0.010	0.00	0.0	0.000
190	per appliance	RET	8	8	170.00	829.8	0.102	0.00	0.0	0.000
191	per appliance	RET	8	8	170.00	785.3	0.092	0.00	0.0	0.000
192	per appliance	RET	4	4	170.00	1,430.4	0.822	0.00	0.0	0.000
193	per unit	ROB	6	6	1.00	108.0	0.027	0.00	0.0	0.000
194	per unit	ROB	5	5	1.00	19.4	0.002	0.00	0.0	0.000
195	per unit	ROB	4	4	1.00	77.0	0.012	0.00	0.0	0.000
196	per unit	NEW	6	6	1.00	108.0	0.027	0.00	0.0	0.000
197	per unit	NEW	5	5	1.00	19.4	0.002	0.00	0.0	0.000
198	per unit	NEW	4	4	1.00	77.0	0.012	0.00	0.0	0.000
199	Per home	RET	16	16	2,722.90	7,839.0	0.239	0.00	0.0	0.000
200	Per home	RET	16	16	3,441.95	8,488.0	0.360	0.00	0.0	0.000
201	Per home	RET	16	16	4,161.00	9,061.0	0.463	0.00	0.0	0.000
202	Per home	RET	16	16	4,880.05	9,569.0	0.551	0.00	0.0	0.000
203	Per home	RET	16	16	5,602.75	10,024.0	0.627	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
204	Per home	RET	16	16	6,321.80	10,433.0	0.691	0.00	0.0	0.000
205	Per home	RET	16	16	7,040.85	10,802.0	0.745	0.00	0.0	0.000
206	per home	RET	1	1	0.01	0.0	0.000	0.00	0.0	0.000
207	per home	RET	1	1	0.01	0.0	0.000	0.00	0.0	0.000
208	per home	RET	14	14	2,740.00	3,678.1	1.213	275.27	0.0	0.000
209	per home	RET	1	1	0.00	605.5	0.000	0.00	0.0	0.000
210	per home	RET	1	1	10.50	295.6	0.000	0.00	0.0	0.000
211	per home	RET	15	15	2,000.00	1,454.0	0.166	62.43	0.0	0.000
212	per home	RET	15	15	2,000.00	861.9	0.079	62.43	0.0	0.000
213	per home	RET	15	15	2,000.00	2,567.0	0.166	13.46	0.0	0.000
214	per home	RET	15	15	2,000.00	1,974.9	0.079	13.46	0.0	0.000
215	per home	RET	15	15	2,000.00	1,974.9	0.166	13.46	0.0	0.000
216	per home	RET	11	15	199.00	739.6	0.109	26.49	0.0	0.000
217	per home	RET	11	15	199.00	0.0	0.000	26.49	0.0	0.000
218	per home	RET	11	15	199.00	1,341.6	0.109	0.00	0.0	0.000
219	per home	RET	11	15	199.00	601.9	0.000	0.00	0.0	0.000
220	per home	RET	11	15	199.00	930.3	0.109	0.00	0.0	0.000
221	per home	RET	1	1	10.20	136.3	0.093	0.00	0.0	0.000
222	per home	RET	1	1	10.20	93.7	0.064	0.00	0.0	0.000
223	per home	RET	1	1	10.20	218.9	0.093	0.00	0.0	0.000
224	per home	RET	1	1	10.20	170.8	0.064	0.00	0.0	0.000
225	per home	RET	1	1	10.20	154.0	0.093	0.00	0.0	0.000
226	per home	RET	1	1	260.00	765.0	0.520	0.00	0.0	0.000
227	per home	RET	1	1	260.00	525.8	0.357	0.00	0.0	0.000
228	per home	RET	1	1	260.00	1,228.9	0.835	0.00	0.0	0.000
229	per home	RET	1	1	260.00	958.9	0.652	0.00	0.0	0.000
230	per home	RET	1	1	260.00	864.4	0.587	0.00	0.0	0.000
231	per home	RET	1	1	2.55	765.0	0.520	0.00	0.0	0.000
232	per home	RET	1	1	2.55	525.8	0.357	0.00	0.0	0.000

Residential Measures

MEASURE DESCRIPTION					MEASURE INCREMENTAL SAVINGS PER UNIT					
Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
233	per home	RET	1	1	2.55	1,228.9	0.520	0.00	0.0	0.000
234	per home	RET	1	1	2.55	958.9	0.357	0.00	0.0	0.000
235	per home	RET	1	1	2.55	864.4	0.520	0.00	0.0	0.000



Residential Measures

Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
1	0.30	0	929,264	1.00	56.3%	92.7%	34.3%	0.0%	53.2%	7.1%	0
2	0.73	0	929,264	1.00	56.3%	92.7%	58.4%	45.3%	53.2%	7.1%	4,878
3	0.51	0	929,264	1.00	43.7%	92.7%	34.3%	1.4%	53.2%	7.1%	70
4	0.94	0	929,264	1.00	43.7%	92.7%	58.4%	30.3%	53.2%	7.1%	2,528
5	0.41	0	929,264	1.00	56.3%	92.7%	34.3%	100.0%	53.2%	7.1%	6,325
6	0.82	0	929,264	1.00	56.3%	92.7%	58.4%	54.7%	53.2%	7.1%	5,891
7	0.76	0	929,264	1.00	43.7%	92.7%	34.3%	98.6%	53.2%	7.1%	4,833
8	1.17	1	929,264	1.00	43.7%	92.7%	58.4%	69.7%	53.2%	7.1%	5,820
9	0.12	0	929,264	1.00	56.3%	92.7%	2.7%	100.0%	53.2%	7.1%	498
10	0.34	0	929,264	1.00	56.3%	92.7%	4.6%	100.0%	53.2%	7.1%	848
11	0.18	0	929,264	1.00	43.7%	92.7%	2.7%	100.0%	53.2%	7.1%	386
12	0.40	0	929,264	1.00	43.7%	92.7%	4.6%	100.0%	53.2%	7.1%	657
13	1.87	1	929,264	1.00	100.0%	69.2%	100.0%	91.7%	60.6%	8.3%	29,794
14	0.68	0	87,011	1.00	100.0%	69.2%	100.0%	16.3%	60.6%	8.3%	495
15	0.76	0	87,011	1.00	100.0%	69.2%	100.0%	25.2%	60.6%	8.3%	766
16	0.95	0	87,011	1.00	100.0%	69.2%	100.0%	58.5%	60.6%	8.3%	1,780
17	0.76	0	929,264	1.00	100.0%	69.2%	100.0%	8.3%	60.6%	8.3%	2,680
18	0.41	0	929,264	1.00	56.3%	61.3%	100.0%	100.0%	13%	6.7%	2,781
19	0.66	0	929,264	1.00	43.7%	61.3%	100.0%	100.0%	13%	6.7%	2,156
20	1.16	1	929,264	1.42	100.0%	99.3%	100.0%	98.1%	59%	5.88%	44,229
21	0.52	0	929,264	1.42	100.0%	99.3%	100.0%	1.9%	100%	5.9%	0
22	1.21	1	929,264	1.70	100.0%	83.6%	100.0%	35.1%	62%	100.0%	143,798
23	0.89	0	929,264	1.70	100.0%	83.6%	100.0%	29.3%	62%	100.0%	119,899
24	1.20	1	929,264	1.70	100.0%	83.6%	100.0%	35.6%	62%	100.0%	145,710
25	1.74	1	929,264	1.70	100.0%	83.6%	100.0%	48.0%	62%	10.0%	19,643
26	1.09	1	929,264	1.70	100.0%	83.6%	100.0%	20.6%	62%	10.0%	8,420
27	1.30	1	929,264	1.70	100.0%	83.6%	100.0%	31.5%	62%	10.0%	12,878
28	1.43	1	783,121	3.79	100.0%	90.2%	100.0%	100.0%	80%	5.0%	107,086
29	1.72	1	929,264	1.00	100.0%	2.2%	60.0%	100.0%	37%	8.3%	378
30	1.69	1	929,264	1.00	100.0%	2.2%	40.0%	100.0%	37%	8.3%	252
31	1.96	1	783,121	1.00	100.0%	9.8%	100.0%	26.6%	66%	100.0%	13,459
32	3.89	1	783,121	1.00	100.0%	9.8%	100.0%	73.4%	66%	100.0%	37,193
33	0.66	0	929,264	1.03	43.7%	52.9%	100.0%	100.0%	60.9%	7.7%	10,366
34	0.79	0	929,264	1.03	43.7%	52.9%	100.0%	100.0%	60.9%	7.7%	10,366
35	0.95	0	929,264	1.03	43.7%	52.9%	100.0%	100.0%	60.9%	7.7%	10,366
36	1.15	1	929,264	1.03	43.7%	52.9%	80.0%	100.0%	60.9%	7.7%	8,293
37	0.66	0	6,949	1.03	43.7%	52.9%	100.0%	100.0%	100%	100.0%	1,655
38	0.79	0	6,949	1.03	43.7%	52.9%	100.0%	100.0%	100%	100.0%	1,655
39	0.95	0	6,949	1.03	43.7%	52.9%	100.0%	100.0%	100%	100.0%	1,655
40	1.15	1	6,949	1.03	43.7%	52.9%	80.0%	100.0%	100%	100.0%	1,324
41	0.20	0	929,264		43.7%	100.0%	100.0%	100.0%	100%	7.7%	0
42	0.25	0	929,264		43.7%	100.0%	100.0%	100.0%	100%	7.7%	0
43	0.33	0	929,264		43.7%	100.0%	100.0%	100.0%	100%	7.7%	0
44	0.33	0	929,264		43.7%	100.0%	100.0%	100.0%	100%	7.7%	0
45	0.20	0	6,949		43.7%	100.0%	100.0%	100.0%	100%	100.0%	0
46	0.25	0	6,949		43.7%	100.0%	100.0%	100.0%	100%	100.0%	0

Residential Measures

Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
47	0.33	0	6,949		43.7%	100.0%	100.0%	100.0%	100%	100.0%	0
48	0.33	0	6,949		43.7%	100.0%	100.0%	100.0%	100%	100.0%	0
49	0.12	0	929,264		43.7%	100.0%	100.0%	100.0%	100%	6.7%	0
50	0.12	0	6,949		43.7%	100.0%	100.0%	100.0%	100%	100.0%	0
51	0.91	0	783,121	1.07	43.7%	49.3%	100.0%	44.6%	100%	100.0%	80,469
52	1.25	1	783,121	1.07	43.7%	33.2%	100.0%	55.4%	100%	100.0%	67,349
53	4.21	1	783,121	1.00	43.7%	49.3%	100.0%	48.2%	100%	100.0%	81,395
54	6.30	1	783,121	1.00	43.7%	49.3%	100.0%	51.8%	100%	100.0%	87,369
55	1.29	1	929,264	2.00	43.7%	49.3%	100.0%	49.3%	38%	100.0%	37,510
56	2.15	1	929,264	2.00	43.7%	49.3%	100.0%	50.7%	38%	100.0%	38,588
57	3.28	1	929,264	1.81	43.7%	49.3%	100.0%	30.2%	60%	100.0%	65,674
58	5.32	1	929,264	1.81	43.7%	49.3%	100.0%	33.3%	60%	100.0%	72,400
59	7.33	1	929,264	1.81	43.7%	49.3%	100.0%	36.5%	60%	100.0%	79,407
60	0.53	0	929,264	1.00	78.0%	100.0%	100.0%	13.4%	78%	5.3%	3,973
61	0.83	0	929,264	1.00	78.0%	100.0%	100.0%	33.0%	78%	5.3%	9,824
62	0.85	0	929,264	1.00	78.0%	100.0%	100.0%	21.0%	78%	5.3%	6,243
63	0.83	0	929,264	1.00	78.0%	100.0%	100.0%	13.3%	78%	5.3%	3,946
64	0.80	0	929,264	1.00	78.0%	100.0%	100.0%	8.2%	78%	5.3%	2,444
65	0.81	0	929,264	1.00	78.0%	100.0%	100.0%	7.9%	78%	5.3%	2,353
66	0.74	0	929,264	1.00	78.0%	100.0%	100.0%	3.3%	78%	5.3%	973
67	0.53	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
68	0.83	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
69	0.85	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
70	0.83	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
71	0.80	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
72	0.81	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
73	0.74	0	6,949	1.00	78.0%	100.0%	100.0%	14.3%	100%	100.0%	774
74	0.99	0	929,264	2.44	7.8%	100.0%	100.0%	100.0%	62%	9.5%	10,407
75	0.55	0	929,264	1.00	6.4%	100.0%	100.0%	13.1%	61%	6.3%	296
76	0.79	0	929,264	1.00	6.4%	100.0%	100.0%	14.6%	61%	6.3%	330
77	0.69	0	929,264	1.00	6.4%	100.0%	100.0%	13.4%	61%	6.3%	303
78	0.86	0	929,264	1.00	6.4%	100.0%	100.0%	14.8%	61%	6.3%	333
79	0.88	0	929,264	1.00	6.4%	100.0%	100.0%	14.8%	61%	6.3%	333
80	0.87	0	929,264	1.00	6.4%	100.0%	100.0%	14.7%	61%	6.3%	331
81	0.85	0	929,264	1.00	6.4%	100.0%	100.0%	14.5%	61%	6.3%	328
82	0.55	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
83	0.79	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
84	0.69	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
85	0.86	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
86	0.88	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
87	0.87	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
88	0.85	0	6,949	1.00	6.4%	100.0%	100.0%	14.3%	100%	100.0%	63
89	0.56	0	783,121	1.00	6.4%	100.0%	100.0%	100.0%	100%	4.0%	0
90	0.56	0	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
91	0.73	0	783,121	1.00	6.4%	100.0%	100.0%	100.0%	100%	5.6%	0
92	0.73	0	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
93	0.38	0	783,121	1.00	78.0%	100.0%	100.0%	100.0%	100%	5.6%	0
94	0.38	0	5,856	1.00	78.0%	100.0%	100.0%	100.0%	100%	100.0%	0
95	2.70	1	929,264	1.00	78.0%	42.5%	100.0%	100.0%	98.9%	100.0%	304,662

Residential Measures

Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
96	3.41	1	929,264	1.00	6.4%	32.4%	100.0%	100.0%	100%	100.0%	19,159
97	7.38	1	783,121	1.00	41.6%	49.3%	100.0%	100.0%	51.0%	100.0%	81,951
98	5.92	1	783,121	1.00	6.4%	49.3%	100.0%	100.0%	51.0%	100.0%	12,542
99	8.13	1	783,121	1.00	36.4%	49.3%	100.0%	100.0%	51.0%	100.0%	71,785
100	3.98	1	783,121	1.00	6.9%	49.3%	100.0%	100.0%	51.0%	100.0%	13,524
101	7.38	1	5,856	1.00	41.6%	100.0%	100.0%	100.0%	100%	100.0%	2,435
102	5.92	1	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
103	8.13	1	5,856	1.00	36.4%	100.0%	100.0%	100.0%	100%	100.0%	2,133
104	3.98	1	5,856	1.00	6.9%	100.0%	100.0%	100.0%	100%	100.0%	402
105	0.68	0	783,121	1.00	41.6%	49.3%	100.0%	100.0%	16.7%	100.0%	26,835
106	0.07	0	783,121	1.00	7.8%	49.3%	100.0%	100.0%	16.7%	100.0%	5,017
107	0.77	0	783,121	1.00	36.4%	49.3%	100.0%	100.0%	16.7%	100.0%	23,506
108	0.66	0	783,121	1.00	6.4%	49.3%	100.0%	100.0%	16.7%	100.0%	4,107
109	2.83	1	783,121	1.00	41.6%	49.3%	83.0%	40.2%	23.5%	100.0%	12,590
110	5.53	1	783,121	1.00	36.4%	49.3%	83.0%	35.6%	23.5%	100.0%	9,770
111	3.79	1	783,121	1.00	6.4%	49.3%	83.0%	37.3%	23.5%	100.0%	1,788
112	2.27	1	783,121	1.00	41.6%	49.3%	83.0%	33.6%	23.5%	100.0%	10,528
113	4.45	1	783,121	1.00	36.4%	49.3%	83.0%	33.5%	23.5%	100.0%	9,205
114	3.05	1	783,121	1.00	6.4%	49.3%	83.0%	33.6%	23.5%	100.0%	1,612
115	1.79	1	783,121	1.00	41.6%	49.3%	83.0%	26.2%	23.5%	100.0%	8,224
116	3.51	1	783,121	1.00	36.4%	49.3%	83.0%	30.9%	23.5%	100.0%	8,479
117	2.40	1	783,121	1.00	6.4%	49.3%	83.0%	29.1%	23.5%	100.0%	1,397
118	0.20	0	5,856	1.00	41.6%	100.0%	100.0%	50.0%	100%	100.0%	1,217
119	0.40	0	5,856	1.00	36.4%	100.0%	100.0%	50.0%	100%	100.0%	1,066
120	0.27	0	5,856	1.00	6.4%	100.0%	100.0%	50.0%	100%	100.0%	186
121	0.16	0	5,856	1.00	41.6%	100.0%	100.0%	50.0%	100%	100.0%	1,217
122	0.31	0	5,856	1.00	36.4%	100.0%	100.0%	50.0%	100%	100.0%	1,066
123	0.21	0	5,856	1.00	6.4%	100.0%	100.0%	50.0%	100%	100.0%	186
124	1.63	1	783,121	1.00	41.6%	49.3%	100.0%	47.5%	35%	100.0%	26,710
125	2.89	1	783,121	1.00	36.4%	49.3%	100.0%	49.0%	35%	100.0%	24,123
126	1.05	1	783,121	1.00	6.4%	49.3%	100.0%	47.6%	35%	100.0%	4,095
127	2.06	1	783,121	1.00	41.6%	49.3%	100.0%	52.5%	35%	100.0%	29,531
128	3.50	1	783,121	1.00	36.4%	49.3%	100.0%	51.0%	35%	100.0%	25,141
129	1.31	1	783,121	1.00	6.4%	49.3%	100.0%	52.4%	35%	100.0%	4,512
130	0.19	0	783,121	1.00	41.6%	49.3%	100.0%	0.0%	35%	100.0%	0
131	0.09	0	783,121	1.00	6.4%	49.3%	100.0%	100.0%	35%	100.0%	8,607
132	0.42	0	783,121	1.00	36.4%	49.3%	100.0%	100.0%	35%	100.0%	49,264
133	0.64	0	783,121		41.6%	100.0%	100.0%	100.0%	100%	100.0%	0
134	0.23	0	783,121		36.4%	100.0%	100.0%	0.0%	100%	100.0%	0
135	0.42	0	783,121		6.4%	100.0%	100.0%	100.0%	100%	100.0%	0
136	0.53	0	783,121		41.6%	100.0%	100.0%	100.0%	100%	100.0%	0
137	0.26	0	783,121		36.4%	100.0%	100.0%	0.0%	100%	100.0%	0
138	0.35	0	783,121		6.4%	100.0%	100.0%	100.0%	100%	100.0%	0
139	5.24	1	783,121	1.00	41.6%	49.3%	100.0%	100.0%	51.3%	100.0%	82,433
140	2.83	1	783,121	1.00	36.4%	49.3%	100.0%	100.0%	51.3%	100.0%	72,207
141	2.24	1	783,121	1.00	6.4%	49.3%	100.0%	100.0%	51.3%	100.0%	12,616
142	3.25	1	929,264	20.70	100.0%	100.0%	68.0%	100.0%	42.7%	5.0%	279,265
143	10.39	1	929,264	20.70	100.0%	100.0%	32.0%	100.0%	42.7%	5.0%	65,709
144	0.55	0	929,264		100.0%	100.0%	100.0%	100.0%	100%	100.0%	0

Residential Measures

Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
145	2.26	1	929,264	20.70	100.0%	100.0%	68.0%	100.0%	42.7%	100.0%	5,585,297
146	4.51	1	929,264	20.70	100.0%	100.0%	32.0%	100.0%	42.7%	100.0%	1,314,187
147	3.25	1	6,949	20.70	100.0%	100.0%	68.0%	100.0%	100%	100.0%	97,811
148	10.39	1	6,949	20.70	100.0%	100.0%	32.0%	100.0%	100%	100.0%	46,029
149	2.50	1	783,121	6.80	100.0%	100.0%	100.0%	100.0%	42.7%	5.0%	113,693
150	2.50	1	5,856	6.80	100.0%	100.0%	100.0%	100.0%	100%	100.0%	39,821
151	0.43	0	783,121		100.0%	100.0%	100.0%	100.0%	100%	100.0%	0
152	1.73	1	783,121	6.80	100.0%	100.0%	100.0%	100.0%	42.7%	100.0%	2,273,869
153	0.86	0	783,121	1.00	41.6%	49.3%	55.8%	100.0%	83%	100.0%	74,421
154	0.22	0	783,121	1.00	7.8%	49.3%	55.8%	100.0%	83%	100.0%	13,913
155	1.19	1	783,121	1.00	36.4%	49.3%	55.8%	100.0%	83%	100.0%	65,189
156	0.94	0	783,121	1.00	6.4%	49.3%	55.8%	100.0%	83%	100.0%	11,390
157	2.71	1	783,121	1.00	41.6%	49.3%	44.2%	100.0%	83%	5.0%	2,948
158	0.51	0	783,121	1.00	7.8%	49.3%	44.2%	100.0%	83%	5.0%	551
159	3.51	1	783,121	1.00	36.4%	49.3%	44.2%	100.0%	83%	5.0%	2,582
160	3.00	1	783,121	1.00	6.4%	49.3%	44.2%	100.0%	83%	5.0%	451
161	1.14	1	783,121	1.00	41.6%	49.3%	100.0%	100.0%	23.6%	100.0%	37,923
162	1.14	1	5,856	1.00	41.6%	100.0%	100.0%	100.0%	100%	100.0%	2,435
163	0.24	0	783,121	1.00	7.8%	49.3%	100.0%	100.0%	23.6%	100.0%	7,090
164	0.24	0	5,856	1.00	7.8%	100.0%	100.0%	100.0%	100%	100.0%	455
165	1.55	1	783,121	1.00	36.4%	49.3%	100.0%	100.0%	23.6%	100.0%	33,218
166	1.55	1	5,856	1.00	36.4%	100.0%	100.0%	100.0%	100%	100.0%	2,133
167	1.31	1	783,121	1.00	6.4%	49.3%	100.0%	100.0%	23.6%	100.0%	5,804
168	1.31	1	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
169	0.09	0	87,011	1.00	41.6%	100.0%	100.0%	0.0%	35%	100.0%	0
170	0.07	0	87,011	1.00	7.8%	100.0%	100.0%	100.0%	35%	100.0%	2,367
171	0.14	0	87,011	1.00	36.4%	100.0%	100.0%	100.0%	35%	100.0%	11,092
172	0.03	0	87,011	1.00	6.4%	100.0%	100.0%	100.0%	35%	100.0%	1,938
173	4.57	1	783,121	1.00	41.6%	100.0%	17.0%	100.0%	23.5%	100.0%	13,008
174	0.83	0	783,121	1.00	7.8%	100.0%	17.0%	100.0%	23.5%	100.0%	2,432
175	5.80	1	783,121	1.00	36.4%	100.0%	17.0%	100.0%	23.5%	100.0%	11,395
176	4.33	1	783,121	1.00	6.4%	100.0%	17.0%	100.0%	23.5%	100.0%	1,991
177	0.98	0	5,856	1.00	41.6%	100.0%	100.0%	100.0%	100%	100.0%	2,435
178	0.54	0	5,856	1.00	7.8%	100.0%	100.0%	100.0%	100%	100.0%	455
179	1.80	1	5,856	1.00	36.4%	100.0%	100.0%	100.0%	100%	100.0%	2,133
180	1.01	1	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
181	0.34	0	5,856	1.00	41.6%	100.0%	100.0%	100.0%	100%	100.0%	2,435
182	0.10	0	5,856	1.00	7.8%	100.0%	100.0%	100.0%	100%	100.0%	455
183	0.48	0	5,856	1.00	36.4%	100.0%	100.0%	100.0%	100%	100.0%	2,133
184	0.34	0	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
185	0.89	0	5,856	1.00	41.6%	100.0%	100.0%	100.0%	100%	100.0%	2,435
186	0.38	0	5,856	1.00	7.8%	100.0%	100.0%	100.0%	100%	100.0%	455
187	1.32	1	5,856	1.00	36.4%	100.0%	100.0%	100.0%	100%	100.0%	2,133
188	0.85	0	5,856	1.00	6.4%	100.0%	100.0%	100.0%	100%	100.0%	373
189	1.42	1	783,121	2.11	100.0%	49.3%	100.0%	100.0%	85%	100.0%	693,126
190	1.61	1	929,264	1.32	100.0%	31.0%	100.0%	100.0%	100%	100.0%	380,255
191	1.51	1	929,264	1.19	100.0%	3.5%	100.0%	100.0%	100%	100.0%	38,704
192	2.60	1	929,264	2.44	7.8%	100.0%	100.0%	100.0%	100%	100.0%	176,251
193	33.53	1	929,264	2.18	100.0%	97.7%	100.0%	100.0%	88%	16.7%	290,283

Residential Measures

Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
194	4.21	1	929,264	1.22	100.0%	26.0%	100.0%	100.0%	94%	20.0%	55,382
195	14.25	1	929,264	1.22	100.0%	49.4%	100.0%	100.0%	44%	25.0%	61,605
196	33.53	1	6,949		100.0%	97.7%	100.0%	100.0%	100%	100.0%	0
197	4.21	1	6,949		100.0%	26.0%	100.0%	100.0%	100%	100.0%	0
198	14.25	1	6,949		100.0%	49.4%	100.0%	100.0%	100%	100.0%	0
199	1.50	1	929,264	1.00	41.1%	42.5%	100.0%	15.6%	61%	100.0%	15,406
200	1.32	1	929,264	1.00	41.1%	42.5%	100.0%	15.1%	61%	100.0%	14,920
201	1.18	1	929,264	1.00	41.1%	42.5%	100.0%	14.6%	61%	100.0%	14,485
202	1.07	1	929,264	1.00	41.1%	42.5%	100.0%	14.2%	61%	100.0%	14,085
203	0.99	0	929,264	1.00	41.1%	42.5%	100.0%	13.8%	61%	100.0%	13,710
204	0.92	0	929,264	1.00	41.1%	42.5%	100.0%	13.5%	61%	100.0%	13,360
205	0.86	0	929,264	1.00	41.1%	42.5%	100.0%	13.2%	61%	100.0%	13,026
206	0.04	0	783,121	1.00	100.0%	49.3%	100.0%	100.0%	100%	100.0%	386,465
207	0.04	0	59,133	1.00	100.0%	30.7%	100.0%	100.0%	100%	100.0%	18,144
208	1.39	1	929,264	1.00	100.0%	35.0%	100.0%	100.0%	100%	100.0%	325,242
209	22095434.05	1	929,264	1.00	100.0%	100.0%	100.0%	100.0%	100%	100.0%	929,264
210	1.03	1	929,264	1.00	100.0%	100.0%	100.0%	100.0%	100%	100.0%	929,264
211	0.55	0	929,264		41.6%	100.0%	100.0%	100.0%	100%	100.0%	0
212	0.38	0	783,121		7.8%	100.0%	100.0%	100.0%	100%	100.0%	0
213	0.70	0	783,121		36.4%	100.0%	100.0%	100.0%	100%	100.0%	0
214	0.53	0	783,121		6.9%	100.0%	100.0%	100.0%	100%	100.0%	0
215	0.56	0	783,121		6.4%	100.0%	100.0%	100.0%	100%	100.0%	0
216	2.82	1	783,121	1.00	41.6%	100%	100.0%	100.0%	94%	100.0%	304,935
217	0.61	0	783,121	1.00	7.8%	100%	100.0%	100.0%	94%	100.0%	57,008
218	3.62	1	783,121	1.00	36.4%	100%	100.0%	100.0%	94%	100.0%	267,105
219	1.41	1	783,121	1.00	6.9%	100%	100.0%	100.0%	94%	100.0%	50,323
220	2.66	1	783,121	1.00	6.4%	100%	100.0%	100.0%	94%	100.0%	46,668
221	1.20	1	929,264	1.00	41.6%	91%	100.0%	100.0%	100%	100.0%	351,606
222	0.82	0	929,264	1.00	7.8%	91%	100.0%	100.0%	100%	100.0%	65,733
223	1.49	1	929,264	1.00	36.4%	91%	100.0%	100.0%	100%	100.0%	307,986
224	1.10	1	929,264	1.00	6.9%	91%	100.0%	100.0%	100%	100.0%	58,025
225	1.26	1	929,264	1.00	6.4%	91%	100.0%	100.0%	100%	100.0%	53,811
226	0.26	0	783,121		41.6%	100.0%	100.0%	100.0%	100%	100.0%	0
227	0.18	0	783,121		7.8%	100.0%	100.0%	100.0%	100%	100.0%	0
228	0.42	0	783,121		36.4%	100.0%	100.0%	100.0%	100%	100.0%	0
229	0.33	0	783,121		6.9%	100.0%	100.0%	100.0%	100%	100.0%	0
230	0.30	0	783,121		6.4%	100.0%	100.0%	100.0%	100%	100.0%	0
231	26.85	1	783,121	1.00	41.6%	100%	100.0%	100.0%	100%	100.0%	325,615
232	18.45	1	783,121	1.00	7.8%	100%	100.0%	100.0%	100%	100.0%	60,874
233	33.48	1	783,121	1.00	36.4%	100%	100.0%	100.0%	100%	100.0%	285,219
234	24.65	1	783,121	1.00	6.9%	100%	100.0%	100.0%	100%	100.0%	53,736
235	28.27	1	783,121	1.00	6.4%	100%	100.0%	100.0%	100%	100.0%	49,833

Residential Measures

MEASURE DESCRIPTION		Measure Documentation				
Measure ID	Measure Cost Source	Measure Savings Source	Measure Lifetime Source	Measure Unit per SubSector	Unit Source	Applicability
1	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
2	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
3	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
4	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
5	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
6	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
7	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
8	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
9	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
10	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
11	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
12	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
13	ICF	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
14	ICF	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
15	ICF	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
16	ICF	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
17	ICF	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
18	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, Energy Star
19	NO TRM	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys, Energy Star
20	IL TRM	IL TRM	AR TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
21	IL TRM	IL TRM	AR TRM	RECS		2006 ELL & EGSL RASS Surveys
22	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
23	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
24	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
25	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
26	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
27	New Orleans TRM	NO TRM	NO TRM	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
28	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
29	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
30	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
31	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
32	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
33	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
34	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
35	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy Star
36	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy.Gov
37	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
38	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
39	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
40	NO TRM	NO TRM	Mid Atlantic TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS, Energy.Gov
41	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
42	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
43	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
44	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
45	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
46	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
47	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
48	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
49	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
50	NO TRM	NO TRM	Mid Atlantic TRM			2006 ELL & EGSL RASS Surveys
51	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
52	NO TRM	NO TRM	NO TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
53	NO TRM	NO TRM	NO TRM	ICF		2006 ELL & EGSL RASS Surveys
54	NO TRM	NO TRM	NO TRM	ICF		2006 ELL & EGSL RASS Surveys

Residential Measures

MEASURE DESCRIPTION		Measure Documentation			
Measure ID	Measure Cost Source	Measure Savings Source	Measure Lifetime Source	Measure Unit per SubSector Unit Source	Applicability
55	IL TRM	NO TRM	NO TRM	EGSL studies, 2017 Cleco studies	2006 ELL & EGSL RASS Surveys, 2017 CLECO Study
56	IL TRM	NO TRM	NO TRM	EGSL studies, 2017 Cleco studies	2006 ELL & EGSL RASS Surveys, 2017 CLECO Study
57	IL TRM	NO TRM	NO TRM	RECS	2006 ELL & EGSL RASS Surveys
58	IL TRM	NO TRM	NO TRM	RECS	2006 ELL & EGSL RASS Surveys
59	IL TRM	NO TRM	NO TRM	RECS	2006 ELL & EGSL RASS Surveys
60	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
61	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
62	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
63	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
64	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
65	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
66	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
67	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
68	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
69	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
70	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
71	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
72	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
73	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
74	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	RECS	2006 ELL & EGSL RASS Surveys, Energy Star
75	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
76	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
77	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
78	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
79	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
80	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
81	NREL	NO TRM, ICF	NO TRM, ICF	ICF	LL & EGSL RASS Surveys, 2016 US Energy Star Report
82	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
83	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
84	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
85	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
86	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
87	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
88	NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
89	IL TRM	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
90	IL TRM	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
91	IL TRM, NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
92	IL TRM, NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
93	ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
94	ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
95	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS, CLECO Study
96	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
97	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, ICF
98	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, ICF
99	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, ICF
100	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
101	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
102	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys

Residential Measures

MEASURE DESCRIPTION	Measure Documentation				
Measure ID	Measure Cost Source	Measure Savings Source	Measure Lifetime Source	Measure Unit per SubSector Unit Source	Applicability
103	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
104	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
105	ICF	AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
106	ICF	AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
107	ICF	AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
108	ICF	AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
109	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
110	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
111	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
112	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
113	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
114	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
115	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
116	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
117	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
118	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
119	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
120	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
121	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
122	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
123	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
124	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
125	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
126	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
127	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
128	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
129	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
130	NO TRM, NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
131	NO TRM, NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
132	NO TRM, NREL	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, RECS
133	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
134	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
135	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
136	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
137	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
138	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
139	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, CLECO Study
140	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, CLECO Study
141	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys, CLECO Study
142	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
143	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
144	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
145	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
146	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
147	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
148	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
149	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
150	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
151	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
152	IL TRM	AR TRM	AR TRM	RECS	2006 ELL & EGSL RASS Surveys
153	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
154	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS
155	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF	2006 ELL & EGSL RASS Surveys, RECS



Residential Measures

MEASURE DESCRIPTION		Measure Documentation				
Measure ID	Measure Cost Source	Measure Savings Source	Measure Lifetime Source	Measure Unit per SubSector	Unit Source	Applicability
156	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
157	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
158	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
159	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
160	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
161	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
162	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
163	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
164	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
165	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
166	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
167	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
168	FSEC & ELL 2014 Data	AR TM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
169	IL TRM	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
170	IL TRM	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
171	IL TRM	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
172	IL TRM	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
173	IL TRM, ICF	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
174	IL TRM, ICF	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
175	IL TRM, ICF	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
176	IL TRM, ICF	AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys, RECS
177	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
178	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
179	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
180	2014 study & House Logic Website	ICF, AR TRM	AR TRM	ICF		2006 ELL & EGSL RASS Surveys
181	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
182	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
183	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
184	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
185	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
186	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
187	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
188	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
189	IL TRM	IL TRM	IL TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
190	IL TRM	IL TRM	IL TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
191	IL TRM	IL TRM	IL TRM	RECS		2006 ELL & EGSL RASS Surveys
192	IL TRM	ICF/AR TRM/IL TRM	IL TRM	RECS		2006 ELL & EGSL RASS Surveys, RECS
193	ICF	ICF	ICF	RASS 2016, ELL & EGSL		2006 ELL & EGSL RASS Surveys
194	ICF	ICF	ICF	RECS		2006 ELL & EGSL RASS Surveys, RECS
195	ICF	ICF	ICF	RECS		2006 ELL & EGSL RASS Surveys, RECS
196	ICF	ICF	ICF			2006 ELL & EGSL RASS Surveys
197	ICF	ICF	ICF			2006 ELL & EGSL RASS Surveys
198	ICF	ICF	ICF			2006 ELL & EGSL RASS Surveys
199	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
200	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
201	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
202	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
203	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
204	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
205	NREL	NO TRM, ICF	NO TRM, ICF	ICF		2006 ELL & EGSL RASS Surveys
206	ICF	NO TRM	ICF	ICF		2006 ELL & EGSL RASS Surveys
207	ICF	NO TRM	ICF	ICF		2006 ELL & EGSL RASS Surveys
208	ICF	ICF	ICF	ICF		2006 ELL & EGSL RASS Surveys, US Census
209	ICF	NO TRM	ICF	ICF		2006 ELL & EGSL RASS Surveys

Residential Measures

MEASURE DESCRIPTION	Measure Documentation				
Measure ID	Measure Cost Source	Measure Savings Source	Measure Lifetime Source	Measure Unit per SubSector Unit Source	Applicability
210	NO TRM	NO TRM	NO TRM	ICF	2006 ELL & EGSL RASS Surveys
211	NO TRM	NO TRM	NO TRM		2006 ELL & EGSL RASS Surveys
212	NO TRM	NO TRM	NO TRM		2006 ELL & EGSL RASS Surveys
213	NO TRM	NO TRM	NO TRM		2006 ELL & EGSL RASS Surveys
214	NO TRM	NO TRM	NO TRM		2006 ELL & EGSL RASS Surveys
215	NO TRM	NO TRM	NO TRM		2006 ELL & EGSL RASS Surveys
216	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
217	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
218	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
219	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
220	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
221	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
222	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
223	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
224	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
225	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
226	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF		2006 ELL & EGSL RASS Surveys
227	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF		2006 ELL & EGSL RASS Surveys
228	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF		2006 ELL & EGSL RASS Surveys
229	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF		2006 ELL & EGSL RASS Surveys
230	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF		2006 ELL & EGSL RASS Surveys
231	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
232	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
233	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
234	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys
235	NO TRM, ICF	NO TRM, ICF	NO TRM, ICF	ICF	2006 ELL & EGSL RASS Surveys

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
1	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
2	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
3	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
4	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
5	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
6	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
7	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
8	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
9	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
10	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
11	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
12	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
13	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
14	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
15	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
16	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
17	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
18	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
19	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
20	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
21	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
22	Home Audit and Retrofit	2019	0.442%	2038	2.208%	2038	2.208%
23	Home Audit and Retrofit	2019	0.368%	2038	1.841%	2038	1.841%
24	Home Audit and Retrofit	2019	0.447%	2038	2.237%	2038	2.237%
25	Lighting, Appliances and Electronics	2019	1.527%	2038	4.580%	2038	4.580%
26	Lighting, Appliances and Electronics	2019	0.654%	2038	1.963%	2038	1.963%
27	Lighting, Appliances and Electronics	2019	1.001%	2038	3.003%	2038	3.003%
28	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
29	Lighting, Appliances and Electronics	2019	6.086%	2038	18.257%	2038	18.257%
30	Lighting, Appliances and Electronics	2019	5.880%	2038	17.639%	2038	17.639%
31	Lighting, Appliances and Electronics	2019	0.114%	2038	0.341%	2038	0.341%
32	Lighting, Appliances and Electronics	2019	0.314%	2038	0.943%	2038	0.943%
33	Lighting, Appliances and Electronics	2019	0.020%	2038	0.061%	2038	0.061%
34	Lighting, Appliances and Electronics	2019	0.064%	2038	0.192%	2038	0.192%
35	Lighting, Appliances and Electronics	2019	0.321%	2038	0.963%	2038	0.963%

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
36	Lighting, Appliances and Electronics	2019	0.386%	2038	1.158%	2038	1.158%
37	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
38	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
39	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
40	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
41	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
42	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
43	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
44	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
45	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
46	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
47	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
48	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
49	Lighting, Appliances and Electronics	2019	0.000%	2019	0.000%	2038	0.000%
50	ENERGY STAR New Homes	2020	1.500%	2029	12.500%	2038	12.500%
51	Home Audit and Retrofit	2019	0.331%	2038	1.655%	2038	1.655%
52	Home Audit and Retrofit	2019	0.412%	2038	2.060%	2038	2.060%
53	Home Audit and Retrofit	2019	0.472%	2038	2.362%	2038	2.362%
54	Home Audit and Retrofit	2019	0.507%	2038	2.535%	2038	2.535%
55	Home Audit and Retrofit	2019	0.459%	2038	2.296%	2038	2.296%
56	Home Audit and Retrofit	2019	0.472%	2038	2.362%	2038	2.362%
57	Home Audit and Retrofit	2019	0.472%	2038	2.362%	2038	2.362%
58	Home Audit and Retrofit	2019	0.521%	2038	2.604%	2038	2.604%
59	Home Audit and Retrofit	2019	0.571%	2038	2.856%	2038	2.856%
60	HVAC and Tune-up	2019	0.000%	2038	0.002%	2038	0.002%
61	HVAC and Tune-up	2019	0.001%	2038	0.004%	2038	0.004%
62	HVAC and Tune-up	2019	0.000%	2038	0.002%	2038	0.002%
63	HVAC and Tune-up	2019	0.000%	2038	0.002%	2038	0.002%
64	HVAC and Tune-up	2019	0.000%	2038	0.001%	2038	0.001%
65	HVAC and Tune-up	2019	0.000%	2038	0.001%	2038	0.001%
66	HVAC and Tune-up	2019	0.000%	2038	0.000%	2038	0.000%
67	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
68	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
69	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
70	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
71	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
72	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
73	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
74	Lighting, Appliances and Electronics	2019	4.928%	2038	14.784%	2038	14.784%
75	HVAC and Tune-up	2019	0.062%	2038	0.310%	2038	0.310%
76	HVAC and Tune-up	2019	0.069%	2038	0.346%	2038	0.346%
77	HVAC and Tune-up	2019	0.064%	2038	0.318%	2038	0.318%
78	HVAC and Tune-up	2019	0.070%	2038	0.350%	2038	0.350%
79	HVAC and Tune-up	2019	0.070%	2038	0.350%	2038	0.350%
80	HVAC and Tune-up	2019	0.069%	2038	0.347%	2038	0.347%
81	HVAC and Tune-up	2019	0.069%	2038	0.344%	2038	0.344%
82	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
83	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
84	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
85	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
86	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
87	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
88	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
89	HVAC and Tune-up	2019	0.000%	2019	0.000%	2038	0.000%
90	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
91	HVAC and Tune-up	2019	0.000%	2019	0.000%	2038	0.000%
92	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
93	HVAC and Tune-up	2019	0.000%	2019	0.000%	2038	0.000%
94	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
95	HVAC and Tune-up	2019	0.384%	2038	1.918%	2038	1.918%
96	HVAC and Tune-up	2019	0.097%	2038	0.487%	2038	0.487%
97	HVAC and Tune-up	2019	0.276%	2038	1.380%	2038	1.380%
98	HVAC and Tune-up	2019	0.293%	2038	1.465%	2038	1.465%
99	HVAC and Tune-up	2019	0.300%	2038	1.500%	2038	1.500%
100	HVAC and Tune-up	2019	0.293%	2038	1.464%	2038	1.464%
101	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
102	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
103	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
104	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
105	Home Audit and Retrofit	2019	0.014%	2038	0.070%	2038	0.070%

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
106	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
107	Home Audit and Retrofit	2019	0.069%	2038	0.343%	2038	0.343%
108	Home Audit and Retrofit	2019	0.026%	2038	0.132%	2038	0.132%
109	Home Audit and Retrofit	2019	0.349%	2038	1.745%	2038	1.745%
110	Home Audit and Retrofit	2019	0.571%	2038	2.853%	2038	2.853%
111	Home Audit and Retrofit	2019	0.476%	2038	2.379%	2038	2.379%
112	Home Audit and Retrofit	2019	0.292%	2038	1.459%	2038	1.459%
113	Home Audit and Retrofit	2019	0.538%	2038	2.688%	2038	2.688%
114	Home Audit and Retrofit	2019	0.429%	2038	2.144%	2038	2.144%
115	Home Audit and Retrofit	2019	0.228%	2038	1.140%	2038	1.140%
116	Home Audit and Retrofit	2019	0.495%	2038	2.476%	2038	2.476%
117	Home Audit and Retrofit	2019	0.372%	2038	1.859%	2038	1.859%
118	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
119	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
120	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
121	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
122	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
123	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
124	Home Audit and Retrofit	2019	0.105%	2038	0.527%	2038	0.527%
125	Home Audit and Retrofit	2019	0.505%	2038	2.527%	2038	2.527%
126	Home Audit and Retrofit	2019	0.192%	2038	0.962%	2038	0.962%
127	Home Audit and Retrofit	2019	0.117%	2038	0.583%	2038	0.583%
128	Home Audit and Retrofit	2019	0.527%	2038	2.634%	2038	2.634%
129	Home Audit and Retrofit	2019	0.212%	2038	1.060%	2038	1.060%
130	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
131	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
132	Home Audit and Retrofit	2019	0.082%	2038	0.409%	2038	0.409%
133	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
134	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
135	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
136	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
137	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
138	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
139	Home Audit and Retrofit	2019	0.055%	2038	0.273%	2038	0.273%
140	Home Audit and Retrofit	2019	0.302%	2038	1.509%	2038	1.509%

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
141	Home Audit and Retrofit	2019	0.198%	2038	0.991%	2038	0.991%
142	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
143	Lighting, Appliances and Electronics	2019	2.512%	2020	3.002%	2038	0.100%
144	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
145	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
146	Lighting, Appliances and Electronics	2019	2.512%	2020	3.002%	2038	0.100%
147	ENERGY STAR New Homes	2020	6.000%	2029	50.000%	2038	50.000%
148	ENERGY STAR New Homes	2020	6.000%	2029	50.000%	2038	50.000%
149	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
150	ENERGY STAR New Homes	2020	6.000%	2029	50.000%	2038	50.000%
151	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
152	Lighting, Appliances and Electronics	2019	1.270%	2020	1.277%	2038	0.000%
153	Home Audit and Retrofit	2019	0.032%	2038	0.162%	2038	0.162%
154	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
155	Home Audit and Retrofit	2019	0.229%	2038	1.145%	2038	1.145%
156	Home Audit and Retrofit	2019	0.131%	2038	0.657%	2038	0.657%
157	Home Audit and Retrofit	2019	0.297%	2038	1.485%	2038	1.485%
158	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
159	Home Audit and Retrofit	2019	0.477%	2038	2.386%	2038	2.386%
160	Home Audit and Retrofit	2019	0.414%	2038	2.068%	2038	2.068%
161	Home Audit and Retrofit	2019	0.079%	2038	0.397%	2038	0.397%
162	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
163	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
164	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
165	Home Audit and Retrofit	2019	0.276%	2038	1.380%	2038	1.380%
166	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
167	Home Audit and Retrofit	2019	0.213%	2038	1.064%	2038	1.064%
168	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
169	Home Audit and Retrofit	2019	0.000%	2019	0.000%	2038	0.000%
170	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
171	Home Audit and Retrofit	2019	0.000%	2038	0.001%	2038	0.001%
172	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
173	Home Audit and Retrofit	2019	0.449%	2038	2.247%	2038	2.247%
174	Home Audit and Retrofit	2019	0.000%	2038	0.000%	2038	0.000%
175	Home Audit and Retrofit	2019	0.575%	2038	2.876%	2038	2.876%

Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
176	Home Audit and Retrofit	2019	0.498%	2038	2.492%	2038	2.492%
177	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
178	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
179	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
180	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
181	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
182	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
183	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
184	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
185	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
186	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
187	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
188	ENERGY STAR New Homes	2020	4.500%	2029	37.500%	2038	37.500%
189	HVAC and Tune-up	2019	0.482%	2038	2.411%	2038	2.411%
190	Appliances Recycling	2019	2.000%	2021	6.000%	2038	3.000%
191	Appliances Recycling	2019	2.000%	2021	6.000%	2038	3.000%
192	Appliances Recycling	2019	2.000%	2021	6.000%	2038	3.000%
193	Lighting, Appliances and Electronics	2019	3.333%	2038	10.000%	2038	10.000%
194	Lighting, Appliances and Electronics	2019	3.333%	2038	10.000%	2038	10.000%
195	Lighting, Appliances and Electronics	2019	3.333%	2038	10.000%	2038	10.000%
196	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
197	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
198	ENERGY STAR New Homes	2020	1.200%	2029	10.000%	2038	10.000%
199	HVAC and Tune-up	2019	0.087%	2038	0.435%	2038	0.435%
200	HVAC and Tune-up	2019	0.084%	2038	0.421%	2038	0.421%
201	HVAC and Tune-up	2019	0.082%	2038	0.409%	2038	0.409%
202	HVAC and Tune-up	2019	0.080%	2038	0.398%	2038	0.398%
203	HVAC and Tune-up	2019	0.077%	2038	0.387%	2038	0.387%
204	HVAC and Tune-up	2019	0.075%	2038	0.377%	2038	0.377%
205	HVAC and Tune-up	2019	0.074%	2038	0.368%	2038	0.368%
206	Home Audit and Retrofit	2019	3.000%	2019	3.000%	2038	3.000%
207	Home Audit and Retrofit	2019	3.000%	2019	3.000%	2038	3.000%
208	Low Income Weatherization	2019	0.070%	2019	0.070%	2038	0.070%
209	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
210	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%



Residential Measures

Measure ID	Program	First Year of Participation (So Year)	First Year Participation Rate (So)	Year of Maximum Annual Participation (Smax)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Participation Rate (Fo)
211	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
212	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
213	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
214	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
215	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
216	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
217	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
218	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
219	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
220	Home Audit and Retrofit	2019	0.005%	2023	0.027%	2038	0.027%
221	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%
222	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%
223	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%
224	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%
225	Home Energy Use Benchmarking	2019	1.000%	2022	5.000%	2038	2.080%
226	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
227	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
228	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
229	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
230	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
231	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
232	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
233	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
234	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%
235	Home Energy Use Benchmarking	2022	0.500%	2030	2.000%	2038	2.000%

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
1	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
2	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
3	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
4	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
5	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
6	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
7	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
8	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
9	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
10	WS	Commercial	Small Commercial	All	HVAC	Unitary and Split System AC/HP Equipment
11	WS	Commercial	Large Commercial	K12 Education	HVAC	Unitary and Split System AC/HP Equipment
12	WS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Unitary and Split System AC/HP Equipment
13	WS	Commercial	Large Commercial	Lodging	HVAC	Unitary and Split System AC/HP Equipment
14	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Unitary and Split System AC/HP Equipment
15	WS	Commercial	Large Commercial	K12 Education	HVAC	Unitary and Split System AC/HP Equipment
16	WS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Unitary and Split System AC/HP Equipment
17	WS	Commercial	Large Commercial	Lodging	HVAC	Unitary and Split System AC/HP Equipment
18	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Unitary and Split System AC/HP Equipment
19	WS	Commercial	Large Commercial	K12 Education	HVAC	Unitary and Split System AC/HP Equipment
20	WS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Unitary and Split System AC/HP Equipment
21	WS	Commercial	Large Commercial	Lodging	HVAC	Unitary and Split System AC/HP Equipment
22	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Unitary and Split System AC/HP Equipment
23	WS	Commercial	Small Commercial	Lodging	HVAC	Packaged Terminal AC/HP (PTAC/PTHP) Equipment
24	WS	Commercial	Small Commercial	Lodging	HVAC	Packaged Terminal AC/HP (PTAC/PTHP) Equipment
25	WS	Commercial	Small Commercial	Lodging	HVAC	Packaged Terminal AC/HP (PTAC/PTHP) Equipment
26	WS	Commercial	Small Commercial	Lodging	HVAC	Packaged Terminal AC/HP (PTAC/PTHP) Equipment
27	WS	Commercial	Small Commercial	Lodging	HVAC	Occupancy-Based PTAC/PTHP Controls
28	WS	Commercial	Large Commercial	Hospital	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
29	WS	Commercial	Large Commercial	Lodging	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
30	WS	Commercial	Large Commercial	K12 Education	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
31	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
32	WS	Commercial	Large Commercial	Hospital	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
33	WS	Commercial	Large Commercial	Lodging	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
34	WS	Commercial	Large Commercial	K12 Education	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
35	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
36	WS	Commercial	Large Commercial	Hospital	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
37	WS	Commercial	Large Commercial	Lodging	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
38	WS	Commercial	Large Commercial	K12 Education	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
39	WS	Commercial	Large Commercial	General Large Commercial	HVAC	Air or Water Cooled Chilling Equipment (Chillers)
40	NWS	Commercial	Large Commercial	Hospital	HVAC	Variable Speed Drives for HVAC
41	NWS	Commercial	Large Commercial	Hospital	HVAC	Variable Speed Drives for HVAC
42	NWS	Commercial	Large Commercial	Hospital	HVAC	Variable Speed Drives for HVAC
43	NWS	Commercial	Large Commercial	Hospital	HVAC	Variable Speed Drives for HVAC
44	NWS	Commercial	Large Commercial	K12 Education	HVAC	Variable Speed Drives for HVAC
45	NWS	Commercial	Large Commercial	K12 Education	HVAC	Variable Speed Drives for HVAC
46	NWS	Commercial	Large Commercial	K12 Education	HVAC	Variable Speed Drives for HVAC
47	NWS	Commercial	Large Commercial	K12 Education	HVAC	Variable Speed Drives for HVAC

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
48	NWS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Variable Speed Drives for HVAC
49	NWS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Variable Speed Drives for HVAC
50	NWS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Variable Speed Drives for HVAC
51	NWS	Commercial	Large Commercial	Education with Summer Sessions	HVAC	Variable Speed Drives for HVAC
52	NWS	Commercial	Large Commercial	Lodging	HVAC	Variable Speed Drives for HVAC
53	NWS	Commercial	Large Commercial	Lodging	HVAC	Variable Speed Drives for HVAC
54	NWS	Commercial	Large Commercial	Lodging	HVAC	Variable Speed Drives for HVAC
55	NWS	Commercial	Large Commercial	Lodging	HVAC	Variable Speed Drives for HVAC
56	NWS	Commercial	Large Commercial	General Large Commercial	HVAC	Variable Speed Drives for HVAC
57	NWS	Commercial	Large Commercial	General Large Commercial	HVAC	Variable Speed Drives for HVAC
58	NWS	Commercial	Large Commercial	General Large Commercial	HVAC	Variable Speed Drives for HVAC
59	NWS	Commercial	Large Commercial	General Large Commercial	HVAC	Variable Speed Drives for HVAC
60	NWS	Commercial	Small Commercial	All	HVAC	Dual Enthalpy Economizer
61	NWS	Commercial	Large Commercial	All	HVAC	Dual Enthalpy Economizer
62	NWS	Commercial	Small Commercial	All	HVAC	Demand Controlled Ventilation
63	NWS	Commercial	Large Commercial	All	HVAC	Demand Controlled Ventilation
64	WS	Commercial	Small Commercial	All	HVAC	Ground Source Heatpump
65	WS	Commercial	Small Commercial	All	HVAC	AC Tune-Up
66	WS	Commercial	Small Commercial	All	HVAC	Heat Pump Tune-Up
67	NWS	Commercial	All	Hospital	Lighting	High Performance T8/T5 with Low-BF Ballast
68	NWS	Commercial	All	Hospital	Lighting	High Performance T8/T5 with Low-BF Ballast
69	NWS	Commercial	All	Hospital	Lighting	High Performance T8/T5 with Low-BF Ballast
70	NWS	Commercial	All	Hospital	Lighting	High Performance T8/T5 with Low-BF Ballast
71	NWS	Commercial	All	K12 Education	Lighting	High Performance T8/T5 with Low-BF Ballast
72	NWS	Commercial	All	K12 Education	Lighting	High Performance T8/T5 with Low-BF Ballast
73	NWS	Commercial	All	K12 Education	Lighting	High Performance T8/T5 with Low-BF Ballast
74	NWS	Commercial	All	K12 Education	Lighting	High Performance T8/T5 with Low-BF Ballast
75	NWS	Commercial	All	Education with Summer Sessions	Lighting	High Performance T8/T5 with Low-BF Ballast
76	NWS	Commercial	All	Education with Summer Sessions	Lighting	High Performance T8/T5 with Low-BF Ballast
77	NWS	Commercial	All	Education with Summer Sessions	Lighting	High Performance T8/T5 with Low-BF Ballast
78	NWS	Commercial	All	Education with Summer Sessions	Lighting	High Performance T8/T5 with Low-BF Ballast
79	NWS	Commercial	All	Lodging	Lighting	High Performance T8/T5 with Low-BF Ballast
80	NWS	Commercial	All	Lodging	Lighting	High Performance T8/T5 with Low-BF Ballast
81	NWS	Commercial	All	Lodging	Lighting	High Performance T8/T5 with Low-BF Ballast
82	NWS	Commercial	All	Lodging	Lighting	High Performance T8/T5 with Low-BF Ballast
83	NWS	Commercial	All	General Large Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
84	NWS	Commercial	All	General Large Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
85	NWS	Commercial	All	General Large Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
86	NWS	Commercial	All	General Large Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
87	NWS	Commercial	All	General Small Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
88	NWS	Commercial	All	General Small Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
89	NWS	Commercial	All	General Small Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
90	NWS	Commercial	All	General Small Commercial	Lighting	High Performance T8/T5 with Low-BF Ballast
91	NWS	Commercial	All	Hospital	Lighting	Reduced Wattage T8/T5 Lamps
92	NWS	Commercial	All	K12 Education	Lighting	Reduced Wattage T8/T5 Lamps
93	NWS	Commercial	All	Education with Summer Sessions	Lighting	Reduced Wattage T8/T5 Lamps
94	NWS	Commercial	All	Lodging	Lighting	Reduced Wattage T8/T5 Lamps

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
95	NWS	Commercial	All	General Large Commercial	Lighting	Reduced Wattage T8/T5 Lamps
96	NWS	Commercial	All	General Small Commercial	Lighting	Reduced Wattage T8/T5 Lamps
97	NWS	Commercial	All	Hospital	Lighting	Reduced Wattage T8/T5 Lamps
98	NWS	Commercial	All	K12 Education	Lighting	Reduced Wattage T8/T5 Lamps
99	NWS	Commercial	All	Education with Summer Sessions	Lighting	Reduced Wattage T8/T5 Lamps
100	NWS	Commercial	All	Lodging	Lighting	Reduced Wattage T8/T5 Lamps
101	NWS	Commercial	All	General Large Commercial	Lighting	Reduced Wattage T8/T5 Lamps
102	NWS	Commercial	All	General Small Commercial	Lighting	Reduced Wattage T8/T5 Lamps
103	NWS	Commercial	All	Hospital	Lighting	Linear Florescent Fixture Upgrade
104	NWS	Commercial	All	K12 Education	Lighting	Linear Florescent Fixture Upgrade
105	NWS	Commercial	All	Education with Summer Sessions	Lighting	Linear Florescent Fixture Upgrade
106	NWS	Commercial	All	Lodging	Lighting	Linear Florescent Fixture Upgrade
107	NWS	Commercial	All	General Large Commercial	Lighting	Linear Florescent Fixture Upgrade
108	NWS	Commercial	All	General Small Commercial	Lighting	Linear Florescent Fixture Upgrade
109	NWS	Commercial	All	Hospital	Lighting	Linear Florescent Fixture Upgrade
110	NWS	Commercial	All	K12 Education	Lighting	Linear Florescent Fixture Upgrade
111	NWS	Commercial	All	Education with Summer Sessions	Lighting	Linear Florescent Fixture Upgrade
112	NWS	Commercial	All	Lodging	Lighting	Linear Florescent Fixture Upgrade
113	NWS	Commercial	All	General Large Commercial	Lighting	Linear Florescent Fixture Upgrade
114	NWS	Commercial	All	General Small Commercial	Lighting	Linear Florescent Fixture Upgrade
115	NWS	Commercial	All	Hospital	Lighting	Linear Florescent Fixture Upgrade
116	NWS	Commercial	All	K12 Education	Lighting	Linear Florescent Fixture Upgrade
117	NWS	Commercial	All	Education with Summer Sessions	Lighting	Linear Florescent Fixture Upgrade
118	NWS	Commercial	All	Lodging	Lighting	Linear Florescent Fixture Upgrade
119	NWS	Commercial	All	General Large Commercial	Lighting	Linear Florescent Fixture Upgrade
120	NWS	Commercial	All	General Small Commercial	Lighting	Linear Florescent Fixture Upgrade
121	NWS	Commercial	All	Hospital	Lighting	Linear Florescent Fixture Upgrade
122	NWS	Commercial	All	K12 Education	Lighting	Linear Florescent Fixture Upgrade
123	NWS	Commercial	All	Education with Summer Sessions	Lighting	Linear Florescent Fixture Upgrade
124	NWS	Commercial	All	Lodging	Lighting	Linear Florescent Fixture Upgrade
125	NWS	Commercial	All	General Large Commercial	Lighting	Linear Florescent Fixture Upgrade
126	NWS	Commercial	All	General Small Commercial	Lighting	Linear Florescent Fixture Upgrade
127	NWS	Commercial	All	Hospital	Lighting	LED Bulbs
128	NWS	Commercial	All	Hospital	Lighting	LED Bulbs
129	NWS	Commercial	All	K12 Education	Lighting	LED Bulbs
130	NWS	Commercial	All	K12 Education	Lighting	LED Bulbs
131	NWS	Commercial	All	Education with Summer Sessions	Lighting	LED Bulbs
132	NWS	Commercial	All	Education with Summer Sessions	Lighting	LED Bulbs
133	NWS	Commercial	All	Lodging	Lighting	LED Bulbs
134	NWS	Commercial	All	Lodging	Lighting	LED Bulbs
135	NWS	Commercial	All	General Large Commercial	Lighting	LED Bulbs
136	NWS	Commercial	All	General Large Commercial	Lighting	LED Bulbs
137	NWS	Commercial	All	General Small Commercial	Lighting	LED Bulbs
138	NWS	Commercial	All	General Small Commercial	Lighting	LED Bulbs
139	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
140	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
141	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
142	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
143	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
144	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
145	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
146	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
147	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
148	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
149	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
150	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
151	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
152	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
153	NWS	Commercial	Large Commercial	All	Lighting	Efficient High Bay Lighting
154	NWS	Commercial	Small Commercial	All	Lighting	Efficient High Bay Lighting
155	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
156	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
157	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
158	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
159	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
160	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
161	NWS	Commercial	Large Commercial	All	Lighting	Lighting Controls
162	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
163	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
164	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
165	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
166	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
167	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
168	NWS	Commercial	Small Commercial	All	Lighting	Lighting Controls
169	NWS	Commercial	Small Commercial	All	Lighting	LED Exit Signs
170	NWS	Commercial	Small Commercial	All	HVAC	Electronically Commutated Motors for HVAC Applications
171	NWS	Commercial	All	All	Refrigeration	Electronically Commutated Motors for Refrigeration Applications
172	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Refrigerator
173	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Refrigerator
174	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Refrigerator
175	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Refrigerator
176	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Freezer
177	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Freezer
178	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Freezer
179	NWS	Commercial	All	All	Refrigeration	ENERGY STAR Solid Door Freezer
180	NWS	Commercial	All	All	Refrigeration	Beverage and Snack Machine Controls
181	NWS	Commercial	All	All	Refrigeration	Beverage and Snack Machine Controls
182	NWS	Commercial	All	All	Refrigeration	Beverage and Snack Machine Controls
183	NWS	Commercial	All	Hospital	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
184	NWS	Commercial	All	Hospital	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
185	NWS	Commercial	All	K12 Education	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
186	NWS	Commercial	All	K12 Education	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
187	NWS	Commercial	All	Education with Summer Sessions	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
188	NWS	Commercial	All	Education with Summer Sessions	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
189	NWS	Commercial	All	Lodging	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
190	NWS	Commercial	All	Lodging	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
191	NWS	Commercial	All	Food Sales	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
192	NWS	Commercial	All	Food Sales	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
193	NWS	Commercial	All	Restaurant	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
194	NWS	Commercial	All	Restaurant	Refrigeration	Automatic Door Closer for Walk-in Coolers and Freezers
195	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
196	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
197	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
198	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
199	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
200	NWS	Commercial	All	Food Sales	Refrigeration	Door Heater Controls for Cooler or Freezer
201	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
202	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
203	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
204	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
205	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
206	NWS	Commercial	All	Restaurant	Refrigeration	Door Heater Controls for Cooler or Freezer
207	NWS	Commercial	All	All	Refrigeration	Evaporator Fan Control
208	NWS	Commercial	All	All	Refrigeration	Evaporator Fan Control
209	NWS	Commercial	All	All	Refrigeration	Evaporator Fan Control
210	NWS	Commercial	All	Hospital	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
211	NWS	Commercial	All	Hospital	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
212	NWS	Commercial	All	K12 Education	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
213	NWS	Commercial	All	K12 Education	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
214	NWS	Commercial	All	Education with Summer Sessions	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
215	NWS	Commercial	All	Education with Summer Sessions	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
216	NWS	Commercial	All	Lodging	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
217	NWS	Commercial	All	Lodging	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
218	NWS	Commercial	All	Food Sales	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
219	NWS	Commercial	All	Food Sales	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
220	NWS	Commercial	All	Restaurant	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
221	NWS	Commercial	All	Restaurant	Refrigeration	Strip Curtain for Walk-in Coolers and Freezers
222	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Dishwasher
223	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Dishwasher
224	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Dishwasher
225	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Dishwasher
226	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Dishwasher
227	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Fryer
228	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Fryer
229	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Fryer
230	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Fryer
231	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Fryer
232	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Fryer
233	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Fryer
234	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Fryer
235	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Fryer

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
236	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Fryer
237	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Griddle
238	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Griddle
239	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Griddle
240	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Griddle
241	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Griddle
242	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Hot Food Holding Cabinets
243	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Hot Food Holding Cabinets
244	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Hot Food Holding Cabinets
245	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Hot Food Holding Cabinets
246	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Hot Food Holding Cabinets
247	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Electric Convection Ovens
248	NWS	Commercial	All	Hospital	Food Services Equipment	ENERGY STAR Electric Convection Ovens
249	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Electric Convection Ovens
250	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Electric Convection Ovens
251	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Electric Convection Ovens
252	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Electric Convection Ovens
253	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Electric Convection Ovens
254	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Electric Convection Ovens
255	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Electric Convection Ovens
256	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Electric Convection Ovens
257	NWS	Commercial	All	K12 Education	Food Services Equipment	ENERGY STAR Steam Cooker
258	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	ENERGY STAR Steam Cooker
259	NWS	Commercial	All	Lodging	Food Services Equipment	ENERGY STAR Steam Cooker
260	NWS	Commercial	All	Restaurant	Food Services Equipment	ENERGY STAR Steam Cooker
261	NWS	Commercial	All	Hospital	Food Services Equipment	Low-Flow Pre-Rinse Spray Valves
262	NWS	Commercial	All	K12 Education	Food Services Equipment	Low-Flow Pre-Rinse Spray Valves
263	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	Low-Flow Pre-Rinse Spray Valves
264	NWS	Commercial	All	Lodging	Food Services Equipment	Low-Flow Pre-Rinse Spray Valves
265	NWS	Commercial	All	Restaurant	Food Services Equipment	Low-Flow Pre-Rinse Spray Valves
266	WS	Commercial	All	Hospital	Service Hot Water	Electric Storage Water Heater
267	WS	Commercial	All	K12 Education	Service Hot Water	Electric Storage Water Heater
268	WS	Commercial	All	Education with Summer Sessions	Service Hot Water	Electric Storage Water Heater
269	WS	Commercial	All	Lodging	Service Hot Water	Electric Storage Water Heater
270	WS	Commercial	All	Restaurant	Service Hot Water	Electric Storage Water Heater
271	WS	Commercial	All	Hospital	Service Hot Water	Heat Pump Storage Water Heater
272	WS	Commercial	All	K12 Education	Service Hot Water	Heat Pump Storage Water Heater
273	WS	Commercial	All	Education with Summer Sessions	Service Hot Water	Heat Pump Storage Water Heater
274	WS	Commercial	All	Lodging	Service Hot Water	Heat Pump Storage Water Heater
275	WS	Commercial	All	Restaurant	Service Hot Water	Heat Pump Storage Water Heater
276	WS	Commercial	All	Hospital	Service Hot Water	Heat Pump Storage Water Heater
277	WS	Commercial	All	K12 Education	Service Hot Water	Heat Pump Storage Water Heater
278	WS	Commercial	All	Education with Summer Sessions	Service Hot Water	Heat Pump Storage Water Heater
279	WS	Commercial	All	Lodging	Service Hot Water	Heat Pump Storage Water Heater
280	WS	Commercial	All	Restaurant	Service Hot Water	Heat Pump Storage Water Heater
281	WS	Commercial	All	Hospital	Service Hot Water	Heat Pump Storage Water Heater
282	WS	Commercial	All	K12 Education	Service Hot Water	Heat Pump Storage Water Heater

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
283	WS	Commercial	All	Education with Summer Sessions	Service Hot Water	Heat Pump Storage Water Heater
284	WS	Commercial	All	Lodging	Service Hot Water	Heat Pump Storage Water Heater
285	WS	Commercial	All	Restaurant	Service Hot Water	Heat Pump Storage Water Heater
286	NWS	Commercial	All	Hospital	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
287	NWS	Commercial	All	Lodging	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
288	NWS	Commercial	All	Restaurant	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
289	NWS	Commercial	All	K12 Education	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
290	NWS	Commercial	All	Education with Summer Sessions	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
291	NWS	Commercial	All	General Large Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
292	NWS	Commercial	All	General Small Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
293	NWS	Commercial	All	Hospital	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
294	NWS	Commercial	All	Lodging	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
295	NWS	Commercial	All	Restaurant	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
296	NWS	Commercial	All	K12 Education	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
297	NWS	Commercial	All	Education with Summer Sessions	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
298	NWS	Commercial	All	General Large Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
299	NWS	Commercial	All	General Small Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
300	NWS	Commercial	All	Hospital	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
301	NWS	Commercial	All	Lodging	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
302	NWS	Commercial	All	Restaurant	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
303	NWS	Commercial	All	K12 Education	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
304	NWS	Commercial	All	Education with Summer Sessions	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
305	NWS	Commercial	All	General Large Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
306	NWS	Commercial	All	General Small Commercial	Service Hot Water	Low Flow Faucet Aerators - Electric DHW fuel
307	NWS	Commercial	Small Commercial	All	Misc	Small Business Program Audit & Direct Install
308	NWS	Commercial	Small Commercial	All	Lighting	Small Business Program Audit & Direct Install
309	NWS	Commercial	Small Commercial	All	Service Hot Water	Small Business Program Audit & Direct Install
310	NWS	Commercial	Small Commercial	All	Lighting	Small Business Program Lighting Upgrade Package
311	NWS	Commercial	Small Commercial	All	Refrigeration	Small Business Program Refrigeration Upgrade Package
312	WS	Commercial	Large Commercial	All	Misc	Retrocommissioning
313	WS	Commercial	Large Commercial	All	Misc	Retrocommissioning
314	NWS	Commercial	All	All	Service Hot Water	Low Flow Showerheads
315	NWS	Commercial	All	All	Service Hot Water	Low Flow Showerheads
316	NWS	Commercial	All	All	Service Hot Water	Low Flow Showerheads
317	NWS	Commercial	Large Commercial	General Large Commercial	Service Hot Water	Recirculation Pump Timer Clock - Controls for Central Domestic Hot Water
318	NWS	Commercial	All	All	Lighting	LED Lighting - Exterior
319	NWS	Commercial	All	All	Lighting	LED Bulbs and Fixtures - Parking Garage
320	NWS	Commercial	All	All	Lighting	LED High Bay Fixtures
321	NWS	Commercial	All	All	Lighting	LED High Bay Fixtures
322	NWS	Commercial	All	All	Lighting	LED High Bay Fixtures
323	NWS	Commercial	All	All	Lighting	LED High Bay Fixtures
324	NWS	Commercial	All	All	Lighting	LED Linear Ambient Fixtures
325	NWS	Commercial	All	All	Lighting	LED Linear Ambient Fixtures
326	NWS	Commercial	All	All	Lighting	LED Linear Ambient Fixtures
327	NWS	Commercial	All	All	Lighting	LED Linear Ambient Fixtures
328	NWS	Commercial	All	All	Lighting	LED Linear Ambient Fixtures



Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
329	NWS	Commercial	All	All	Lighting	LED Troffers
330	NWS	Commercial	All	All	Lighting	LED Troffers
331	NWS	Commercial	All	All	Lighting	LED Troffers
332	NWS	Commercial	All	All	Lighting	LED Troffers
333	NWS	Commercial	All	All	Lighting	LED Troffers
334	NWS	Commercial	All	All	Lighting	LED Troffers
335	NWS	Commercial	All	All	Lighting	LED Troffers
336	NWS	Commercial	All	All	Lighting	LED Troffers
337	NWS	Commercial	All	All	Lighting	LED Downlight Fixtures
338	NWS	Commercial	All	All	Lighting	LED Linear Replacement Lamps
339	NWS	Commercial	All	All	Lighting	LED Linear Replacement Lamps
340	NWS	Commercial	All	All	Lighting	LED Interior Directional
341	NWS	Commercial	All	All	Lighting	LED Interior Directional
342	NWS	Commercial	All	All	Misc	Commercial Ice Makers
343	NWS	Commercial	All	All	Misc	Commercial Ice Makers
344	NWS	Commercial	All	All	Refrigeration	Refrigerated Case Night Covers
345	NWS	Commercial	All	All	Misc	Computer Power Management
346	NWS	Commercial	All	All	Misc	Light Emitting Diode (LED) Traffic Signals
347	NWS	Commercial	All	All	Misc	Advanced Power Strips
348	NWS	Commercial	Small Commercial	All	Service Hot Water	Water Heater Pipe Insulation
349	WS	Commercial	Small Commercial	All	Shell	Window Film (Small Commercial)
350	WS	Commercial	Small Commercial	All	Shell	Window Film (Small Commercial)
351	WS	Commercial	Small Commercial	All	Shell	Roof Deck Insulation
352	NWS	Commercial	Small Commercial	All	Lighting	Exterior Lighting BiLevel Control w Override, 150 to 1000 HID
353	NWS	Commercial	Small Commercial	All	Lighting	Exterior Lighting BiLevel Control w Override, 150 to 1000 PSMH
354	NWS	Commercial	Small Commercial	All	Lighting	Exterior LED BiLevel Controls 0-810W LED
355	NWS	Commercial	All	All	Refrigeration	Door Gaskets - Cooler and Freezer
356	WS	Commercial	All	Hospital	HVAC	Commercial Kitchen Demand Ventilation Controls
357	WS	Commercial	All	Lodging	HVAC	Commercial Kitchen Demand Ventilation Controls
358	WS	Commercial	All	K12 Education	HVAC	Commercial Kitchen Demand Ventilation Controls
359	WS	Commercial	All	Education with Summer Sessions	HVAC	Commercial Kitchen Demand Ventilation Controls
360	WS	Commercial	All	Restaurant	HVAC	Commercial Kitchen Demand Ventilation Controls
361	NWS	Commercial	All	All	Refrigeration	Commercial Solid and Glass Door Refrigerators & Freezers
362	NWS	Commercial	All	All	Refrigeration	Commercial Solid and Glass Door Refrigerators & Freezers
363	WS	Commercial	Small Commercial	All	Shell	Ceiling Insulation (Small Commercial)
364	WS	Commercial	Small Commercial	All	Service Hot Water	Water Heater Jackets
365	NWS	Commercial	All	Hospital	Food Services Equipment	Combination Ovens
366	NWS	Commercial	All	K12 Education	Food Services Equipment	Combination Ovens
367	NWS	Commercial	All	Education with Summer Sessions	Food Services Equipment	Combination Ovens
368	NWS	Commercial	All	Lodging	Food Services Equipment	Combination Ovens
369	NWS	Commercial	All	Restaurant	Food Services Equipment	Combination Ovens
370	WS	Commercial	Small Commercial	All	Shell	Duct Efficiency Improvements -Average
371	NWS	Commercial	All	All	HVAC	Premium Efficiency Motors for HVAC applications
372	NWS	Commercial	All	Food Sales	Refrigeration	Zero Energy Door
373	NWS	Commercial	All	Food Sales	Refrigeration	Zero Energy Door
374	NWS	Commercial	All	Food Sales	Refrigeration	Zero Energy Door
375	NWS	Commercial	All	Restaurant	Refrigeration	Zero Energy Door

Commercial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	Building Type	End Use	Measure Name
376	NWS	Commercial	All	Restaurant	Refrigeration	Zero Energy Door
377	NWS	Commercial	All	Restaurant	Refrigeration	Zero Energy Door
378	NWS	Commercial	Small Commercial	General Small Commercial	Misc	Plug Load Occupancy Sensors
379	NWS	Commercial	Small Commercial	General Small Commercial	Misc	Plug Load Occupancy Sensors
380	NWS	Commercial	Small Commercial	General Small Commercial	Misc	Plug Load Occupancy Sensors
381	NWS	Commercial	Large Commercial	General Large Commercial	Misc	Plug Load Occupancy Sensors
382	NWS	Commercial	Large Commercial	General Large Commercial	Misc	Plug Load Occupancy Sensors
383	NWS	Commercial	Large Commercial	General Large Commercial	Misc	Plug Load Occupancy Sensors
384	WS	Commercial	Small Commercial	General Small Commercial	Shell	Cool Roofs
385	WS	Commercial	Small Commercial	General Small Commercial	Shell	Cool Roofs
386	WS	Commercial	Small Commercial	General Small Commercial	Shell	Cool Roofs
387	WS	Commercial	Large Commercial	General Large Commercial	Shell	Cool Roofs
388	WS	Commercial	Large Commercial	General Large Commercial	Shell	Cool Roofs
389	WS	Commercial	Large Commercial	General Large Commercial	Shell	Cool Roofs
390	WS	Commercial	All	K12 Education	Shell	Cool Roofs
391	WS	Commercial	All	K12 Education	Shell	Cool Roofs
392	WS	Commercial	All	K12 Education	Shell	Cool Roofs
393	WS	Commercial	All	Restaurant	Shell	Cool Roofs
394	WS	Commercial	All	Restaurant	Shell	Cool Roofs
395	WS	Commercial	All	Restaurant	Shell	Cool Roofs
396	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, East)
397	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, East)
398	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, East)
399	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, West)
400	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, West)
401	WS	Commercial	Small Commercial	General Small Commercial	Shell	Window Awnings (Small Commercial, West)
402	WS	Commercial	Large Commercial	General Large Commercial	Shell	Commercial Door Air Infiltration
403	WS	Commercial	Large Commercial	General Large Commercial	Shell	Commercial Door Air Infiltration
404	WS	Commercial	Large Commercial	General Large Commercial	Shell	Commercial Door Air Infiltration
405	WS	Commercial	Small Commercial	General Small Commercial	Shell	Commercial Door Air Infiltration
406	WS	Commercial	Small Commercial	General Small Commercial	Shell	Commercial Door Air Infiltration
407	WS	Commercial	Small Commercial	General Small Commercial	Shell	Commercial Door Air Infiltration
408	NWS	Commercial	All	Lodging	Misc	ENERGY STAR Pool Pumps
409	NWS	Commercial	All	Lodging	Misc	ENERGY STAR Pool Pumps
410	WS	Commercial	All	Hospital	Service Hot Water	Electric Tankless Water Heater
411	WS	Commercial	All	K12 Education	Service Hot Water	Electric Tankless Water Heater
412	WS	Commercial	All	Education with Summer Sessions	Service Hot Water	Electric Tankless Water Heater
413	WS	Commercial	All	Lodging	Service Hot Water	Electric Tankless Water Heater
414	WS	Commercial	All	Restaurant	Service Hot Water	Electric Tankless Water Heater
415	WS	Commercial	Large Commercial	All	Misc	Commercial New Construction
416	WS	Commercial	Large Commercial	All	Misc	Commercial New Construction
417	WS	Commercial	Large Commercial	All	Misc	Commercial New Construction
418	WS	Commercial	Small Commercial	All	Misc	Commercial New Construction
419	WS	Commercial	Small Commercial	All	Misc	Commercial New Construction
420	WS	Commercial	Small Commercial	All	Misc	Commercial New Construction

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
1	Per ton	ROB	15	15	\$140.00	148	0.051	0.00	0	0.000
2	Per ton	ROB	15	15	\$160.00	134	0.038	0.00	0	0.000
3	Per ton	ROB	15	15	\$140.00	120	0.051	0.00	0	0.000
4	Per ton	ROB	15	15	\$160.00	74	0.059	0.00	0	0.000
5	Per ton	ROB	15	15	\$160.00	57	0.084	0.00	0	0.000
6	Per ton	ROB	15	15	\$160.00	56	0.066	0.00	0	0.000
7	Per ton	ROB	15	15	\$180.00	192	0.067	0.00	0	0.000
8	Per ton	ROB	15	15	\$200.00	291	0.086	0.00	0	0.000
9	Per ton	ROB	15	15	\$200.00	289	0.084	0.00	0	0.000
10	Per ton	ROB	15	15	\$200.00	155	0.066	0.00	0	0.000
11	Per ton	ROB	15	15	\$160.00	22	0.053	0.00	0	0.000
12	Per ton	ROB	15	15	\$160.00	48	0.053	0.00	0	0.000
13	Per ton	ROB	15	15	\$160.00	76	0.058	0.00	0	0.000
14	Per ton	ROB	15	15	\$160.00	49	0.063	0.00	0	0.000
15	Per ton	ROB	15	15	\$200.00	61	0.053	0.00	0	0.000
16	Per ton	ROB	15	15	\$200.00	133	0.053	0.00	0	0.000
17	Per ton	ROB	15	15	\$200.00	209	0.058	0.00	0	0.000
18	Per ton	ROB	15	15	\$200.00	136	0.063	0.00	0	0.000
19	Per ton	ROB	15	15	\$160.00	12	0.049	0.00	0	0.000
20	Per ton	ROB	15	15	\$160.00	26	0.049	0.00	0	0.000
21	Per ton	ROB	15	15	\$160.00	41	0.053	0.00	0	0.000
22	Per ton	ROB	15	15	\$160.00	27	0.058	0.00	0	0.000
23	per unit	RET	10	10	\$1,047.00	792	0.428	0.00	0	0.000
24	per unit	RET	10	10	\$1,047.00	978	0.972	0.00	0	0.000
25	per unit	ROB	10	10	\$84.00	433	0.430	0.00	0	0.000
26	per unit	ROB	10	10	\$84.00	356	0.192	0.00	0	0.000
27	per unit	RET	8	8	\$260.00	432	0.000	0.00	0	0.000
28	per ton	ROB	20	20	\$127.00	381	0.327	0.00	0	0.000
29	per ton	ROB	20	20	\$127.00	401	0.296	0.00	0	0.000
30	per ton	ROB	20	20	\$127.00	446	0.273	0.00	0	0.000
31	per ton	ROB	20	20	\$127.00	387	0.326	0.00	0	0.000
32	per ton	ROB	20	20	\$22.00	102	0.053	0.00	0	0.000
33	per ton	ROB	20	20	\$22.00	107	0.048	0.00	0	0.000
34	per ton	ROB	20	20	\$22.00	119	0.045	0.00	0	0.000
35	per ton	ROB	20	20	\$22.00	104	0.053	0.00	0	0.000
36	per ton	ROB	20	20	\$87.00	82	0.029	0.00	0	0.000
37	per ton	ROB	20	20	\$87.00	87	0.026	0.00	0	0.000
38	per ton	ROB	20	20	\$87.00	96	0.024	0.00	0	0.000
39	per ton	ROB	20	20	\$87.00	84	0.029	0.00	0	0.000
40	Per HP	RET	15	15	\$175.00	2921	0.078	0.00	0	0.000
41	Per HP	RET	15	15	\$280.00	1478	0.177	0.00	0	0.000
42	Per HP	RET	15	15	\$280.00	3109	0.000	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
43	Per HP	RET	15	15	\$175.00	4409	0.105	0.00	0	0.000
44	Per HP	RET	15	15	\$175.00	833	0.078	0.00	0	0.000
45	Per HP	RET	15	15	\$280.00	561	0.177	0.00	0	0.000
46	Per HP	RET	15	15	\$280.00	3109	0.000	0.00	0	0.000
47	Per HP	RET	15	15	\$175.00	1258	0.105	0.00	0	0.000
48	Per HP	RET	15	15	\$175.00	985	0.078	0.00	0	0.000
49	Per HP	RET	15	15	\$280.00	627	0.177	0.00	0	0.000
50	Per HP	RET	15	15	\$280.00	3109	0.000	0.00	0	0.000
51	Per HP	RET	15	15	\$175.00	1487	0.105	0.00	0	0.000
52	Per HP	RET	15	15	\$175.00	1167	0.078	0.00	0	0.000
53	Per HP	RET	15	15	\$280.00	708	0.177	0.00	0	0.000
54	Per HP	RET	15	15	\$280.00	3109	0.000	0.00	0	0.000
55	Per HP	RET	15	15	\$175.00	1762	0.105	0.00	0	0.000
56	Per HP	RET	15	15	\$175.00	1428	0.078	0.00	0	0.000
57	Per HP	RET	15	15	\$280.00	822	0.177	0.00	0	0.000
58	Per HP	RET	15	15	\$280.00	3109	0.000	0.00	0	0.000
59	Per HP	RET	15	15	\$175.00	2156	0.105	0.00	0	0.000
60	per building	ROB	10	10	\$250.00	896	0.000	0.00	0	0.000
61	per building	ROB	10	10	\$2,000.00	8545	0.000	0.00	0	0.000
62	per building	ROB	10	10	\$600.00	2536	2.264	0.00	0	0.000
63	per building	ROB	10	10	\$3,960.55	8221	7.341	0.00	0	0.000
64	Per ton	ROB	25	25	\$750.00	345	0.291	0.00	0	0.000
65	Per ton	RET	10	10	\$35.00	396	0.159	0.00	0	0.000
66	Per ton	RET	10	10	\$35.00	483	0.162	0.00	0	0.000
67	Per Fixture	RET	12	12	\$50.00	39	0.007	0.00	0	0.000
68	Per Fixture	RET	12	12	\$55.00	56	0.009	0.00	0	0.000
69	Per Fixture	RET	12	12	\$60.00	90	0.015	0.00	0	0.000
70	Per Fixture	RET	12	12	\$65.00	112	0.019	0.00	0	0.000
71	Per Fixture	RET	15	15	\$50.00	19	0.004	0.00	0	0.000
72	Per Fixture	RET	15	15	\$55.00	27	0.006	0.00	0	0.000
73	Per Fixture	RET	15	15	\$60.00	44	0.009	0.00	0	0.000
74	Per Fixture	RET	15	15	\$65.00	54	0.011	0.00	0	0.000
75	Per Fixture	RET	15	15	\$50.00	25	0.006	0.00	0	0.000
76	Per Fixture	RET	15	15	\$55.00	35	0.008	0.00	0	0.000
77	Per Fixture	RET	15	15	\$60.00	56	0.013	0.00	0	0.000
78	Per Fixture	RET	15	15	\$65.00	70	0.017	0.00	0	0.000
79	Per Fixture	RET	11	11	\$50.00	45	0.007	0.00	0	0.000
80	Per Fixture	RET	11	11	\$55.00	65	0.010	0.00	0	0.000
81	Per Fixture	RET	11	11	\$60.00	104	0.016	0.00	0	0.000
82	Per Fixture	RET	11	11	\$65.00	130	0.020	0.00	0	0.000
83	Per Fixture	RET	15	15	\$50.00	26	0.006	0.00	0	0.000
84	Per Fixture	RET	15	15	\$55.00	37	0.009	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
85	Per Fixture	RET	15	15	\$60.00	59	0.015	0.00	0	0.000
86	Per Fixture	RET	15	15	\$65.00	73	0.018	0.00	0	0.000
87	Per Fixture	RET	15	15	\$50.00	28	0.008	0.00	0	0.000
88	Per Fixture	RET	15	15	\$55.00	41	0.011	0.00	0	0.000
89	Per Fixture	RET	15	15	\$60.00	65	0.017	0.00	0	0.000
90	Per Fixture	RET	15	15	\$65.00	81	0.022	0.00	0	0.000
91	Per Lamp	ROB	6	6	\$2.00	34	0.006	0.00	0	0.000
92	Per Lamp	ROB	13	13	\$2.00	16	0.003	0.00	0	0.000
93	Per Lamp	ROB	10	10	\$2.00	21	0.005	0.00	0	0.000
94	Per Lamp	ROB	5	5	\$2.00	39	0.006	0.00	0	0.000
95	Per Lamp	ROB	10	10	\$2.00	22	0.006	0.00	0	0.000
96	Per Lamp	ROB	9	9	\$2.00	24	0.007	0.00	0	0.000
97	Per Lamp	RET	6	6	\$7.17	34	0.006	0.00	0	0.000
98	Per Lamp	RET	13	13	\$7.17	16	0.003	0.00	0	0.000
99	Per Lamp	RET	10	10	\$7.17	21	0.005	0.00	0	0.000
100	Per Lamp	RET	5	5	\$7.17	39	0.006	0.00	0	0.000
101	Per Lamp	RET	10	10	\$7.17	22	0.006	0.00	0	0.000
102	Per Lamp	RET	9	9	\$7.17	24	0.007	0.00	0	0.000
103	Per Lamp	RET	11	11	\$49.00	112	0.019	0.00	0	0.000
104	Per Lamp	RET	11	11	\$49.00	54	0.011	0.00	0	0.000
105	Per Lamp	RET	11	11	\$49.00	42	0.017	0.00	0	0.000
106	Per Lamp	RET	11	11	\$49.00	130	0.020	0.00	0	0.000
107	Per Lamp	RET	11	11	\$49.00	73	0.018	0.00	0	0.000
108	Per Lamp	RET	11	11	\$49.00	81	0.022	0.00	0	0.000
109	Per Lamp	RET	11	11	\$53.00	225	0.037	0.00	0	0.000
110	Per Lamp	RET	11	11	\$53.00	109	0.023	0.00	0	0.000
111	Per Lamp	RET	11	11	\$53.00	140	0.033	0.00	0	0.000
112	Per Lamp	RET	11	11	\$53.00	260	0.039	0.00	0	0.000
113	Per Lamp	RET	11	11	\$53.00	146	0.037	0.00	0	0.000
114	Per Lamp	RET	11	11	\$53.00	163	0.044	0.00	0	0.000
115	Per Lamp	RET	11	11	\$62.00	112	0.019	0.00	0	0.000
116	Per Lamp	RET	11	11	\$62.00	54	0.011	0.00	0	0.000
117	Per Lamp	RET	11	11	\$62.00	70	0.017	0.00	0	0.000
118	Per Lamp	RET	11	11	\$62.00	130	0.020	0.00	0	0.000
119	Per Lamp	RET	11	11	\$62.00	73	0.018	0.00	0	0.000
120	Per Lamp	RET	11	11	\$62.00	81	0.022	0.00	0	0.000
121	Per Lamp	RET	11	11	\$62.00	225	0.037	0.00	0	0.000
122	Per Lamp	RET	11	11	\$62.00	109	0.023	0.00	0	0.000
123	Per Lamp	RET	11	11	\$62.00	140	0.033	0.00	0	0.000
124	Per Lamp	RET	11	11	\$62.00	260	0.039	0.00	0	0.000
125	Per Lamp	RET	11	11	\$62.00	146	0.037	0.00	0	0.000
126	Per Lamp	RET	11	11	\$62.00	163	0.044	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
127	Per Lamp	ROB	9	9	\$1.96	168	0.028	0.00	0	0.000
128	Per Lamp	ROB	9	9	\$2.94	337	0.056	0.00	0	0.000
129	Per Lamp	ROB	15	15	\$1.96	81	0.017	0.00	0	0.000
130	Per Lamp	ROB	15	15	\$2.94	164	0.034	0.00	0	0.000
131	Per Lamp	ROB	14	14	\$1.96	105	0.025	0.00	0	0.000
132	Per Lamp	ROB	14	14	\$2.94	211	0.050	0.00	0	0.000
133	Per Lamp	ROB	15	15	\$1.96	90	0.009	0.00	0	0.000
134	Per Lamp	ROB	15	15	\$2.94	180	0.018	0.00	0	0.000
135	Per Lamp	ROB	13	13	\$1.96	110	0.028	0.00	0	0.000
136	Per Lamp	ROB	13	13	\$2.94	220	0.056	0.00	0	0.000
137	Per Lamp	ROB	12	12	\$1.96	122	0.033	0.00	0	0.000
138	Per Lamp	ROB	12	12	\$2.94	244	0.066	0.00	0	0.000
139	Per Fixture	RET	15	15	\$75.00	315	0.079	0.00	0	0.000
140	Per Fixture	RET	15	15	\$75.00	350	0.094	0.00	0	0.000
141	Per Fixture	RET	15	15	\$75.00	524	0.141	0.00	0	0.000
142	Per Fixture	RET	15	15	\$75.00	524	0.141	0.00	0	0.000
143	Per Fixture	RET	15	15	\$75.00	546	0.138	0.00	0	0.000
144	Per Fixture	RET	15	15	\$75.00	546	0.138	0.00	0	0.000
145	Per Fixture	RET	15	15	\$75.00	951	0.256	0.00	0	0.000
146	Per Fixture	RET	15	15	\$75.00	951	0.256	0.00	0	0.000
147	Per Fixture	RET	8	8	\$175.00	593	0.150	0.00	0	0.000
148	Per Fixture	RET	7	7	\$175.00	659	0.177	0.00	0	0.000
149	Per Fixture	RET	8	8	\$175.00	263	0.066	0.00	0	0.000
150	Per Fixture	RET	7	7	\$175.00	292	0.078	0.00	0	0.000
151	Per Fixture	RET	8	8	\$250.00	875	0.221	0.00	0	0.000
152	Per Fixture	RET	7	7	\$250.00	972	0.261	0.00	0	0.000
153	Per Fixture	RET	8	8	\$250.00	448	0.106	0.00	0	0.000
154	Per Fixture	RET	7	7	\$250.00	545	0.146	0.00	0	0.000
155	Per Fixture	RET	8	8	\$100.00	370	0.099	0.00	0	0.000
156	Per Fixture	RET	8	8	\$82.50	247	0.066	0.00	0	0.000
157	Per Fixture	RET	8	8	\$65.00	123	0.033	0.00	0	0.000
158	Per Fixture	RET	8	8	\$51.00	370	0.099	0.00	0	0.000
159	Per Fixture	RET	8	8	\$110.00	493	0.132	0.00	0	0.000
160	Per Fixture	RET	8	8	\$92.50	432	0.115	0.00	0	0.000
161	Per Fixture	RET	8	8	\$75.00	432	0.115	0.00	0	0.000
162	Per Fixture	RET	8	8	\$100.00	411	0.099	0.00	0	0.000
163	Per Fixture	RET	8	8	\$82.50	274	0.066	0.00	0	0.000
164	Per Fixture	RET	8	8	\$65.00	137	0.033	0.00	0	0.000
165	Per Fixture	RET	8	8	\$51.00	411	0.099	0.00	0	0.000
166	Per Fixture	RET	8	8	\$110.00	548	0.132	0.00	0	0.000
167	Per Fixture	RET	8	8	\$92.50	479	0.115	0.00	0	0.000
168	Per Fixture	RET	8	8	\$75.00	479	0.115	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
169	Per Fixture	RET	16	16	\$14.45	77	0.010	0.00	0	0.000
170	Per Motor	RET	15	15	\$177.00	351	0.070	0.00	0	0.000
171	Per Motor	RET	15	15	\$177.00	829	0.081	0.00	0	0.000
172	Per Unit	ROB	12	12	\$143.00	290	0.030	0.00	0	0.000
173	Per Unit	ROB	12	12	\$164.00	631	0.070	0.00	0	0.000
174	Per Unit	ROB	12	12	\$164.00	951	0.110	0.00	0	0.000
175	Per Unit	ROB	12	12	\$249.00	1250	0.140	0.00	0	0.000
176	Per Unit	ROB	12	12	\$142.00	869	0.100	0.00	0	0.000
177	Per Unit	ROB	12	12	\$166.00	869	0.100	0.00	0	0.000
178	Per Unit	ROB	12	12	\$166.00	2593	0.300	0.00	0	0.000
179	Per Unit	ROB	12	12	\$407.00	4375	0.500	0.00	0	0.000
180	Per Unit	RET	10	10	\$180.00	1612	0.030	0.00	0	0.000
181	Per Unit	RET	10	10	\$180.00	1209	0.035	0.00	0	0.000
182	Per Unit	RET	10	10	\$80.00	343	0.006	0.00	0	0.000
183	Per Unit	RET	8	8	\$156.82	943	0.137	0.00	0	0.000
184	Per Unit	RET	8	8	\$156.82	2307	0.309	0.00	0	0.000
185	Per Unit	RET	8	8	\$156.82	747	0.000	0.00	0	0.000
186	Per Unit	RET	8	8	\$156.82	1826	0.000	0.00	0	0.000
187	Per Unit	RET	8	8	\$156.82	943	0.137	0.00	0	0.000
188	Per Unit	RET	8	8	\$156.82	2307	0.309	0.00	0	0.000
189	Per Unit	RET	8	8	\$156.82	943	0.137	0.00	0	0.000
190	Per Unit	RET	8	8	\$156.82	2307	0.309	0.00	0	0.000
191	Per Unit	RET	8	8	\$156.82	943	0.137	0.00	0	0.000
192	Per Unit	RET	8	8	\$156.82	2307	0.309	0.00	0	0.000
193	Per Unit	RET	8	8	\$156.82	943	0.137	0.00	0	0.000
194	Per Unit	RET	8	8	\$156.82	2307	0.309	0.00	0	0.000
195	Per Unit	RET	12	12	\$300.00	2555	0.000	0.00	0	0.000
196	Per Unit	RET	12	12	\$300.00	1082	0.000	0.00	0	0.000
197	Per Unit	RET	12	12	\$300.00	1082	0.000	0.00	0	0.000
198	Per Unit	RET	12	12	\$200.00	3252	0.000	0.00	0	0.000
199	Per Unit	RET	12	12	\$200.00	1377	0.000	0.00	0	0.000
200	Per Unit	RET	12	12	\$200.00	1377	0.000	0.00	0	0.000
201	Per Unit	RET	12	12	\$300.00	2555	0.000	0.00	0	0.000
202	Per Unit	RET	12	12	\$300.00	1082	0.000	0.00	0	0.000
203	Per Unit	RET	12	12	\$300.00	1082	0.000	0.00	0	0.000
204	Per Unit	RET	12	12	\$200.00	3252	0.000	0.00	0	0.000
205	Per Unit	RET	12	12	\$200.00	1377	0.000	0.00	0	0.000
206	Per Unit	RET	12	12	\$200.00	1377	0.000	0.00	0	0.000
207	Per Unit	RET	16	16	\$291.00	543	0.062	0.00	0	0.000
208	Per Unit	RET	16	16	\$291.00	501	0.057	0.00	0	0.000
209	Per Unit	RET	16	16	\$291.00	463	0.053	0.00	0	0.000
210	Per Unit	RET	4	4	\$214.41	1607	0.350	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
211	Per Unit	RET	4	4	\$214.41	420	0.050	0.00	0	0.000
212	Per Unit	RET	4	4	\$214.41	1272	0.000	0.00	0	0.000
213	Per Unit	RET	4	4	\$214.41	333	0.000	0.00	0	0.000
214	Per Unit	RET	4	4	\$214.41	1607	0.350	0.00	0	0.000
215	Per Unit	RET	4	4	\$214.41	420	0.050	0.00	0	0.000
216	Per Unit	RET	4	4	\$214.41	1607	0.350	0.00	0	0.000
217	Per Unit	RET	4	4	\$214.41	420	0.050	0.00	0	0.000
218	Per Unit	RET	4	4	\$357.35	6848	0.350	0.00	0	0.000
219	Per Unit	RET	4	4	\$357.35	2123	0.050	0.00	0	0.000
220	Per Unit	RET	4	4	\$214.41	1607	0.350	0.00	0	0.000
221	Per Unit	RET	4	4	\$214.41	420	0.050	0.00	0	0.000
222	Per Unit	ROB	16	16	\$737.78	10815	1.383	40.68	0	0.000
223	Per Unit	ROB	16	16	\$737.78	8562	0.000	40.68	0	0.000
224	Per Unit	ROB	16	16	\$737.78	10815	1.383	40.68	0	0.000
225	Per Unit	ROB	16	16	\$737.78	10815	1.383	40.68	0	0.000
226	Per Unit	ROB	16	16	\$737.78	10815	1.383	40.68	0	0.000
227	Per Unit	ROB	12	12	\$1,200.00	1057	0.200	0.00	0	0.000
228	Per Unit	ROB	12	12	\$1,200.00	2659	0.510	0.00	0	0.000
229	Per Unit	ROB	12	12	\$1,200.00	378	0.000	0.00	0	0.000
230	Per Unit	ROB	12	12	\$1,200.00	950	0.000	0.00	0	0.000
231	Per Unit	ROB	12	12	\$1,200.00	503	0.200	0.00	0	0.000
232	Per Unit	ROB	12	12	\$1,200.00	1266	0.510	0.00	0	0.000
233	Per Unit	ROB	12	12	\$1,200.00	1057	0.200	0.00	0	0.000
234	Per Unit	ROB	12	12	\$1,200.00	2659	0.510	0.00	0	0.000
235	Per Unit	ROB	12	12	\$1,200.00	1057	0.200	0.00	0	0.000
236	Per Unit	ROB	12	12	\$1,200.00	2659	0.510	0.00	0	0.000
237	Per Unit	ROB	12	12	\$180.00	2274	0.450	0.00	0	0.000
238	Per Unit	ROB	12	12	\$180.00	812	0.000	0.00	0	0.000
239	Per Unit	ROB	12	12	\$180.00	1083	0.450	0.00	0	0.000
240	Per Unit	ROB	12	12	\$180.00	2274	0.450	0.00	0	0.000
241	Per Unit	ROB	12	12	\$180.00	2274	0.450	0.00	0	0.000
242	Per Unit	ROB	12	12	\$1,200.00	9314	0.610	0.00	0	0.000
243	Per Unit	ROB	12	12	\$1,200.00	3326	0.000	0.00	0	0.000
244	Per Unit	ROB	12	12	\$1,200.00	4435	0.610	0.00	0	0.000
245	Per Unit	ROB	12	12	\$1,200.00	9314	0.610	0.00	0	0.000
246	Per Unit	ROB	12	12	\$1,200.00	9314	0.610	0.00	0	0.000
247	Per Unit	ROB	12	12	\$50.00	1933	0.370	0.00	0	0.000
248	Per Unit	ROB	12	12	\$50.00	2042	0.390	0.00	0	0.000
249	Per Unit	ROB	12	12	\$50.00	690	0.000	0.00	0	0.000
250	Per Unit	ROB	12	12	\$50.00	729	0.000	0.00	0	0.000
251	Per Unit	ROB	12	12	\$50.00	920	0.370	0.00	0	0.000
252	Per Unit	ROB	12	12	\$50.00	972	0.390	0.00	0	0.000



Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
253	Per Unit	ROB	12	12	\$50.00	1933	0.370	0.00	0	0.000
254	Per Unit	ROB	12	12	\$50.00	2042	0.390	0.00	0	0.000
255	Per Unit	ROB	12	12	\$50.00	1933	0.370	0.00	0	0.000
256	Per Unit	ROB	12	12	\$50.00	2042	0.390	0.00	0	0.000
257	Per Unit	ROB	12	12	\$2,490.00	10403	0.000	0.00	0	0.000
258	Per Unit	ROB	12	12	\$2,490.00	13140	2.240	0.00	0	0.000
259	Per Unit	ROB	12	12	\$2,490.00	26280	2.240	0.00	0	0.000
260	Per Unit	ROB	12	12	\$2,490.00	26280	2.240	0.00	0	0.000
261	Per Unit	RET	5	5	\$92.90	2992	0.355	0.00	0	0.000
262	Per Unit	RET	5	5	\$92.90	2295	0.000	0.00	0	0.000
263	Per Unit	RET	5	5	\$92.90	1721	0.570	0.00	0	0.000
264	Per Unit	RET	5	5	\$92.90	2992	0.355	0.00	0	0.000
265	Per Unit	RET	5	5	\$92.90	2992	0.355	0.00	0	0.000
266	Per 1000 sqft	ROB	15	15	\$190.72	95	0.097	0.00	0	0.000
267	Per 1000 sqft	ROB	15	15	\$79.98	22	0.005	0.00	0	0.000
268	Per 1000 sqft	ROB	15	15	\$79.98	28	0.005	0.00	0	0.000
269	Per 1000 sqft	ROB	15	15	\$252.25	114	0.012	0.00	0	0.000
270	Per 1000 sqft	ROB	15	15	\$436.82	172	0.281	0.00	0	0.000
271	Per 1000 sqft	ROB	10	10	\$604.50	1648	0.188	0.00	0	0.000
272	Per 1000 sqft	ROB	10	10	\$253.50	387	0.056	0.00	0	0.000
273	Per 1000 sqft	ROB	10	10	\$253.50	489	0.056	0.00	0	0.000
274	Per 1000 sqft	ROB	10	10	\$799.50	1987	0.227	0.00	0	0.000
275	Per 1000 sqft	ROB	10	10	\$1,384.50	2988	0.341	0.00	0	0.000
276	Per 1000 sqft	ROB	10	10	\$594.61	370	0.042	0.00	0	0.000
277	Per 1000 sqft	ROB	10	10	\$249.35	87	0.013	0.00	0	0.000
278	Per 1000 sqft	ROB	10	10	\$249.35	110	0.013	0.00	0	0.000
279	Per 1000 sqft	ROB	10	10	\$786.42	446	0.051	0.00	0	0.000
280	Per 1000 sqft	ROB	10	10	\$1,361.84	672	0.077	0.00	0	0.000
281	Per 1000 sqft	ROB	10	10	\$654.04	1743	0.199	0.00	0	0.000
282	Per 1000 sqft	ROB	10	10	\$274.28	410	0.059	0.00	0	0.000
283	Per 1000 sqft	ROB	10	10	\$274.28	517	0.059	0.00	0	0.000
284	Per 1000 sqft	ROB	10	10	\$865.03	2101	0.240	0.00	0	0.000
285	Per 1000 sqft	ROB	10	10	\$1,497.97	3160	0.361	0.00	0	0.000
286	Per Unit	RET	10	10	\$8.00	86	0.007	0.00	0	0.000
287	Per Unit	RET	10	10	\$8.00	86	0.005	0.00	0	0.000
288	Per Unit	RET	10	10	\$8.00	591	0.189	0.00	0	0.000
289	Per Unit	RET	10	10	\$8.00	473	0.118	0.00	0	0.000
290	Per Unit	RET	10	10	\$8.00	631	0.118	0.00	0	0.000
291	Per Unit	RET	10	10	\$8.00	329	0.070	0.00	0	0.000
292	Per Unit	RET	10	10	\$8.00	329	0.070	0.00	0	0.000
293	Per Unit	RET	10	10	\$8.00	148	0.012	0.00	0	0.000
294	Per Unit	RET	10	10	\$8.00	148	0.008	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
295	Per Unit	RET	10	10	\$8.00	1014	0.324	0.00	0	0.000
296	Per Unit	RET	10	10	\$8.00	642	0.203	0.00	0	0.000
297	Per Unit	RET	10	10	\$8.00	811	0.203	0.00	0	0.000
298	Per Unit	RET	10	10	\$8.00	563	0.120	0.00	0	0.000
299	Per Unit	RET	10	10	\$8.00	563	0.120	0.00	0	0.000
300	Per Unit	RET	10	10	\$8.00	210	0.017	0.00	0	0.000
301	Per Unit	RET	10	10	\$8.00	210	0.012	0.00	0	0.000
302	Per Unit	RET	10	10	\$8.00	1436	0.460	0.00	0	0.000
303	Per Unit	RET	10	10	\$8.00	910	0.287	0.00	0	0.000
304	Per Unit	RET	10	10	\$8.00	1149	0.287	0.00	0	0.000
305	Per Unit	RET	10	10	\$8.00	798	0.170	0.00	0	0.000
306	Per Unit	RET	10	10	\$8.00	798	0.170	0.00	0	0.000
307	Per Participant	RET	1	1	\$0.00	0	0.000	0.00	0	0.000
308	Per Participant	RET	12	12	\$8.01	497	0.137	0.00	0	0.000
309	Per Participant	RET	9	9	\$95.81	2752	0.740	0.00	0	0.000
310	Per Participant	RET	15	15	\$1,953.95	4890	0.780	0.00	0	0.000
311	Per Participant	RET	15	15	\$90.85	552	0.040	0.00	0	0.000
312	per building	RET	5	5	\$11,062.00	149245	2.100	0.00	0	0.000
313	per building	RET	5	5	\$1,216.00	28212	0.400	0.00	0	0.000
314	per showerhead	RET	10	10	\$12.00	32	0.006	0.00	0	0.000
315	per showerhead	RET	10	10	\$12.00	48	0.009	0.00	0	0.000
316	per showerhead	RET	10	10	\$12.00	64	0.011	0.00	0	0.000
317	Per Unit	RET	15	15	\$2,008.00	656	0.000	0.00	0	0.000
318	Per Fixture	RET	11	11	\$136.00	781	0.000	0.00	0	0.000
319	Per Fixture	RET	6	6	\$136.00	1559	0.178	0.00	0	0.000
320	per unit	RET	14	14	\$204.00	263	0.053	0.00	0	0.000
321	per unit	RET	14	14	\$276.25	270	0.054	0.00	0	0.000
322	per unit	RET	14	14	\$382.50	406	0.081	0.00	0	0.000
323	per unit	RET	14	14	\$488.75	560	0.112	0.00	0	0.000
324	per unit	RET	14	14	\$54.00	43	0.009	0.00	0	0.000
325	per unit	RET	14	14	\$104.00	91	0.018	0.00	0	0.000
326	per unit	RET	14	14	\$158.00	187	0.037	0.00	0	0.000
327	per unit	RET	14	14	\$127.50	226	0.045	0.00	0	0.000
328	per unit	RET	14	14	\$127.50	333	0.067	0.00	0	0.000
329	per unit	RET	14	14	\$48.00	106	0.021	0.00	0	0.000
330	per unit	RET	14	14	\$91.00	238	0.048	0.00	0	0.000
331	per unit	RET	14	14	\$62.00	91	0.018	0.00	0	0.000
332	per unit	RET	14	14	\$99.00	193	0.039	0.00	0	0.000
333	per unit	RET	14	14	\$150.00	256	0.051	0.00	0	0.000
334	per unit	RET	14	14	\$36.00	49	0.010	0.00	0	0.000
335	per unit	RET	14	14	\$76.00	84	0.017	0.00	0	0.000
336	per unit	RET	14	14	\$130.00	198	0.040	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
337	per unit	RET	14	14	\$27.00	144	0.029	0.00	0	0.000
338	per unit	RET	14	14	\$7.71	59	0.012	0.00	0	0.000
339	per unit	RET	14	14	\$6.86	38	0.008	0.00	0	0.000
340	per unit	RET	14	14	\$59.00	190	0.038	0.00	0	0.000
341	per unit	RET	14	14	\$59.00	37	0.007	0.00	0	0.000
342	per unit	ROB	10	10	\$1,092.57	482	0.057	0.00	0	0.000
343	per unit	ROB	10	10	\$1,092.57	649	0.073	0.00	0	0.000
344	per linear foot	RET	4	4	\$42.00	145	0.000	0.00	0	0.000
345	Per Unit	RET	4	4	\$29.00	198	0.010	0.00	0	0.000
346	per lamp	RET	6	6	\$50.00	319	0.036	0.00	0	0.000
347	Per Unit	RET	10	10	\$21.00	61	0.000	0.00	0	0.000
348	Per Water Heater	RET	4	4	\$12.45	112	0.013	0.00	0	0.000
349	per sqft	RET	10	10	\$0.90	6	0.003	0.00	0	0.000
350	per sqft	RET	10	10	\$0.90	6	0.003	0.00	0	0.000
351	per building	RET	20	20	\$784.70	630	0.003	0.00	0	0.000
352	Per Fixture	RET	10	10	\$300.00	744	0.000	0.00	0	0.000
353	Per Fixture	RET	10	10	\$300.00	355	0.000	0.00	0	0.000
354	Per Fixture	RET	10	10	\$400.00	492	0.000	0.00	0	0.000
355	per linear foot	RET	4	4	\$2.25	98	0.011	0.00	0	0.000
356	per fan hp	RET	15	15	\$1,988.00	3406	0.467	279.00	0	0.000
357	per fan hp	RET	15	15	\$1,988.00	4541	0.467	414.00	0	0.000
358	per fan hp	RET	15	15	\$1,988.00	1244	0.000	173.00	0	0.000
359	per fan hp	RET	15	15	\$1,988.00	1705	0.467	173.00	0	0.000
360	per fan hp	RET	15	15	\$1,988.00	3406	0.467	279.00	0	0.000
361	per unit	RET	12	12	\$164.00	1174	0.143	0.00	0	0.000
362	per unit	RET	12	12	\$166.00	5059	0.616	0.00	0	0.000
363	per building	RET	20	20	\$1,239.00	2394	0.501	0.00	0	0.000
364	per blanket	RET	7	7	\$35.00	249	0.007	0.00	0	0.000
365	per oven	ROB	12	12	\$3,809.00	16323	3.130	0.00	0	0.000
366	per oven	ROB	12	12	\$3,809.00	5830	0.000	0.00	0	0.000
367	per oven	ROB	12	12	\$3,809.00	7773	3.130	0.00	0	0.000
368	per oven	ROB	12	12	\$3,809.00	16323	3.130	0.00	0	0.000
369	per oven	ROB	12	12	\$3,809.00	16323	3.130	0.00	0	0.000
370	per 1900 sqft building	RET	18	18	\$736.00	1196	1.003	9.45	0	0.000
371	per hp	RET	15	15	\$480.00	127	0.018	0.00	0	0.000
372	per unit	RET	12	12	\$290.00	723	0.080	0.00	0	0.000
373	per unit	RET	12	12	\$290.00	2102	0.240	0.00	0	0.000
374	per unit	RET	12	12	\$290.00	2278	0.260	0.00	0	0.000
375	per unit	RET	12	12	\$290.00	723	0.080	0.00	0	0.000
376	per unit	RET	12	12	\$290.00	2102	0.240	0.00	0	0.000
377	per unit	RET	12	12	\$290.00	2278	0.260	0.00	0	0.000
378	per unit	RET	8	8	\$70.00	65	0.000	0.00	0	0.000

Commercial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
379	per unit	RET	8	8	\$70.00	129	0.000	0.00	0	0.000
380	per unit	RET	8	8	\$70.00	321	0.000	0.00	0	0.000
381	per unit	RET	8	8	\$70.00	65	0.000	0.00	0	0.000
382	per unit	RET	8	8	\$70.00	129	0.000	0.00	0	0.000
383	per unit	RET	8	8	\$70.00	321	0.000	0.00	0	0.000
384	per 1000 sqft	RET	10	10	\$75.00	68	0.059	0.00	0	0.000
385	per 1000 sqft	RET	10	10	\$75.00	55	0.058	0.00	0	0.000
386	per 1000 sqft	RET	10	10	\$75.00	53	0.060	0.00	0	0.000
387	per 1000 sqft	RET	10	10	\$75.00	83	0.052	0.00	0	0.000
388	per 1000 sqft	RET	10	10	\$75.00	69	0.071	0.00	0	0.000
389	per 1000 sqft	RET	10	10	\$75.00	69	0.053	0.00	0	0.000
390	per 1000 sqft	RET	10	10	\$75.00	88	0.037	0.00	0	0.000
391	per 1000 sqft	RET	10	10	\$75.00	83	0.036	0.00	0	0.000
392	per 1000 sqft	RET	10	10	\$75.00	66	0.038	0.00	0	0.000
393	per 1000 sqft	RET	10	10	\$75.00	79	0.054	0.00	0	0.000
394	per 1000 sqft	RET	10	10	\$75.00	62	0.053	0.00	0	0.000
395	per 1000 sqft	RET	10	10	\$75.00	61	0.054	0.00	0	0.000
396	per 1000 sqft	RET	10	10	\$260.00	2770	2.400	0.00	0	0.000
397	per 1000 sqft	RET	10	10	\$260.00	3986	2.400	0.00	0	0.000
398	per 1000 sqft	RET	10	10	\$260.00	4750	2.450	0.00	0	0.000
399	per 1000 sqft	RET	10	10	\$260.00	2983	3.400	0.00	0	0.000
400	per 1000 sqft	RET	10	10	\$260.00	3699	3.500	0.00	0	0.000
401	per 1000 sqft	RET	10	10	\$260.00	4062	3.390	0.00	0	0.000
402	per linear foot	RET	11	11	\$0.25	5	0.006	0.00	0	0.000
403	per linear foot	RET	11	11	\$0.25	127	0.006	0.00	0	0.000
404	per linear foot	RET	11	11	\$0.25	36	0.006	0.00	0	0.000
405	per linear foot	RET	11	11	\$0.25	5	0.006	0.00	0	0.000
406	per linear foot	RET	11	11	\$0.25	127	0.006	0.00	0	0.000
407	per linear foot	RET	11	11	\$0.25	36	0.006	0.00	0	0.000
408	per unit	ROB	10	10	\$549.00	5618	1.170	0.00	0	0.000
409	per unit	ROB	10	10	\$549.00	3745	1.170	0.00	0	0.000
410	Per 1000 sqft	ROB	20	20	\$256.32	121	0.014	0.00	0	0.000
411	Per 1000 sqft	ROB	20	20	\$107.49	28	0.004	0.00	0	0.000
412	Per 1000 sqft	ROB	20	20	\$107.49	36	0.004	0.00	0	0.000
413	Per 1000 sqft	ROB	20	20	\$339.00	145	0.017	0.00	0	0.000
414	Per 1000 sqft	ROB	20	20	\$587.06	219	0.025	0.00	0	0.000
415	per building	NEW	15	15	\$36,768.00	132429	13.600	0.00	0	0.000
416	per building	NEW	15	15	\$36,768.00	117026	12.020	0.00	0	0.000
417	per building	NEW	15	15	\$50,000.00	90959	9.346	0.00	0	0.000
418	per building	NEW	15	15	\$1,479.00	5574	0.440	0.00	0	0.000
419	per building	NEW	15	15	\$1,479.00	4926	0.390	0.00	0	0.000
420	per building	NEW	15	15	\$2,000.00	3829	0.305	0.00	0	0.000

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY							
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
1	0.81	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	6.7%	0
2	0.68	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	6.7%	0
3	0.72	0	94,538		100.0%	100.0%	100.0%	74.5%	100.0%	6.7%	0
4	0.50	0	94,538		100.0%	100.0%	100.0%	15.2%	100.0%	6.7%	0
5	0.47	0	94,538		100.0%	100.0%	100.0%	13.0%	100.0%	6.7%	0
6	0.42	0	94,538		100.0%	100.0%	100.0%	11.1%	100.0%	6.7%	0
7	0.82	0	94,538	10.9	100.0%	67.0%	82.0%	25.5%	100.0%	6.7%	4,833
8	1.29	1	94,538	10.9	100.0%	67.0%	8.0%	84.8%	100.0%	6.7%	1,567
9	1.28	1	94,538	10.9	100.0%	100.0%	5.0%	87.0%	100.0%	6.7%	1,500
10	0.73	0	94,538		100.0%	100.0%	100.0%	88.9%	100.0%	6.7%	0
11	0.28	0	36,295		9.5%	100.0%	100.0%	8.5%	100.0%	6.7%	0
12	0.35	0	36,295		1.0%	100.0%	100.0%	8.2%	100.0%	6.7%	0
13	0.44	0	36,295		5.2%	100.0%	100.0%	12.2%	100.0%	6.7%	0
14	0.39	0	36,295		82.7%	100.0%	100.0%	10.9%	100.0%	6.7%	0
15	0.45	0	36,295		9.5%	100.0%	100.0%	91.5%	100.0%	6.7%	0
16	0.60	0	36,295		1.0%	100.0%	100.0%	91.8%	100.0%	6.7%	0
17	0.79	0	36,295		5.2%	100.0%	100.0%	87.8%	100.0%	6.7%	0
18	0.67	0	36,295		82.7%	100.0%	100.0%	89.1%	100.0%	6.7%	0
19	0.30	0	36,295		9.5%	100.0%	100.0%	100.0%	100.0%	6.7%	0
20	0.34	0	36,295		1.0%	100.0%	100.0%	100.0%	100.0%	6.7%	0
21	0.41	0	36,295		5.2%	100.0%	100.0%	100.0%	100.0%	6.7%	0
22	0.39	0	36,295		82.7%	100.0%	100.0%	100.0%	100.0%	6.7%	0
23	0.51	0	94,538		1.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
24	0.90	0	94,538		1.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
25	4.95	1	94,538	26.7	1.0%	100.0%	33.0%	100.0%	100.0%	10.0%	425
26	2.84	1	94,538	26.7	1.0%	100.0%	67.0%	100.0%	100.0%	10.0%	864
27	0.44	0	94,538		1.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
28	4.55	1	36,295	608.0	1.6%	100.0%	33.0%	100.0%	100.0%	5.0%	5,788
29	4.39	1	36,295	353.5	5.2%	100.0%	33.0%	100.0%	100.0%	5.0%	11,082
30	4.41	1	36,295	227.5	9.5%	100.0%	33.0%	100.0%	100.0%	5.0%	12,957
31	4.57	1	36,295	383.7	82.7%	100.0%	33.0%	100.0%	100.0%	5.0%	189,946
32	5.37	1	36,295	608.0	1.6%	100.0%	33.0%	100.0%	100.0%	5.0%	5,788
33	5.28	1	36,295	353.5	5.2%	100.0%	33.0%	100.0%	100.0%	5.0%	11,082
34	5.42	1	36,295	227.5	9.5%	100.0%	33.0%	100.0%	100.0%	5.0%	12,957
35	5.41	1	36,295	383.7	82.7%	100.0%	33.0%	100.0%	100.0%	5.0%	189,946
36	0.92	0	36,295	608.0	1.6%	100.0%	33.0%	100.0%	100.0%	5.0%	5,788
37	0.92	0	36,295	353.5	5.2%	100.0%	33.0%	100.0%	100.0%	5.0%	11,082
38	0.96	0	36,295	227.5	9.5%	100.0%	33.0%	100.0%	100.0%	5.0%	12,957
39	0.93	0	36,295	383.7	82.7%	100.0%	33.0%	100.0%	100.0%	5.0%	189,946
40	8.12	1	36,295	364.8	1.6%	100.0%	100.0%	100.0%	79.4%	100.0%	167,192
41	3.00	1	36,295	36.5	1.6%	100.0%	100.0%	100.0%	79.4%	100.0%	16,719

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY							
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
42	5.14	1	36,295	36.5	1.6%	100.0%	100.0%	100.0%	79.4%	100.0%	16,719
43	12.19	1	36,295	36.5	1.6%	100.0%	100.0%	100.0%	79.4%	100.0%	16,719
44	2.60	1	36,295	136.5	9.5%	90.0%	100.0%	100.0%	79.4%	100.0%	336,866
45	1.48	1	36,295	13.7	9.5%	80.0%	100.0%	100.0%	79.4%	100.0%	29,944
46	5.14	1	36,295	13.7	9.5%	80.0%	100.0%	100.0%	79.4%	100.0%	29,944
47	3.86	1	36,295	13.7	9.5%	80.0%	100.0%	100.0%	79.4%	100.0%	29,944
48	3.00	1	36,295	114.5	1.0%	90.0%	100.0%	100.0%	79.4%	100.0%	29,627
49	1.59	1	36,295	11.4	1.0%	80.0%	100.0%	100.0%	79.4%	100.0%	2,633
50	5.14	1	36,295	11.4	1.0%	80.0%	100.0%	100.0%	79.4%	100.0%	2,633
51	4.46	1	36,295	11.4	1.0%	80.0%	100.0%	100.0%	79.4%	100.0%	2,633
52	3.48	1	36,295	212.1	5.2%	90.0%	100.0%	100.0%	79.4%	100.0%	288,123
53	1.73	1	36,295	21.2	5.2%	80.0%	100.0%	100.0%	79.4%	100.0%	25,611
54	5.14	1	36,295	21.2	5.2%	80.0%	100.0%	100.0%	79.4%	100.0%	25,611
55	5.19	1	36,295	21.2	5.2%	80.0%	100.0%	100.0%	79.4%	100.0%	25,611
56	4.17	1	36,295	230.2	82.7%	90.0%	100.0%	100.0%	79.4%	100.0%	4,938,475
57	1.91	1	36,295	23.0	82.7%	80.0%	100.0%	100.0%	79.4%	100.0%	438,976
58	5.14	1	36,295	23.0	82.7%	80.0%	100.0%	100.0%	79.4%	100.0%	438,976
59	6.23	1	36,295	23.0	82.7%	80.0%	100.0%	100.0%	79.4%	100.0%	438,976
60	1.15	1	94,538	1.0	100.0%	16.1%	100.0%	100.0%	100.0%	10.0%	1,522
61	1.37	1	36,295	1.0	100.0%	16.1%	100.0%	100.0%	100.0%	10.0%	584
62	3.79	1	94,538	1.0	100.0%	100.0%	100.0%	100.0%	95.8%	10.0%	9,057
63	1.86	1	36,295	1.0	100.0%	100.0%	100.0%	100.0%	95.8%	10.0%	3,477
64	0.81	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	4.0%	0
65	6.55	1	94,538	10.9	100.0%	67.0%	100.0%	100.0%	50.0%	100.0%	346,608
66	7.40	1	94,538	10.9	100.0%	33.0%	100.0%	100.0%	50.0%	100.0%	170,717
67	0.39	0	130,833	7924.3	0.4%	100.0%	10.0%	100.0%	100.0%	100.0%	0
68	0.50	0	130,833	4297.9	0.4%	100.0%	30.0%	100.0%	100.0%	100.0%	0
69	0.73	0	130,833	2881.5	0.4%	100.0%	30.0%	100.0%	100.0%	100.0%	0
70	0.84	0	130,833	2224.4	0.4%	100.0%	30.0%	100.0%	100.0%	100.0%	0
71	0.24	0	130,833	1711.5	3.2%	100.0%	10.0%	100.0%	100.0%	100.0%	0
72	0.32	0	130,833	928.3	3.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0
73	0.46	0	130,833	622.4	3.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0
74	0.53	0	130,833	480.4	3.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0
75	0.33	0	130,833	1040.9	0.3%	100.0%	10.0%	100.0%	100.0%	100.0%	0
76	0.42	0	130,833	564.6	0.3%	100.0%	30.0%	100.0%	100.0%	100.0%	0
77	0.62	0	130,833	378.5	0.3%	100.0%	30.0%	100.0%	100.0%	100.0%	0
78	0.71	0	130,833	292.2	0.3%	100.0%	30.0%	100.0%	100.0%	100.0%	0
79	0.38	0	130,833	1192.2	2.2%	100.0%	10.0%	100.0%	100.0%	100.0%	0
80	0.49	0	130,833	646.6	2.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0
81	0.71	0	130,833	433.5	2.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0
82	0.81	0	130,833	334.6	2.2%	100.0%	30.0%	100.0%	100.0%	100.0%	0

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units	
83	0.35	0	130,833	2006.9	22.9%	100.0%	10.0%	100.0%	100.0%	100.0%	0	
84	0.45	0	130,833	1088.5	22.9%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
85	0.66	0	130,833	729.8	22.9%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
86	0.76	0	130,833	563.3	22.9%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
87	0.39	0	130,833	166.8	71.0%	100.0%	10.0%	100.0%	100.0%	100.0%	0	
88	0.51	0	130,833	90.5	71.0%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
89	0.74	0	130,833	60.6	71.0%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
90	0.85	0	130,833	46.8	71.0%	100.0%	30.0%	100.0%	100.0%	100.0%	0	
91	4.00	1	130,833	9056.3	0.4%	75.1%	29.0%	100.0%	67.1%	15.9%	60,795	
92	3.84	1	130,833	1956.1	3.2%	71.8%	29.0%	100.0%	82.9%	7.7%	54,182	
93	4.35	1	130,833	1189.6	0.3%	71.8%	29.0%	100.0%	82.9%	9.9%	3,691	
94	3.85	1	130,833	1362.5	2.2%	41.3%	29.0%	100.0%	94.3%	18.4%	40,561	
95	4.26	1	130,833	2293.6	22.9%	70.8%	29.0%	100.0%	88.6%	10.4%	649,671	
96	4.36	1	130,833	190.6	71.0%	68.1%	29.0%	100.0%	85.7%	11.5%	172,713	
97	1.23	1	130,833	9056.3	0.4%	75.1%	29.0%	100.0%	67.1%	100.0%	381,961	
98	1.17	1	130,833	1956.1	3.2%	71.8%	29.0%	100.0%	82.9%	100.0%	702,393	
99	1.33	1	130,833	1189.6	0.3%	71.8%	29.0%	100.0%	82.9%	100.0%	37,145	
100	1.18	1	130,833	1362.5	2.2%	41.3%	29.0%	100.0%	94.3%	100.0%	220,243	
101	1.30	1	130,833	2293.6	22.9%	70.8%	29.0%	100.0%	88.6%	100.0%	6,258,540	
102	1.33	1	130,833	190.6	71.0%	68.1%	29.0%	100.0%	85.7%	100.0%	1,498,718	
103	1.03	1	130,833		0.4%	100.0%	100.0%	22.4%	100.0%	100.0%	0	
104	0.54	0	130,833		3.2%	100.0%	100.0%	26.9%	100.0%	100.0%	0	
105	0.52	0	130,833		0.3%	100.0%	100.0%	10.7%	100.0%	100.0%	0	
106	1.16	1	130,833		2.2%	100.0%	100.0%	22.2%	100.0%	100.0%	0	
107	0.77	0	130,833		22.9%	100.0%	100.0%	24.8%	100.0%	100.0%	0	
108	0.87	0	130,833		71.0%	100.0%	100.0%	24.3%	100.0%	100.0%	0	
109	1.85	1	130,833	1531.8	0.4%	75.1%	50.0%	34.5%	90.0%	100.0%	103,057	
110	0.98	0	130,833	330.8	3.2%	71.8%	50.0%	35.7%	90.0%	100.0%	158,937	
111	1.31	1	130,833	201.2	0.3%	71.8%	50.0%	41.3%	90.0%	100.0%	9,725	
112	2.08	1	130,833	230.5	2.2%	41.3%	50.0%	33.3%	90.0%	100.0%	40,864	
113	1.39	1	130,833	387.9	22.9%	70.8%	50.0%	35.3%	90.0%	100.0%	1,309,707	
114	1.57	1	130,833	32.2	71.0%	68.1%	50.0%	33.8%	90.0%	100.0%	309,826	
115	0.82	0	130,833	2821.1	0.4%	75.1%	100.0%	15.9%	90.0%	100.0%	174,997	
116	0.43	0	130,833	609.3	3.2%	71.8%	100.0%	14.3%	90.0%	100.0%	234,070	
117	0.57	0	130,833	370.6	0.3%	71.8%	100.0%	18.4%	90.0%	100.0%	15,978	
118	0.92	0	130,833	424.4	2.2%	41.3%	100.0%	16.9%	90.0%	100.0%	76,261	
119	0.61	0	130,833	714.5	22.9%	70.8%	100.0%	15.0%	90.0%	100.0%	2,045,573	
120	0.69	0	130,833	59.4	71.0%	68.1%	100.0%	16.3%	90.0%	100.0%	551,789	
121	1.60	1	130,833	1531.8	0.4%	75.1%	100.0%	27.2%	90.0%	100.0%	162,370	
122	0.84	0	130,833	330.8	3.2%	71.8%	100.0%	23.0%	90.0%	100.0%	204,941	
123	1.12	1	130,833	201.2	0.3%	71.8%	100.0%	29.5%	90.0%	100.0%	13,898	

Commercial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY									
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units	
124	1.79	1	130,833	230.5	2.2%	41.3%	100.0%	27.6%	90.0%	100.0%	67,658	
125	1.20	1	130,833	387.9	22.9%	70.8%	100.0%	24.9%	90.0%	100.0%	1,849,413	
126	1.35	1	130,833	32.2	71.0%	68.1%	100.0%	25.6%	90.0%	100.0%	469,868	
127	9.72	1	130,833	5977.0	0.4%	1.5%	33.0%	100.0%	86.5%	11.5%	1,741	
128	17.59	1	130,833	3205.8	0.4%	1.5%	67.0%	100.0%	86.5%	11.5%	1,896	
129	7.83	1	130,833	1291.0	3.2%	2.1%	33.0%	100.0%	86.5%	6.7%	2,146	
130	17.66	1	130,833	692.4	3.2%	2.1%	67.0%	100.0%	86.5%	6.7%	2,337	
131	9.24	1	130,833	785.1	0.3%	2.1%	33.0%	100.0%	86.5%	7.2%	122	
132	19.31	1	130,833	421.1	0.3%	2.1%	67.0%	100.0%	86.5%	7.2%	133	
133	7.17	1	130,833	899.2	2.2%	15.8%	90.0%	100.0%	86.5%	6.7%	21,117	
134	15.79	1	130,833	482.3	2.2%	15.8%	10.0%	100.0%	86.5%	6.7%	1,258	
135	9.75	1	130,833	1513.7	22.9%	5.0%	33.0%	100.0%	86.5%	7.5%	48,179	
136	20.11	1	130,833	811.9	22.9%	5.0%	67.0%	100.0%	86.5%	7.5%	52,464	
137	10.40	1	130,833	125.8	71.0%	5.9%	33.0%	100.0%	86.5%	8.3%	16,322	
138	20.78	1	130,833	67.5	71.0%	5.9%	67.0%	100.0%	86.5%	8.3%	17,773	
139	2.67	1	36,295	287.6	100.0%	0.5%	25.0%	91.9%	88.2%	100.0%	8,060	
140	3.00	1	94,538	23.0	100.0%	2.3%	25.0%	87.3%	88.2%	100.0%	7,711	
141	4.33	1	36,295	190.6	100.0%	0.5%	25.0%	91.5%	88.2%	100.0%	5,342	
142	4.33	1	94,538	15.2	100.0%	2.3%	25.0%	82.9%	88.2%	100.0%	5,111	
143	4.39	1	36,295	226.2	100.0%	0.5%	25.0%	70.9%	88.2%	100.0%	6,338	
144	4.39	1	94,538	18.1	100.0%	2.3%	25.0%	65.5%	88.2%	100.0%	6,064	
145	7.18	1	36,295	146.6	100.0%	0.5%	25.0%	71.3%	88.2%	100.0%	4,110	
146	7.18	1	94,538	11.7	100.0%	2.3%	25.0%	65.4%	88.2%	100.0%	3,932	
147	1.30	1	36,295	226.2	100.0%	1.5%	25.0%	29.1%	90.6%	100.0%	8,422	
148	1.31	1	94,538	18.1	100.0%	1.5%	25.0%	34.5%	90.6%	100.0%	1,752	
149	0.59	0	36,295	287.6	100.0%	1.5%	25.0%	8.1%	90.6%	100.0%	10,708	
150	0.59	0	94,538	23.0	100.0%	1.5%	25.0%	12.7%	90.6%	100.0%	2,227	
151	1.34	1	36,295	146.6	100.0%	1.5%	25.0%	28.7%	90.6%	100.0%	5,460	
152	1.35	1	94,538	11.7	100.0%	1.5%	25.0%	34.6%	90.6%	100.0%	1,136	
153	0.69	0	36,295	190.6	100.0%	1.5%	25.0%	8.5%	90.6%	100.0%	7,098	
154	0.77	0	94,538	15.2	100.0%	1.5%	25.0%	17.1%	90.6%	100.0%	1,476	
155	1.44	1	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
156	1.17	1	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
157	0.75	0	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
158	2.72	1	36,295	198.2	100.0%	90.0%	100.0%	100.0%	77.0%	100.0%	4,984,991	
159	1.73	1	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
160	1.80	1	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
161	2.19	1	36,295	198.2	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	184,629	
162	1.54	1	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401	
163	1.25	1	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401	
164	0.81	0	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401	



Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY							
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
165	2.89	1	94,538	15.8	100.0%	90.0%	100.0%	100.0%	77.0%	100.0%	1,036,830
166	1.85	1	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401
167	1.92	1	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401
168	2.34	1	94,538	15.8	100.0%	10.0%	33.3%	100.0%	77.0%	100.0%	38,401
169	2.95	1	94,538	484.4	100.0%	1.6%	100.0%	100.0%	50.0%	100.0%	357,806
170	1.27	1	94,538	2.0	100.0%	82.0%	100.0%	100.0%	100.0%	100.0%	155,043
171	2.57	1	130,833	3.0	100.0%	80.0%	100.0%	100.0%	100.0%	100.0%	310,859
172	0.92	0	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
173	1.77	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
174	2.69	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
175	2.31	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
176	2.83	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
177	2.42	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
178	7.23	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
179	4.97	1	130,833	1.4	17.3%	50.0%	25.0%	100.0%	31.0%	8.3%	102
180	2.97	1	130,833	0.4	100.0%	100.0%	33.0%	100.0%	64.0%	100.0%	9,947
181	2.27	1	130,833	0.4	100.0%	100.0%	33.0%	100.0%	64.0%	100.0%	9,947
182	1.42	1	130,833	0.4	100.0%	100.0%	33.0%	100.0%	64.0%	100.0%	9,947
183	2.05	1	130,833	1.0	0.4%	100.0%	50.0%	100.0%	94.0%	100.0%	271
184	4.92	1	130,833	1.0	0.4%	100.0%	50.0%	100.0%	94.0%	100.0%	271
185	1.25	1	130,833	1.0	3.2%	100.0%	50.0%	100.0%	94.0%	100.0%	1,956
186	3.06	1	130,833	1.0	3.2%	100.0%	50.0%	100.0%	94.0%	100.0%	1,956
187	2.05	1	130,833	1.0	0.3%	100.0%	50.0%	100.0%	94.0%	100.0%	170
188	4.92	1	130,833	1.0	0.3%	100.0%	50.0%	100.0%	94.0%	100.0%	170
189	2.05	1	130,833	1.0	2.2%	100.0%	50.0%	100.0%	94.0%	100.0%	1,346
190	4.92	1	130,833	1.0	2.2%	100.0%	50.0%	100.0%	94.0%	100.0%	1,346
191	2.05	1	130,833	5.0	0.8%	100.0%	50.0%	100.0%	94.0%	100.0%	2,354
192	4.92	1	130,833	5.0	0.8%	100.0%	50.0%	100.0%	94.0%	100.0%	2,354
193	2.05	1	130,833	1.0	10.4%	100.0%	50.0%	100.0%	94.0%	100.0%	6,407
194	4.92	1	130,833	1.0	10.4%	100.0%	50.0%	100.0%	94.0%	100.0%	6,407
195	3.21	1	130,833	15.0	0.8%	50.0%	16.7%	50.0%	33.0%	100.0%	207
196	1.36	1	130,833	15.0	0.8%	50.0%	16.7%	36.5%	33.0%	100.0%	151
197	1.36	1	130,833	15.0	0.8%	50.0%	16.7%	36.5%	33.0%	100.0%	151
198	6.13	1	130,833	15.0	0.8%	50.0%	16.7%	50.0%	33.0%	100.0%	207
199	2.59	1	130,833	15.0	0.8%	50.0%	16.7%	63.5%	33.0%	100.0%	262
200	2.59	1	130,833	15.0	0.8%	50.0%	16.7%	63.5%	33.0%	100.0%	262
201	3.21	1	130,833	5.0	10.4%	50.0%	16.7%	50.0%	99.0%	100.0%	2,812
202	1.36	1	130,833	5.0	10.4%	50.0%	16.7%	36.5%	99.0%	100.0%	2,053
203	1.36	1	130,833	5.0	10.4%	50.0%	16.7%	36.5%	99.0%	100.0%	2,053
204	6.13	1	130,833	5.0	10.4%	50.0%	16.7%	50.0%	99.0%	100.0%	2,812
205	2.59	1	130,833	5.0	10.4%	50.0%	16.7%	63.5%	99.0%	100.0%	3,570

Commercial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
206	2.59	1	130,833	5.0	10.4%	50.0%	16.7%	63.5%	99.0%	100.0%	3,570
207	1.11	1	130,833	1.6	100.0%	20.0%	33.0%	100.0%	99.0%	100.0%	13,567
208	1.03	1	130,833	1.6	100.0%	20.0%	33.0%	100.0%	99.0%	100.0%	13,567
209	0.95	0	130,833	1.6	100.0%	20.0%	33.0%	100.0%	99.0%	100.0%	13,567
210	1.53	1	130,833	1.0	0.4%	100.0%	100.0%	100.0%	77.0%	100.0%	444
211	0.34	0	130,833	1.0	0.4%	100.0%	100.0%	100.0%	77.0%	100.0%	444
212	0.83	0	130,833	1.0	3.2%	100.0%	100.0%	100.0%	77.0%	100.0%	3,205
213	0.22	0	130,833	1.0	3.2%	100.0%	100.0%	100.0%	77.0%	100.0%	3,205
214	1.53	1	130,833	1.0	0.3%	100.0%	100.0%	100.0%	77.0%	100.0%	279
215	0.34	0	130,833	1.0	0.3%	100.0%	100.0%	100.0%	77.0%	100.0%	279
216	1.53	1	130,833	1.0	2.2%	100.0%	100.0%	100.0%	77.0%	100.0%	2,205
217	0.34	0	130,833	1.0	2.2%	100.0%	100.0%	100.0%	77.0%	100.0%	2,205
218	2.98	1	130,833	5.0	0.8%	100.0%	100.0%	100.0%	62.0%	100.0%	3,105
219	0.88	0	130,833	5.0	0.8%	100.0%	100.0%	100.0%	62.0%	100.0%	3,105
220	1.53	1	130,833	1.0	10.4%	100.0%	100.0%	100.0%	77.0%	100.0%	10,497
221	0.34	0	130,833	1.0	10.4%	100.0%	100.0%	100.0%	77.0%	100.0%	10,497
222	8.68	1	130,833	1.0	0.4%	100.0%	100.0%	100.0%	33.0%	6.4%	12
223	5.62	1	130,833	1.0	3.2%	100.0%	100.0%	100.0%	33.0%	6.4%	88
224	8.68	1	130,833	1.0	0.3%	100.0%	100.0%	100.0%	33.0%	6.4%	8
225	8.68	1	130,833	1.0	2.2%	100.0%	100.0%	100.0%	33.0%	6.4%	61
226	8.68	1	130,833	1.0	10.4%	100.0%	100.0%	100.0%	33.0%	6.4%	289
227	0.46	0	130,833	1.0	0.4%	100.0%	100.0%	100.0%	100.0%	8.3%	0
228	1.15	1	130,833	1.0	0.4%	100.0%	100.0%	100.0%	100.0%	8.3%	0
229	0.12	0	130,833	1.0	3.2%	100.0%	100.0%	100.0%	100.0%	8.3%	0
230	0.30	0	130,833	1.0	3.2%	100.0%	100.0%	100.0%	100.0%	8.3%	0
231	0.28	0	130,833	1.0	0.3%	100.0%	100.0%	100.0%	100.0%	8.3%	0
232	0.71	0	130,833	1.0	0.3%	100.0%	100.0%	100.0%	100.0%	8.3%	0
233	0.46	0	130,833	1.0	2.2%	100.0%	100.0%	100.0%	100.0%	8.3%	0
234	1.15	1	130,833	1.0	2.2%	100.0%	100.0%	100.0%	100.0%	8.3%	0
235	0.46	0	130,833	1.0	10.4%	100.0%	100.0%	100.0%	100.0%	8.3%	0
236	1.15	1	130,833	1.0	10.4%	100.0%	100.0%	100.0%	100.0%	8.3%	0
237	6.62	1	130,833	1.0	0.4%	100.0%	100.0%	100.0%	33.0%	8.3%	16
238	1.70	1	130,833	1.0	3.2%	100.0%	100.0%	100.0%	33.0%	8.3%	114
239	4.13	1	130,833	1.0	0.3%	100.0%	100.0%	100.0%	33.0%	8.3%	10
240	6.62	1	130,833	1.0	2.2%	100.0%	100.0%	100.0%	33.0%	8.3%	79
241	6.62	1	130,833	1.0	10.4%	100.0%	100.0%	100.0%	33.0%	8.3%	375
242	3.30	1	130,833	1.0	0.4%	100.0%	100.0%	100.0%	33.0%	8.3%	16
243	1.05	1	130,833	1.0	3.2%	100.0%	100.0%	100.0%	33.0%	8.3%	114
244	1.77	1	130,833	1.0	0.3%	100.0%	100.0%	100.0%	33.0%	8.3%	10
245	3.30	1	130,833	1.0	2.2%	100.0%	100.0%	100.0%	33.0%	8.3%	79
246	3.30	1	130,833	1.0	10.4%	100.0%	100.0%	100.0%	33.0%	8.3%	375

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units	
247	20.08	1	130,833	4.0	0.4%	100.0%	46.0%	100.0%	41.0%	8.3%	36	
248	21.20	1	130,833	4.0	0.4%	100.0%	46.0%	100.0%	41.0%	8.3%	36	
249	5.21	1	130,833	2.0	3.2%	100.0%	46.0%	100.0%	41.0%	8.3%	131	
250	5.50	1	130,833	2.0	3.2%	100.0%	46.0%	100.0%	41.0%	8.3%	131	
251	12.45	1	130,833	2.0	0.3%	100.0%	46.0%	100.0%	41.0%	8.3%	11	
252	13.14	1	130,833	2.0	0.3%	100.0%	46.0%	100.0%	41.0%	8.3%	11	
253	20.08	1	130,833	2.0	2.2%	100.0%	46.0%	100.0%	41.0%	8.3%	90	
254	21.20	1	130,833	2.0	2.2%	100.0%	46.0%	100.0%	41.0%	8.3%	90	
255	20.08	1	130,833	2.0	10.4%	100.0%	46.0%	100.0%	41.0%	8.3%	429	
256	21.20	1	130,833	2.0	10.4%	100.0%	46.0%	100.0%	41.0%	8.3%	429	
257	1.57	1	130,833	1.0	3.2%	8.6%	100.0%	100.0%	50.0%	8.3%	15	
258	2.66	1	130,833	1.0	0.3%	8.6%	100.0%	100.0%	50.0%	8.3%	1	
259	4.65	1	130,833	1.0	2.2%	8.6%	100.0%	100.0%	50.0%	8.3%	10	
260	4.65	1	130,833	1.0	10.4%	8.6%	100.0%	100.0%	50.0%	8.3%	49	
261	6.92	1	130,833	1.0	0.4%	16.4%	100.0%	100.0%	68.0%	100.0%	64	
262	4.26	1	130,833	1.0	3.2%	16.4%	100.0%	100.0%	68.0%	100.0%	464	
263	5.38	1	130,833	1.0	0.3%	16.4%	100.0%	100.0%	68.0%	100.0%	40	
264	6.92	1	130,833	1.0	2.2%	16.4%	100.0%	100.0%	68.0%	100.0%	319	
265	6.92	1	130,833	1.0	10.4%	16.4%	100.0%	100.0%	68.0%	100.0%	1,521	
266	0.68	0	130,833		0.4%	100.0%	100.0%	5.7%	100.0%	6.7%	0	
267	0.19	0	130,833		3.2%	100.0%	100.0%	0.1%	100.0%	6.7%	0	
268	0.22	0	130,833		0.3%	100.0%	100.0%	0.2%	100.0%	6.7%	0	
269	0.25	0	130,833		2.2%	100.0%	100.0%	0.7%	100.0%	6.7%	0	
270	0.75	0	130,833		10.4%	100.0%	100.0%	6.4%	100.0%	6.7%	0	
271	1.07	1	130,833		0.4%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
272	0.63	0	130,833		3.2%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
273	0.76	0	130,833		0.3%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
274	0.98	0	130,833		2.2%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
275	0.85	0	130,833		10.4%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
276	0.25	0	130,833		0.4%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
277	0.14	0	130,833		3.2%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
278	0.17	0	130,833		0.3%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
279	0.22	0	130,833		2.2%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
280	0.19	0	130,833		10.4%	100.0%	100.0%	100.0%	100.0%	10.0%	0	
281	1.05	1	130,833		0.4%	100.0%	100.0%	93.9%	100.0%	10.0%	0	
282	0.62	0	130,833		3.2%	100.0%	100.0%	99.9%	100.0%	10.0%	0	
283	0.74	0	130,833		0.3%	100.0%	100.0%	99.7%	100.0%	10.0%	0	
284	0.96	0	130,833		2.2%	100.0%	100.0%	98.9%	100.0%	10.0%	0	
285	0.83	0	130,833		10.4%	100.0%	100.0%	93.4%	100.0%	10.0%	0	
286	4.01	1	130,833	5.9	0.4%	48.6%	100.0%	33.3%	46.0%	100.0%	254	
287	3.82	1	130,833	5.9	2.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,260	

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units	
288	38.89	1	130,833	5.9	10.4%	48.6%	100.0%	33.3%	46.0%	100.0%	5,999	
289	28.45	1	130,833	5.9	3.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,832	
290	34.76	1	130,833	5.9	0.3%	48.6%	100.0%	33.3%	46.0%	100.0%	159	
291	18.80	1	130,833	5.9	22.9%	48.6%	100.0%	33.3%	46.0%	100.0%	13,203	
292	18.80	1	130,833	5.9	71.0%	48.6%	100.0%	33.3%	46.0%	100.0%	40,864	
293	6.90	1	130,833	5.9	0.4%	48.6%	100.0%	33.3%	46.0%	100.0%	254	
294	6.57	1	130,833	5.9	2.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,260	
295	66.71	1	130,833	5.9	10.4%	48.6%	100.0%	33.3%	46.0%	100.0%	5,999	
296	42.03	1	130,833	5.9	3.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,832	
297	48.78	1	130,833	5.9	0.3%	48.6%	100.0%	33.3%	46.0%	100.0%	159	
298	32.19	1	130,833	5.9	22.9%	48.6%	100.0%	33.3%	46.0%	100.0%	13,203	
299	32.19	1	130,833	5.9	71.0%	48.6%	100.0%	33.3%	46.0%	100.0%	40,864	
300	9.78	1	130,833	5.9	0.4%	48.6%	100.0%	33.3%	46.0%	100.0%	254	
301	9.32	1	130,833	5.9	2.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,260	
302	94.49	1	130,833	5.9	10.4%	48.6%	100.0%	33.3%	46.0%	100.0%	5,999	
303	59.54	1	130,833	5.9	3.2%	48.6%	100.0%	33.3%	46.0%	100.0%	1,832	
304	69.11	1	130,833	5.9	0.3%	48.6%	100.0%	33.3%	46.0%	100.0%	159	
305	45.62	1	130,833	5.9	22.9%	48.6%	100.0%	33.3%	46.0%	100.0%	13,203	
306	45.62	1	130,833	5.9	71.0%	48.6%	100.0%	33.3%	46.0%	100.0%	40,864	
307	0.00	0	94,538	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94,538	
308	10.49	1	94,538	1.0	100.0%	100.0%	100.0%	100.0%	86.5%	100.0%	81,776	
309	12.94	1	94,538	1.0	100.0%	48.6%	100.0%	100.0%	100.0%	100.0%	45,987	
310	1.44	1	94,538	1.0	100.0%	100.0%	100.0%	100.0%	86.5%	100.0%	81,776	
311	3.20	1	94,538	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	94,538	
312	2.39	1	36,295	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	36,295	
313	4.12	1	36,295	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	36,295	
314	1.15	1	130,833	0.6	100.0%	48.6%	100.0%	17.5%	63.3%	100.0%	3,937	
315	1.73	1	130,833	0.6	100.0%	48.6%	100.0%	34.4%	63.3%	100.0%	7,757	
316	2.31	1	130,833	0.6	100.0%	48.6%	100.0%	48.2%	63.3%	100.0%	10,866	
317	0.15	0	36,295		82.7%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
318	2.00	1	130,833	2.7	100.0%	100.0%	50.0%	100.0%	68.8%	100.0%	121,518	
319	2.88	1	130,833	2.7	100.0%	100.0%	50.0%	100.0%	67.5%	100.0%	119,222	
320	0.66	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
321	0.51	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
322	0.55	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
323	0.59	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
324	0.42	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
325	0.46	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
326	0.61	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
327	0.87	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	
328	1.21	1	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0	

Commercial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
329	1.05	1	130,833	365.6	100.0%	68.3%	1.0%	100.0%	100.0%	100.0%	326,785
330	1.21	1	130,833	216.5	100.0%	68.3%	1.0%	100.0%	100.0%	100.0%	193,533
331	0.74	0	130,833	365.6	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
332	0.95	0	130,833	216.5	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
333	0.84	0	130,833	162.8	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
334	0.69	0	130,833	728.8	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
335	0.57	0	130,833	365.6	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
336	0.76	0	130,833	216.5	100.0%	68.3%	13.3%	100.0%	100.0%	100.0%	0
337	2.09	1	130,833	410.7	100.0%	2.2%	50.0%	100.0%	100.0%	100.0%	587,904
338	2.63	1	130,833	696.9	100.0%	68.3%	40.0%	100.0%	94.0%	100.0%	23,422,291
339	2.15	1	130,833	1311.9	100.0%	68.3%	1.0%	100.0%	94.0%	100.0%	1,102,225
340	1.43	1	130,833	369.2	100.0%	2.2%	50.0%	100.0%	100.0%	100.0%	528,529
341	0.34	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
342	0.17	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	10.0%	0
343	0.23	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	10.0%	0
344	0.49	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
345	1.06	1	130,833	4.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
346	1.60	1	130,833	1.6	100.0%	100.0%	100.0%	100.0%	71.7%	100.0%	145,704
347	0.93	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
348	1.56	1	94,538	1.0	100.0%	48.6%	49.3%	100.0%	68.0%	100.0%	15,432
349	2.68	1	94,538	125.0	100.0%	25.6%	50.0%	100.0%	48.8%	100.0%	736,815
350	3.20	1	94,538	125.0	100.0%	25.6%	50.0%	100.0%	48.8%	100.0%	736,815
351	0.46	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
352	0.79	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
353	0.38	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
354	0.39	0	94,538		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
355	7.54	1	130,833	0.6	100.0%	100.0%	100.0%	100.0%	33.0%	100.0%	27,451
356	1.64	1	130,833	6.5	0.4%	100.0%	100.0%	100.0%	96.0%	100.0%	3,600
357	2.21	1	130,833	6.5	2.2%	100.0%	100.0%	100.0%	96.0%	100.0%	17,870
358	0.69	0	130,833	6.5	3.2%	100.0%	100.0%	100.0%	96.0%	100.0%	25,971
359	1.00	0	130,833	6.5	0.3%	100.0%	100.0%	100.0%	96.0%	100.0%	2,258
360	1.64	1	130,833	6.5	10.4%	100.0%	100.0%	100.0%	96.0%	100.0%	85,066
361	3.35	1	130,833	0.6	100.0%	50.0%	50.0%	100.0%	55.0%	100.0%	11,438
362	14.25	1	130,833	0.6	100.0%	50.0%	50.0%	100.0%	55.0%	100.0%	11,438
363	1.53	1	94,538	1.0	100.0%	100.0%	31.6%	100.0%	14.5%	100.0%	4,323
364	1.76	1	94,538	1.0	100.0%	48.6%	100.0%	100.0%	7.7%	100.0%	3,537
365	2.23	1	130,833	0.5	0.4%	100.0%	46.0%	100.0%	49.0%	8.3%	5
366	0.58	0	130,833	0.5	3.2%	100.0%	46.0%	100.0%	49.0%	8.3%	39
367	1.38	1	130,833	0.5	0.3%	100.0%	46.0%	100.0%	49.0%	8.3%	3
368	2.23	1	130,833	0.5	2.2%	100.0%	46.0%	100.0%	49.0%	8.3%	27
369	2.23	1	130,833	0.5	10.4%	100.0%	46.0%	100.0%	49.0%	8.3%	128

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY							
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
370	2.21	1	94,538	1.3	100.0%	100.0%	100.0%	100.0%	52.0%	100.0%	64,684
371	0.16	0	130,833		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0
372	1.15	1	130,833	15.0	0.8%	50.0%	33.0%	100.0%	33.0%	100.0%	818
373	3.35	1	130,833	15.0	0.8%	50.0%	33.0%	100.0%	33.0%	100.0%	818
374	3.63	1	130,833	15.0	0.8%	50.0%	33.0%	100.0%	33.0%	100.0%	818
375	1.15	1	130,833	5.0	10.4%	50.0%	33.0%	100.0%	33.0%	100.0%	3,711
376	3.35	1	130,833	5.0	10.4%	50.0%	33.0%	100.0%	33.0%	100.0%	3,711
377	3.63	1	130,833	5.0	10.4%	50.0%	33.0%	100.0%	33.0%	100.0%	3,711
378	0.24	0	94,538		98.2%	100.0%	100.0%	5.9%	100.0%	100.0%	0
379	0.48	0	94,538		98.2%	100.0%	100.0%	26.8%	100.0%	100.0%	0
380	1.20	1	94,538		98.2%	100.0%	100.0%	67.3%	100.0%	100.0%	0
381	0.24	0	36,295		82.7%	100.0%	100.0%	4.2%	100.0%	100.0%	0
382	0.48	0	36,295		82.7%	100.0%	100.0%	24.4%	100.0%	100.0%	0
383	1.20	1	36,295		82.7%	100.0%	100.0%	71.4%	100.0%	100.0%	0
384	0.80	0	94,538		98.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
385	0.73	0	94,538		98.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
386	0.74	0	94,538		98.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
387	0.80	0	36,295		82.7%	100.0%	100.0%	100.0%	100.0%	100.0%	0
388	0.90	0	36,295		82.7%	100.0%	100.0%	100.0%	100.0%	100.0%	0
389	0.75	0	36,295		82.7%	100.0%	100.0%	100.0%	100.0%	100.0%	0
390	0.69	0	130,833		3.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
391	0.66	0	130,833		3.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
392	0.61	0	130,833		3.2%	100.0%	100.0%	100.0%	100.0%	100.0%	0
393	0.80	0	130,833		10.4%	100.0%	100.0%	100.0%	100.0%	100.0%	0
394	0.72	0	130,833		10.4%	100.0%	100.0%	100.0%	100.0%	100.0%	0
395	0.72	0	130,833		10.4%	100.0%	100.0%	100.0%	100.0%	100.0%	0
396	9.36	1	94,538	0.1	98.2%	25.6%	4.1%	50.0%	48.8%	100.0%	30
397	10.86	1	94,538	0.1	98.2%	25.6%	15.8%	50.0%	48.8%	100.0%	114
398	11.92	1	94,538	0.1	98.2%	25.6%	30.1%	50.0%	48.8%	100.0%	218
399	12.11	1	94,538	0.1	98.2%	25.6%	4.1%	50.0%	48.8%	100.0%	30
400	13.24	1	94,538	0.1	98.2%	25.6%	15.8%	50.0%	48.8%	100.0%	114
401	13.41	1	94,538	0.1	98.2%	25.6%	30.1%	50.0%	48.8%	100.0%	218
402	22.66	1	36,295	6.0	82.7%	25.6%	60.2%	33.3%	93.0%	100.0%	8,587
403	192.69	1	36,295	6.0	82.7%	25.6%	31.6%	33.3%	93.0%	100.0%	4,499
404	65.75	1	36,295	6.0	82.7%	25.6%	8.2%	33.3%	93.0%	100.0%	1,174
405	22.66	1	94,538	6.0	98.2%	25.6%	60.2%	33.3%	93.0%	100.0%	26,577
406	192.69	1	94,538	6.0	98.2%	25.6%	31.6%	33.3%	93.0%	100.0%	13,926
407	65.75	1	94,538	6.0	98.2%	25.6%	8.2%	33.3%	93.0%	100.0%	3,633
408	4.65	1	130,833	1.0	2.2%	79.0%	50.0%	100.0%	66.0%	10.0%	75
409	3.56	1	130,833	1.0	2.2%	79.0%	50.0%	100.0%	66.0%	10.0%	75
410	0.34	0	130,833		0.4%	100.0%	100.0%	0.4%	100.0%	5.0%	0

Commercial Measures

MEASURE DESCRIPTION		MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units	
411	0.20	0	130,833		3.2%	100.0%	100.0%	0.0%	100.0%	5.0%	0	
412	0.24	0	130,833		0.3%	100.0%	100.0%	0.1%	100.0%	5.0%	0	
413	0.31	0	130,833		2.2%	100.0%	100.0%	0.5%	100.0%	5.0%	0	
414	0.27	0	130,833		10.4%	100.0%	100.0%	0.2%	100.0%	5.0%	0	
415	1.99	1	88	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88	
416	1.76	1	88	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88	
417	1.01	1	88	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88	
418	2.01	1	229	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	229	
419	1.77	1	229	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	229	
420	1.02	1	229	1.0	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	229	

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
1	Mid-Atlantic TRM, AR TRM	New Orleans TRM
2	Mid-Atlantic TRM, AR TRM	New Orleans TRM
3	Mid-Atlantic TRM, AR TRM	New Orleans TRM
4	Mid-Atlantic TRM, AR TRM	New Orleans TRM
5	Mid-Atlantic TRM, AR TRM	New Orleans TRM
6	Mid-Atlantic TRM, AR TRM	New Orleans TRM
7	Mid-Atlantic TRM, AR TRM	New Orleans TRM
8	Mid-Atlantic TRM, AR TRM	New Orleans TRM
9	Mid-Atlantic TRM, AR TRM	New Orleans TRM
10	Mid-Atlantic TRM, AR TRM	New Orleans TRM
11	Mid-Atlantic TRM, AR TRM	New Orleans TRM
12	Mid-Atlantic TRM, AR TRM	New Orleans TRM
13	Mid-Atlantic TRM, AR TRM	New Orleans TRM
14	Mid-Atlantic TRM, AR TRM	New Orleans TRM
15	Mid-Atlantic TRM, AR TRM	New Orleans TRM
16	Mid-Atlantic TRM, AR TRM	New Orleans TRM
17	Mid-Atlantic TRM, AR TRM	New Orleans TRM
18	Mid-Atlantic TRM, AR TRM	New Orleans TRM
19	Mid-Atlantic TRM, AR TRM	New Orleans TRM
20	Mid-Atlantic TRM, AR TRM	New Orleans TRM
21	Mid-Atlantic TRM, AR TRM	New Orleans TRM
22	Mid-Atlantic TRM, AR TRM	New Orleans TRM
23	AR TRM	New Orleans TRM
24	AR TRM	New Orleans TRM
25	AR TRM	New Orleans TRM
26	AR TRM	New Orleans TRM
27	New Orleans TRM	New Orleans TRM
28	New Orleans TRM	New Orleans TRM
29	New Orleans TRM	New Orleans TRM
30	New Orleans TRM	New Orleans TRM
31	New Orleans TRM	New Orleans TRM
32	New Orleans TRM	New Orleans TRM
33	New Orleans TRM	New Orleans TRM
34	New Orleans TRM	New Orleans TRM
35	New Orleans TRM	New Orleans TRM
36	New Orleans TRM	New Orleans TRM
37	New Orleans TRM	New Orleans TRM
38	New Orleans TRM	New Orleans TRM



Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
39	New Orleans TRM	New Orleans TRM
40	MidAtlantic TRM	Mid-Atlantic TRM
41	MidAtlantic TRM	Mid-Atlantic TRM
42	MidAtlantic TRM	Mid-Atlantic TRM
43	MidAtlantic TRM	Mid-Atlantic TRM
44	MidAtlantic TRM	Mid-Atlantic TRM
45	MidAtlantic TRM	Mid-Atlantic TRM
46	MidAtlantic TRM	Mid-Atlantic TRM
47	MidAtlantic TRM	Mid-Atlantic TRM
48	MidAtlantic TRM	Mid-Atlantic TRM
49	MidAtlantic TRM	Mid-Atlantic TRM
50	MidAtlantic TRM	Mid-Atlantic TRM
51	MidAtlantic TRM	Mid-Atlantic TRM
52	MidAtlantic TRM	Mid-Atlantic TRM
53	MidAtlantic TRM	Mid-Atlantic TRM
54	MidAtlantic TRM	Mid-Atlantic TRM
55	MidAtlantic TRM	Mid-Atlantic TRM
56	MidAtlantic TRM	Mid-Atlantic TRM
57	MidAtlantic TRM	Mid-Atlantic TRM
58	MidAtlantic TRM	Mid-Atlantic TRM
59	MidAtlantic TRM	Mid-Atlantic TRM
60	Honeywell	Mid-Atlantic
61	Honeywell	Mid-Atlantic
62	Honeywell	IL TRM
63	Honeywell	IL TRM
64	ICF	IL TRM
65	New Orleans TRM	New Orleans TRM
66	New Orleans TRM	New Orleans TRM
67	IL TRM	AR & IL TRM
68	IL TRM	AR & IL TRM
69	IL TRM	AR & IL TRM
70	IL TRM	AR & IL TRM
71	IL TRM	IL TRM
72	IL TRM	IL TRM
73	IL TRM	IL TRM
74	IL TRM	IL TRM
75	IL TRM	IL TRM
76	IL TRM	IL TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
77	IL TRM	IL TRM
78	IL TRM	IL TRM
79	IL TRM	AR & IL TRM
80	IL TRM	AR & IL TRM
81	IL TRM	AR & IL TRM
82	IL TRM	AR & IL TRM
83	IL TRM	IL TRM
84	IL TRM	IL TRM
85	IL TRM	IL TRM
86	IL TRM	IL TRM
87	IL TRM	IL TRM
88	IL TRM	IL TRM
89	IL TRM	IL TRM
90	IL TRM	IL TRM
91	ICF	AR & IL TRM
92	ICF	AR & IL TRM
93	ICF	AR & IL TRM
94	ICF	AR & IL TRM
95	ICF	AR & IL TRM
96	ICF	AR & IL TRM
97	ICF	AR & IL TRM
98	ICF	AR & IL TRM
99	ICF	AR & IL TRM
100	ICF	AR & IL TRM
101	ICF	AR & IL TRM
102	ICF	AR & IL TRM
103	ICF	IL TRM
104	ICF	IL TRM
105	ICF	IL TRM
106	ICF	IL TRM
107	ICF	IL TRM
108	ICF	IL TRM
109	ICF	IL TRM
110	ICF	IL TRM
111	ICF	IL TRM
112	ICF	IL TRM
113	ICF	IL TRM
114	ICF	IL TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
115	ICF	AR & IL TRM
116	ICF	AR & IL TRM
117	ICF	AR & IL TRM
118	ICF	AR & IL TRM
119	ICF	AR & IL TRM
120	ICF	AR & IL TRM
121	ICF	AR & IL TRM
122	ICF	AR & IL TRM
123	ICF	AR & IL TRM
124	ICF	AR & IL TRM
125	ICF	AR & IL TRM
126	ICF	AR & IL TRM
127	ICF	AR & IL TRM
128	ICF	AR & IL TRM
129	ICF	AR & IL TRM
130	ICF	AR & IL TRM
131	ICF	AR & IL TRM
132	ICF	AR & IL TRM
133	ICF	AR & IL TRM
134	ICF	AR & IL TRM
135	ICF	AR & IL TRM
136	ICF	AR & IL TRM
137	ICF	AR & IL TRM
138	ICF	AR & IL TRM
139	ICF	AR & IL TRM
140	ICF	AR & IL TRM
141	ICF	AR & IL TRM
142	ICF	AR & IL TRM
143	ICF	AR & IL TRM
144	ICF	AR & IL TRM
145	ICF	AR & IL TRM
146	ICF	AR & IL TRM
147	ICF	AR & IL TRM
148	ICF	AR & IL TRM
149	ICF	AR & IL TRM
150	ICF	AR & IL TRM
151	ICF	AR & IL TRM
152	ICF	AR & IL TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
153	ICF	AR & IL TRM
154	ICF	AR & IL TRM
155	AR TRM	New Orleans TRM
156	AR TRM	New Orleans TRM
157	AR TRM	New Orleans TRM
158	AR TRM	New Orleans TRM
159	AR TRM	New Orleans TRM
160	AR TRM	New Orleans TRM
161	AR TRM	New Orleans TRM
162	AR TRM	New Orleans TRM
163	AR TRM	New Orleans TRM
164	AR TRM	New Orleans TRM
165	AR TRM	New Orleans TRM
166	AR TRM	New Orleans TRM
167	AR TRM	New Orleans TRM
168	AR TRM	New Orleans TRM
169	ICF	IL TRM
170	New Orleans TRM	New Orleans TRM
171	New Orleans TRM	New Orleans TRM
172	New Orleans TRM	New Orleans TRM
173	New Orleans TRM	New Orleans TRM
174	New Orleans TRM	New Orleans TRM
175	New Orleans TRM	New Orleans TRM
176	New Orleans TRM	New Orleans TRM
177	New Orleans TRM	New Orleans TRM
178	New Orleans TRM	New Orleans TRM
179	New Orleans TRM	New Orleans TRM
180	New Orleans TRM	New Orleans TRM
181	New Orleans TRM	New Orleans TRM
182	New Orleans TRM	New Orleans TRM
183	IL TRM	IL TRM
184	IL TRM	IL TRM
185	IL TRM	IL TRM
186	IL TRM	IL TRM
187	IL TRM	IL TRM
188	IL TRM	IL TRM
189	IL TRM	IL TRM
190	IL TRM	IL TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
191	IL TRM	IL TRM
192	IL TRM	IL TRM
193	IL TRM	IL TRM
194	IL TRM	IL TRM
195	IL TRM	AR TRM
196	IL TRM	AR TRM
197	IL TRM	AR TRM
198	IL TRM	AR TRM
199	IL TRM	AR TRM
200	IL TRM	AR TRM
201	IL TRM	AR TRM
202	IL TRM	AR TRM
203	IL TRM	AR TRM
204	IL TRM	AR TRM
205	IL TRM	AR TRM
206	IL TRM	AR TRM
207	New Orleans TRM	New Orleans TRM
208	New Orleans TRM	New Orleans TRM
209	New Orleans TRM	New Orleans TRM
210	IL TRM	AR TRM
211	IL TRM	AR TRM
212	IL TRM	AR TRM
213	IL TRM	AR TRM
214	IL TRM	AR TRM
215	IL TRM	AR TRM
216	IL TRM	AR TRM
217	IL TRM	AR TRM
218	IL TRM	AR TRM
219	IL TRM	AR TRM
220	IL TRM	AR TRM
221	IL TRM	AR TRM
222	IL TRM	AR TRM
223	IL TRM	AR TRM
224	IL TRM	AR TRM
225	IL TRM	AR TRM
226	IL TRM	AR TRM
227	New Orleans TRM	New Orleans TRM
228	New Orleans TRM	New Orleans TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
229	New Orleans TRM	New Orleans TRM
230	New Orleans TRM	New Orleans TRM
231	New Orleans TRM	New Orleans TRM
232	New Orleans TRM	New Orleans TRM
233	New Orleans TRM	New Orleans TRM
234	New Orleans TRM	New Orleans TRM
235	New Orleans TRM	New Orleans TRM
236	New Orleans TRM	New Orleans TRM
237	New Orleans TRM	AR TRM
238	New Orleans TRM	AR TRM
239	New Orleans TRM	AR TRM
240	New Orleans TRM	AR TRM
241	New Orleans TRM	AR TRM
242	IL TRM	IL TRM
243	IL TRM	IL TRM
244	IL TRM	IL TRM
245	IL TRM	IL TRM
246	IL TRM	IL TRM
247	New Orleans TRM	New Orleans TRM
248	New Orleans TRM	New Orleans TRM
249	New Orleans TRM	New Orleans TRM
250	New Orleans TRM	New Orleans TRM
251	New Orleans TRM	New Orleans TRM
252	New Orleans TRM	New Orleans TRM
253	New Orleans TRM	New Orleans TRM
254	New Orleans TRM	New Orleans TRM
255	New Orleans TRM	New Orleans TRM
256	New Orleans TRM	New Orleans TRM
257	IL TRM	New Orleans TRM
258	IL TRM	New Orleans TRM
259	IL TRM	New Orleans TRM
260	IL TRM	New Orleans TRM
261	New Orleans TRM	New Orleans TRM
262	New Orleans TRM	New Orleans TRM
263	New Orleans TRM	New Orleans TRM
264	New Orleans TRM	New Orleans TRM
265	New Orleans TRM	New Orleans TRM
266	New Orleans TRM	New Orleans TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
267	New Orleans TRM	New Orleans TRM
268	New Orleans TRM	New Orleans TRM
269	New Orleans TRM	New Orleans TRM
270	New Orleans TRM	New Orleans TRM
271	New Orleans TRM	New Orleans TRM
272	New Orleans TRM	New Orleans TRM
273	New Orleans TRM	New Orleans TRM
274	New Orleans TRM	New Orleans TRM
275	New Orleans TRM	New Orleans TRM
276	New Orleans TRM	New Orleans TRM
277	New Orleans TRM	New Orleans TRM
278	New Orleans TRM	New Orleans TRM
279	New Orleans TRM	New Orleans TRM
280	New Orleans TRM	New Orleans TRM
281	New Orleans TRM	New Orleans TRM
282	New Orleans TRM	New Orleans TRM
283	New Orleans TRM	New Orleans TRM
284	New Orleans TRM	New Orleans TRM
285	New Orleans TRM	New Orleans TRM
286	New Orleans TRM	New Orleans TRM
287	New Orleans TRM	New Orleans TRM
288	New Orleans TRM	New Orleans TRM
289	New Orleans TRM	New Orleans TRM
290	New Orleans TRM	New Orleans TRM
291	New Orleans TRM	New Orleans TRM
292	New Orleans TRM	New Orleans TRM
293	New Orleans TRM	New Orleans TRM
294	New Orleans TRM	New Orleans TRM
295	New Orleans TRM	New Orleans TRM
296	New Orleans TRM	New Orleans TRM
297	New Orleans TRM	New Orleans TRM
298	New Orleans TRM	New Orleans TRM
299	New Orleans TRM	New Orleans TRM
300	New Orleans TRM	New Orleans TRM
301	New Orleans TRM	New Orleans TRM
302	New Orleans TRM	New Orleans TRM
303	New Orleans TRM	New Orleans TRM
304	New Orleans TRM	New Orleans TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
305	New Orleans TRM	New Orleans TRM
306	New Orleans TRM	New Orleans TRM
307	ICF	ICF
308	ICF	ICF
309	ICF	ICF
310	ICF	ICF
311	ICF	ICF
312	ICF	ICF
313	ICF	ICF
314	New Orleans TRM	New Orleans TRM
315	New Orleans TRM	New Orleans TRM
316	New Orleans TRM	New Orleans TRM
317	IL TRM	IL TRM
318	ICF	
319	ICF	
320	ICF	
321	ICF	
322	ICF	
323	ICF	
324	IL TRM	IL TRM
325	IL TRM	IL TRM
326	IL TRM	IL TRM
327	ICF	
328	ICF	
329	IL TRM	IL TRM
330	IL TRM	IL TRM
331	IL TRM	IL TRM
332	IL TRM	IL TRM
333	IL TRM	IL TRM
334	IL TRM	IL TRM
335	IL TRM	IL TRM
336	IL TRM	IL TRM
337	IL TRM	IL TRM
338	ICF	
339	ICF	
340	IL TRM	IL TRM
341	IL TRM	IL TRM
342	New Orleans TRM	New Orleans TRM



Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
343	New Orleans TRM	New Orleans TRM
344	New Orleans TRM	New Orleans TRM
345	New Orleans TRM	New Orleans TRM
346	New Orleans TRM	New Orleans TRM
347	New Orleans TRM	New Orleans TRM
348	New Orleans TRM	New Orleans TRM
349	AR TRM	AR TRM
350	AR TRM	AR TRM
351	AR TRM	AR TRM
352	Michigan MEMD Mater Database	Michigan MEMD Mater Database
353	Michigan MEMD Mater Database	Michigan MEMD Mater Database
354	Michigan MEMD Mater Database	Michigan MEMD Mater Database
355	Michigan MEMD Mater Database	Michigan MEMD Mater Database
356	AR TRM	AR TRM
357	AR TRM	AR TRM
358	AR TRM	AR TRM
359	AR TRM	AR TRM
360	AR TRM	AR TRM
361	IL TRM	IL TRM
362	IL TRM	IL TRM
363	AR TRM	AR TRM
364	AR TRM	AR TRM
365	AR TRM	AR TRM
366	AR TRM	AR TRM
367	AR TRM	AR TRM
368	AR TRM	AR TRM
369	AR TRM	AR TRM
370	AR TRM	AR TRM
371	AR TRM	New Orleans TRM
372	New Orleans TRM	New Orleans TRM
373	New Orleans TRM	New Orleans TRM
374	New Orleans TRM	New Orleans TRM
375	New Orleans TRM	New Orleans TRM
376	New Orleans TRM	New Orleans TRM
377	New Orleans TRM	New Orleans TRM
378	New Orleans TRM	New Orleans TRM
379	New Orleans TRM	New Orleans TRM
380	New Orleans TRM	New Orleans TRM

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
381	New Orleans TRM	New Orleans TRM
382	New Orleans TRM	New Orleans TRM
383	New Orleans TRM	New Orleans TRM
384	AR TRM	AR TRM
385	AR TRM	AR TRM
386	AR TRM	AR TRM
387	AR TRM	AR TRM
388	AR TRM	AR TRM
389	AR TRM	AR TRM
390	AR TRM	AR TRM
391	AR TRM	AR TRM
392	AR TRM	AR TRM
393	AR TRM	AR TRM
394	AR TRM	AR TRM
395	AR TRM	AR TRM
396	AR TRM	AR TRM
397	AR TRM	AR TRM
398	AR TRM	AR TRM
399	AR TRM	AR TRM
400	AR TRM	AR TRM
401	AR TRM	AR TRM
402	AR TRM	AR TRM
403	AR TRM	AR TRM
404	AR TRM	AR TRM
405	AR TRM	AR TRM
406	AR TRM	AR TRM
407	AR TRM	AR TRM
408	AR TRM	AR TRM
409	AR TRM	AR TRM
410	New Orleans TRM	New Orleans TRM
411	New Orleans TRM	New Orleans TRM
412	New Orleans TRM	New Orleans TRM
413	New Orleans TRM	New Orleans TRM
414	New Orleans TRM	New Orleans TRM
415	ASHRAE	ICF
416	ASHRAE	ICF
417	ASHRAE	ICF
418	ASHRAE	ICF

Commercial Measures

MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
419	ASHRAE	ICF
420	ASHRAE	ICF

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
1	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
2	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
3	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
4	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
5	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
6	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
7	Commercial Prescriptive & Custom	2019	0.052%	2038	0.261%	2038	0.261%
8	Commercial Prescriptive & Custom	2019	0.163%	2038	1.106%	2038	1.106%
9	Commercial Prescriptive & Custom	2019	0.157%	2038	1.087%	2038	1.087%
10	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
11	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
12	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
13	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
14	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
15	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
16	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
17	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
18	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
19	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
20	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
21	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
22	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
23	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
24	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
25	Commercial Prescriptive & Custom	2019	1.902%	2038	9.509%	2038	9.509%
26	Commercial Prescriptive & Custom	2019	1.581%	2038	7.906%	2038	7.906%
27	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
28	Commercial Prescriptive & Custom	2019	0.731%	2038	3.657%	2038	3.657%
29	Commercial Prescriptive & Custom	2019	0.741%	2038	3.707%	2038	3.707%
30	Commercial Prescriptive & Custom	2019	0.805%	2038	4.025%	2038	4.025%
31	Commercial Prescriptive & Custom	2019	0.742%	2038	3.709%	2038	3.709%
32	Commercial Prescriptive & Custom	2019	1.078%	2038	5.391%	2038	5.391%
33	Commercial Prescriptive & Custom	2019	1.108%	2038	5.540%	2038	5.540%
34	Commercial Prescriptive & Custom	2019	1.199%	2038	5.996%	2038	5.996%
35	Commercial Prescriptive & Custom	2019	1.092%	2038	5.461%	2038	5.461%
36	Commercial Prescriptive & Custom	2019	0.011%	2038	0.054%	2038	0.054%
37	Commercial Prescriptive & Custom	2019	0.013%	2038	0.063%	2038	0.063%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
38	Commercial Prescriptive & Custom	2019	0.019%	2038	0.096%	2038	0.096%
39	Commercial Prescriptive & Custom	2019	0.012%	2038	0.058%	2038	0.058%
40	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
41	Commercial Prescriptive & Custom	2019	0.005%	2038	0.024%	2038	0.024%
42	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
43	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
44	Commercial Prescriptive & Custom	2019	0.004%	2038	0.021%	2038	0.021%
45	Commercial Prescriptive & Custom	2019	0.001%	2038	0.005%	2038	0.005%
46	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
47	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
48	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
49	Commercial Prescriptive & Custom	2019	0.001%	2038	0.006%	2038	0.006%
50	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
51	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
52	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
53	Commercial Prescriptive & Custom	2019	0.002%	2038	0.008%	2038	0.008%
54	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
55	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
56	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
57	Commercial Prescriptive & Custom	2019	0.002%	2038	0.010%	2038	0.010%
58	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
59	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
60	Commercial Prescriptive & Custom	2019	0.003%	2038	0.015%	2038	0.015%
61	Commercial Prescriptive & Custom	2019	0.004%	2038	0.018%	2038	0.018%
62	Commercial Prescriptive & Custom	2019	0.004%	2038	0.022%	2038	0.022%
63	Commercial Prescriptive & Custom	2019	0.002%	2038	0.008%	2038	0.008%
64	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
65	Small Business Solutions	2019	0.090%	2038	0.450%	2038	0.450%
66	Small Business Solutions	2019	0.090%	2038	0.450%	2038	0.450%
67	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
68	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
69	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
70	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
71	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
72	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
73	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
74	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
75	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
76	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
77	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
78	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
79	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
80	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
81	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
82	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
83	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
84	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
85	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
86	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
87	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
88	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
89	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
90	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
91	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
92	Midstream Commercial Lighting	2019	5.531%	2038	16.594%	2038	16.594%
93	Midstream Commercial Lighting	2019	6.418%	2038	19.255%	2038	19.255%
94	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
95	Midstream Commercial Lighting	2019	6.442%	2038	19.326%	2038	19.326%
96	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
97	Midstream Commercial Lighting	2019	3.083%	2038	9.249%	2038	9.249%
98	Midstream Commercial Lighting	2019	1.030%	2038	3.090%	2038	3.090%
99	Midstream Commercial Lighting	2019	1.772%	2038	5.316%	2038	5.316%
100	Midstream Commercial Lighting	2019	3.914%	2038	11.742%	2038	11.742%
101	Midstream Commercial Lighting	2019	1.699%	2038	5.096%	2038	5.096%
102	Midstream Commercial Lighting	2019	2.400%	2038	7.201%	2038	7.201%
103	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
104	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
105	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
106	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
107	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
108	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
109	Commercial Prescriptive & Custom	2019	0.130%	2038	0.648%	2038	0.648%
110	Commercial Prescriptive & Custom	2019	0.038%	2038	0.188%	2038	0.188%
111	Commercial Prescriptive & Custom	2019	0.068%	2038	0.342%	2038	0.342%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
112	Commercial Prescriptive & Custom	2019	0.166%	2038	0.830%	2038	0.830%
113	Commercial Prescriptive & Custom	2019	0.066%	2038	0.331%	2038	0.331%
114	Commercial Prescriptive & Custom	2019	0.095%	2038	0.475%	2038	0.475%
115	Commercial Prescriptive & Custom	2019	0.055%	2038	0.276%	2038	0.276%
116	Commercial Prescriptive & Custom	2019	0.014%	2038	0.069%	2038	0.069%
117	Commercial Prescriptive & Custom	2019	0.028%	2038	0.141%	2038	0.141%
118	Commercial Prescriptive & Custom	2019	0.078%	2038	0.388%	2038	0.388%
119	Commercial Prescriptive & Custom	2019	0.026%	2038	0.130%	2038	0.130%
120	Commercial Prescriptive & Custom	2019	0.042%	2038	0.212%	2038	0.212%
121	Commercial Prescriptive & Custom	2019	0.102%	2038	0.511%	2038	0.511%
122	Commercial Prescriptive & Custom	2019	0.024%	2038	0.121%	2038	0.121%
123	Commercial Prescriptive & Custom	2019	0.049%	2038	0.245%	2038	0.245%
124	Commercial Prescriptive & Custom	2019	0.137%	2038	0.687%	2038	0.687%
125	Commercial Prescriptive & Custom	2019	0.047%	2038	0.234%	2038	0.234%
126	Commercial Prescriptive & Custom	2019	0.072%	2038	0.360%	2038	0.360%
127	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
128	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
129	Midstream Commercial Lighting	2019	6.667%	2038	19.530%	2038	19.530%
130	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
131	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
132	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
133	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
134	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
135	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
136	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
137	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
138	Midstream Commercial Lighting	2019	6.667%	2038	20.000%	2038	20.000%
139	Commercial Prescriptive & Custom	2019	0.061%	2038	0.307%	2038	0.307%
140	Commercial Prescriptive & Custom	2019	0.076%	2038	0.382%	2038	0.382%
141	Commercial Prescriptive & Custom	2019	0.106%	2038	0.528%	2038	0.528%
142	Commercial Prescriptive & Custom	2019	0.109%	2038	0.546%	2038	0.546%
143	Commercial Prescriptive & Custom	2019	0.109%	2038	0.543%	2038	0.543%
144	Commercial Prescriptive & Custom	2019	0.112%	2038	0.560%	2038	0.560%
145	Commercial Prescriptive & Custom	2019	0.117%	2038	0.583%	2038	0.583%
146	Commercial Prescriptive & Custom	2019	0.117%	2038	0.583%	2038	0.583%
147	Commercial Prescriptive & Custom	2019	0.045%	2038	0.223%	2038	0.223%
148	Commercial Prescriptive & Custom	2019	0.059%	2038	0.295%	2038	0.295%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
149	Commercial Prescriptive & Custom	2019	0.005%	2038	0.027%	2038	0.027%
150	Commercial Prescriptive & Custom	2019	0.011%	2038	0.056%	2038	0.056%
151	Commercial Prescriptive & Custom	2019	0.047%	2038	0.235%	2038	0.235%
152	Commercial Prescriptive & Custom	2019	0.062%	2038	0.308%	2038	0.308%
153	Commercial Prescriptive & Custom	2019	0.010%	2038	0.049%	2038	0.049%
154	Commercial Prescriptive & Custom	2019	0.022%	2038	0.112%	2038	0.112%
155	Commercial Prescriptive & Custom	2019	0.022%	2038	0.112%	2038	0.112%
156	Commercial Prescriptive & Custom	2019	0.016%	2038	0.078%	2038	0.078%
157	Commercial Prescriptive & Custom	2019	0.005%	2038	0.027%	2038	0.027%
158	Commercial Prescriptive & Custom	2019	0.047%	2038	0.236%	2038	0.236%
159	Commercial Prescriptive & Custom	2019	0.029%	2038	0.146%	2038	0.146%
160	Commercial Prescriptive & Custom	2019	0.031%	2038	0.154%	2038	0.154%
161	Commercial Prescriptive & Custom	2019	0.039%	2038	0.193%	2038	0.193%
162	Commercial Prescriptive & Custom	2019	0.028%	2038	0.142%	2038	0.142%
163	Commercial Prescriptive & Custom	2019	0.021%	2038	0.106%	2038	0.106%
164	Commercial Prescriptive & Custom	2019	0.009%	2038	0.044%	2038	0.044%
165	Commercial Prescriptive & Custom	2019	0.051%	2038	0.254%	2038	0.254%
166	Commercial Prescriptive & Custom	2019	0.035%	2038	0.176%	2038	0.176%
167	Commercial Prescriptive & Custom	2019	0.037%	2038	0.183%	2038	0.183%
168	Commercial Prescriptive & Custom	2019	0.044%	2038	0.221%	2038	0.221%
169	Commercial Prescriptive & Custom	2019	0.111%	2038	0.553%	2038	0.553%
170	Small Business Solutions	2019	0.019%	2038	0.093%	2038	0.093%
171	Commercial Prescriptive & Custom	2019	0.130%	2038	0.650%	2038	0.650%
172	Commercial Prescriptive & Custom	2019	0.027%	2038	0.136%	2038	0.136%
173	Commercial Prescriptive & Custom	2019	0.101%	2038	0.503%	2038	0.503%
174	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
175	Commercial Prescriptive & Custom	2019	0.141%	2038	0.705%	2038	0.705%
176	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
177	Commercial Prescriptive & Custom	2019	0.148%	2038	0.738%	2038	0.738%
178	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
179	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
180	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
181	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
182	Commercial Prescriptive & Custom	2019	0.114%	2038	0.570%	2038	0.570%
183	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
184	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
185	Commercial Prescriptive & Custom	2019	0.130%	2038	0.651%	2038	0.651%



Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
186	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
187	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
188	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
189	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
190	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
191	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
192	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
193	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
194	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
195	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
196	Commercial Prescriptive & Custom	2019	0.087%	2038	0.437%	2038	0.437%
197	Commercial Prescriptive & Custom	2019	0.087%	2038	0.437%	2038	0.437%
198	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
199	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
200	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
201	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
202	Commercial Prescriptive & Custom	2019	0.087%	2038	0.437%	2038	0.437%
203	Commercial Prescriptive & Custom	2019	0.087%	2038	0.437%	2038	0.437%
204	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
205	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
206	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
207	Commercial Prescriptive & Custom	2019	0.022%	2038	0.109%	2038	0.109%
208	Commercial Prescriptive & Custom	2019	0.017%	2038	0.085%	2038	0.085%
209	Commercial Prescriptive & Custom	2019	0.013%	2038	0.065%	2038	0.065%
210	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
211	Commercial Prescriptive & Custom	2019	0.060%	2038	0.299%	2038	0.299%
212	Commercial Prescriptive & Custom	2019	0.174%	2038	0.868%	2038	0.868%
213	Commercial Prescriptive & Custom	2019	0.043%	2038	0.213%	2038	0.213%
214	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
215	Commercial Prescriptive & Custom	2019	0.069%	2038	0.346%	2038	0.346%
216	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
217	Commercial Prescriptive & Custom	2019	0.069%	2038	0.346%	2038	0.346%
218	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
219	Commercial Prescriptive & Custom	2019	0.175%	2038	0.874%	2038	0.874%
220	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
221	Commercial Prescriptive & Custom	2019	0.069%	2038	0.346%	2038	0.346%
222	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
223	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
224	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
225	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
226	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
227	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
228	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
229	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
230	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
231	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
232	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
233	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
234	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
235	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
236	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
237	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
238	Commercial Prescriptive & Custom	2019	0.122%	2038	0.608%	2038	0.608%
239	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
240	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
241	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
242	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
243	Commercial Prescriptive & Custom	2019	0.054%	2038	0.268%	2038	0.268%
244	Commercial Prescriptive & Custom	2019	0.096%	2038	0.478%	2038	0.478%
245	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
246	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
247	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
248	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
249	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
250	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
251	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
252	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
253	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
254	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
255	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
256	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
257	Commercial Prescriptive & Custom	2019	0.109%	2038	0.547%	2038	0.547%
258	Commercial Prescriptive & Custom	2019	0.150%	2038	0.749%	2038	0.749%
259	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
260	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
261	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
262	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
263	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
264	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
265	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
266	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
267	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
268	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
269	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
270	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
271	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
272	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
273	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
274	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
275	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
276	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
277	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
278	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
279	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
280	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
281	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
282	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
283	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
284	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
285	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
286	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
287	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
288	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
289	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
290	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
291	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
292	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
293	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
294	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
295	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
296	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
297	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
298	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
299	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
300	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
301	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
302	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
303	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
304	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
305	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
306	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
307	Small Business Solutions	2019	0.003%	2038	0.015%	2038	0.015%
308	Small Business Solutions	2019	2.700%	2038	13.500%	2038	13.500%
309	Small Business Solutions	2019	0.090%	2038	0.450%	2038	0.450%
310	Small Business Solutions	2019	0.936%	2038	4.678%	2038	4.678%
311	Small Business Solutions	2019	0.090%	2038	0.450%	2038	0.450%
312	RetroCommissioning	2019	0.050%	2038	0.150%	2038	0.150%
313	RetroCommissioning	2019	0.050%	2038	0.150%	2038	0.150%
314	Commercial Prescriptive & Custom	2019	0.055%	2038	0.274%	2038	0.274%
315	Commercial Prescriptive & Custom	2019	0.108%	2038	0.539%	2038	0.539%
316	Commercial Prescriptive & Custom	2019	0.151%	2038	0.755%	2038	0.755%
317	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
318	Commercial Prescriptive & Custom	2019	0.087%	2038	0.433%	2038	0.433%
319	Commercial Prescriptive & Custom	2019	0.117%	2038	0.583%	2038	0.583%
320	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
321	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
322	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
323	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
324	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
325	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
326	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
327	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
328	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
329	Commercial Prescriptive & Custom	2019	0.085%	2038	0.427%	2038	0.427%
330	Commercial Prescriptive & Custom	2019	0.103%	2038	0.516%	2038	0.516%
331	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
332	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
333	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
334	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
335	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
336	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
337	Commercial Prescriptive & Custom	2019	0.185%	2038	0.923%	2038	0.923%
338	Commercial Prescriptive & Custom	2019	0.248%	2038	1.240%	2038	1.240%
339	Commercial Prescriptive & Custom	2019	0.192%	2038	0.959%	2038	0.959%
340	Commercial Prescriptive & Custom	2019	0.095%	2038	0.477%	2038	0.477%
341	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
342	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
343	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
344	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
345	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
346	Commercial Prescriptive & Custom	2019	0.128%	2038	0.640%	2038	0.640%
347	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
348	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
349	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
350	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
351	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
352	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
353	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
354	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
355	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
356	Commercial Prescriptive & Custom	2019	0.000%	2038	0.002%	2038	0.002%
357	Commercial Prescriptive & Custom	2019	0.001%	2038	0.006%	2038	0.006%
358	Commercial Prescriptive & Custom	2019	0.000%	2038	0.000%	2038	0.000%
359	Commercial Prescriptive & Custom	2019	0.000%	2038	0.000%	2038	0.000%
360	Commercial Prescriptive & Custom	2019	0.001%	2038	0.003%	2038	0.003%
361	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
362	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
363	Commercial Prescriptive & Custom	2019	0.072%	2038	0.362%	2038	0.362%
364	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
365	Commercial Prescriptive & Custom	2019	0.114%	2038	0.569%	2038	0.569%
366	Commercial Prescriptive & Custom	2019	0.042%	2038	0.208%	2038	0.208%
367	Commercial Prescriptive & Custom	2019	0.036%	2038	0.178%	2038	0.178%
368	Commercial Prescriptive & Custom	2019	0.119%	2038	0.594%	2038	0.594%
369	Commercial Prescriptive & Custom	2019	0.119%	2038	0.594%	2038	0.594%
370	Commercial Prescriptive & Custom	2019	0.083%	2038	0.416%	2038	0.416%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
371	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
372	Commercial Prescriptive & Custom	2019	0.046%	2038	0.229%	2038	0.229%
373	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
374	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
375	Commercial Prescriptive & Custom	2019	0.046%	2038	0.229%	2038	0.229%
376	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
377	Commercial Prescriptive & Custom	2019	0.152%	2038	0.761%	2038	0.761%
378	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
379	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
380	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
381	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
382	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
383	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
384	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
385	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
386	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
387	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
388	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
389	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
390	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
391	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
392	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
393	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
394	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
395	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
396	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
397	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
398	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
399	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
400	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
401	Small Business Solutions	2019	0.225%	2038	0.450%	2038	0.450%
402	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%
403	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%
404	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%
405	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%
406	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%

Commercial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
407	Commercial Prescriptive & Custom	2019	0.456%	2038	2.282%	2038	2.282%
408	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
409	Commercial Prescriptive & Custom	2019	0.005%	2038	0.025%	2038	0.025%
410	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
411	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
412	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
413	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
414	Commercial Prescriptive & Custom		0.000%		0.000%		0.000%
415	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%
416	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%
417	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%
418	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%
419	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%
420	Commercial New Construction	2020	0.000%	2038	20.000%	2038	20.000%

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
1	NWS	Industrial	Petroleum Refining	Motors - Other Applications	SEM - Operations and maintenance
2	NWS	Industrial	Petroleum Refining	Motors - Other Applications	SEM - Match Motor Size to Load
3	NWS	Industrial	Petroleum Refining	Motors - Other Applications	Motor Efficiency Upgrade
4	NWS	Industrial	Petroleum Refining	Motors - Other Applications	Variable Speed Drives
5	NWS	Industrial	Petroleum Refining	Pumps	Reduce Overall System Requirements
6	NWS	Industrial	Petroleum Refining	Pumps	SEM - Match Pump Size to Load
7	NWS	Industrial	Petroleum Refining	Pumps	Reduce or Control Pump Speed
8	NWS	Industrial	Petroleum Refining	Pumps	Improve Pump Components
9	NWS	Industrial	Petroleum Refining	Pumps	SEM - Operation and Maintenance
10	NWS	Industrial	Petroleum Refining	Compressed Air	SEM - Reduce Overall System Requirements
11	NWS	Industrial	Petroleum Refining	Compressed Air	SEM - Match Compressor Size to Load
12	NWS	Industrial	Petroleum Refining	Compressed Air	Compressor Control
13	NWS	Industrial	Petroleum Refining	Compressed Air	Improve Compressor Components
14	NWS	Industrial	Petroleum Refining	Compressed Air	SEM - Operation and Maintenance
15	NWS	Industrial	Petroleum Refining	Fans	SEM - Reduce Overall System Requirements
16	NWS	Industrial	Petroleum Refining	Fans	Reduce or Control Fan Speed
17	NWS	Industrial	Petroleum Refining	Fans	Improve Fan Components
18	NWS	Industrial	Petroleum Refining	Fans	SEM - Operation and Maintenance
19	WS	Industrial	Petroleum Refining	HVAC	Air Source Heat Pump for Backup Generators
20	WS	Industrial	Petroleum Refining	HVAC	Free cooling
21	WS	Industrial	Petroleum Refining	HVAC	Radiant Heaters
22	WS	Industrial	Petroleum Refining	HVAC	High efficiency non-packaged HVAC equipment
23	WS	Industrial	Petroleum Refining	HVAC	Seasonal Temperature Settings Adjustments
24	WS	Industrial	Petroleum Refining	HVAC	High-efficiency rooftop AC with an EER of 13.5
25	WS	Industrial	Petroleum Refining	HVAC	Ground Source Heat Pump
26	WS	Industrial	Petroleum Refining	HVAC	Ventilation Heat Recovery
27	WS	Industrial	Petroleum Refining	HVAC	Automated Temperature Control
28	WS	Industrial	Petroleum Refining	HVAC	Reduced Temperature Settings
29	WS	Industrial	Petroleum Refining	HVAC	De-stratification Fans
30	WS	Industrial	Petroleum Refining	HVAC	Warehouse Loading Dock Seals
31	WS	Industrial	Petroleum Refining	HVAC	Air Curtains
32	WS	Industrial	Petroleum Refining	HVAC	SEM - Preventative Packaged HVAC Maintenance
33	WS	Industrial	Petroleum Refining	HVAC	Heat Recovery from Processes to Heat Ventilation Make-up Air
34	NWS	Industrial	Petroleum Refining	FL	High efficiency ballasts for lighting
35	NWS	Industrial	Petroleum Refining	FL	High Efficiency Light fixtures
36	NWS	Industrial	Petroleum Refining	FL	Efficient Lighting Design
37	NWS	Industrial	Petroleum Refining	FL	SEM - Lighting controls: on/off timer settings
38	NWS	Industrial	Petroleum Refining	FL	Lighting controls: occupancy sensors
39	WS	Industrial	Petroleum Refining	HVAC	SEM - Ventilation Optimization
40	WS	Industrial	Petroleum Refining	HVAC	Premium efficiency ventilation control with VSD
41	WS	Industrial	Petroleum Refining	HVAC	Demand-Controlled Ventilation
42	WS	Industrial	Petroleum Refining	HVAC	SEM - Optimized duct design to improve efficiency
43	NWS	Industrial	Industrial Organic Chemicals	Motors - Other Applications	SEM - Operations and maintenance
44	NWS	Industrial	Industrial Organic Chemicals	Motors - Other Applications	SEM - Match Motor Size to Load



Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
45	NWS	Industrial	Industrial Organic Chemicals	Motors - Other Applications	Motor Efficiency Upgrade
46	NWS	Industrial	Industrial Organic Chemicals	Motors - Other Applications	Variable Speed Drives
47	NWS	Industrial	Industrial Organic Chemicals	Pumps	Reduce Overall System Requirements
48	NWS	Industrial	Industrial Organic Chemicals	Pumps	SEM - Match Pump Size to Load
49	NWS	Industrial	Industrial Organic Chemicals	Pumps	Reduce or Control Pump Speed
50	NWS	Industrial	Industrial Organic Chemicals	Pumps	Improve Pump Components
51	NWS	Industrial	Industrial Organic Chemicals	Pumps	SEM - Operation and Maintenance
52	NWS	Industrial	Industrial Organic Chemicals	Compressed Air	Reduce Overall System Requirements
53	NWS	Industrial	Industrial Organic Chemicals	Compressed Air	SEM - Match Compressor Size to Load
54	NWS	Industrial	Industrial Organic Chemicals	Compressed Air	Compressor Control
55	NWS	Industrial	Industrial Organic Chemicals	Compressed Air	Improve Compressor Components
56	NWS	Industrial	Industrial Organic Chemicals	Compressed Air	SEM - Operation and Maintenance
57	NWS	Industrial	Industrial Organic Chemicals	Fans	Reduce Overall System Requirements
58	NWS	Industrial	Industrial Organic Chemicals	Fans	Reduce or Control Fan Speed
59	NWS	Industrial	Industrial Organic Chemicals	Fans	Improve Fan Components
60	NWS	Industrial	Industrial Organic Chemicals	Fans	SEM - Operation and Maintenance
61	WS	Industrial	Industrial Organic Chemicals	HVAC	Air Source Heat Pump for Backup Generators
62	WS	Industrial	Industrial Organic Chemicals	HVAC	Free cooling
63	WS	Industrial	Industrial Organic Chemicals	HVAC	Radiant Heaters
64	WS	Industrial	Industrial Organic Chemicals	HVAC	High efficiency non-packaged HVAC equipment
65	WS	Industrial	Industrial Organic Chemicals	HVAC	Seasonal Temperature Settings Adjustments
66	WS	Industrial	Industrial Organic Chemicals	HVAC	High-efficiency rooftop AC with an EER of 13.5
67	WS	Industrial	Industrial Organic Chemicals	HVAC	Ground Source Heat Pump
68	WS	Industrial	Industrial Organic Chemicals	HVAC	Ventilation Heat Recovery
69	WS	Industrial	Industrial Organic Chemicals	HVAC	Automated Temperature Control
70	WS	Industrial	Industrial Organic Chemicals	HVAC	Reduced Temperature Settings
71	WS	Industrial	Industrial Organic Chemicals	HVAC	Destratification Fans
72	WS	Industrial	Industrial Organic Chemicals	HVAC	Warehouse Loading Dock Seals
73	WS	Industrial	Industrial Organic Chemicals	HVAC	Air Curtains
74	WS	Industrial	Industrial Organic Chemicals	HVAC	SEM - Preventative Packaged HVAC Maintenance
75	WS	Industrial	Industrial Organic Chemicals	HVAC	Heat Recovery from Processes to Heat Ventilation Make-up Air
76	NWS	Industrial	Industrial Organic Chemicals	FL	High efficiency ballasts for lighting
77	NWS	Industrial	Industrial Organic Chemicals	FL	High Efficiency Light fixtures
78	NWS	Industrial	Industrial Organic Chemicals	FL	Efficient Lighting Design
79	NWS	Industrial	Industrial Organic Chemicals	FL	SEM - Lighting controls: on/off timer settings
80	NWS	Industrial	Industrial Organic Chemicals	FL	Lighting controls: occupancy sensors
81	WS	Industrial	Industrial Organic Chemicals	HVAC	SEM - Ventilation Optimization
82	WS	Industrial	Industrial Organic Chemicals	HVAC	Premium efficiency ventilation control with VSD
83	WS	Industrial	Industrial Organic Chemicals	HVAC	Demand-Controlled Ventilation
84	WS	Industrial	Industrial Organic Chemicals	HVAC	SEM - Optimized duct design to improve efficiency
85	NWS	Industrial	Small Industrial	Machine Drive	Sub-Metering and Interval Metering
86	NWS	Industrial	Small Industrial	Machine Drive	Integrated control system
87	NWS	Industrial	Small Industrial	OPU	HE Dry-Type Transformers
88	NWS	Industrial	Small Industrial	PH	Advanced water heater controls

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
89	NWS	Industrial	Small Industrial	PH	Process Heat Recovery to Preheat Makeup Water
90	NWS	Industrial	Small Industrial	PH	Air Curtains (Oven)
91	NWS	Industrial	Small Industrial	PH	Insulation (Oven)
92	NWS	Industrial	Small Industrial	PH	SEM - Preventative Oven Maintenance
93	NWS	Industrial	Small Industrial	PH	Air Curtains (Dryer)
94	NWS	Industrial	Small Industrial	PH	Insulation (Dryer)
95	NWS	Industrial	Small Industrial	PH	SEM - Preventative Dryer Maintenance
96	NWS	Industrial	Small Industrial	PH	SEM - Preventative Furnace Maintenance
97	NWS	Industrial	Small Industrial	PH	Insulation (Furnace)
98	NWS	Industrial	Small Industrial	PH	SEM - Preventative Kiln Maintenance
99	NWS	Industrial	Small Industrial	PH	Insulation (Kiln)
100	NWS	Industrial	Small Industrial	PCR	High Efficiency Chiller
101	NWS	Industrial	Small Industrial	PCR	SEM - Optimized Distribution System
102	NWS	Industrial	Small Industrial	PCR	Floating head pressure controls
103	NWS	Industrial	Small Industrial	PCR	Premium efficiency refrigeration control system
104	NWS	Industrial	Small Industrial	PCR	Smart Defrost Controls
105	NWS	Industrial	Small Industrial	PCR	Doors, Covers and Curtains
106	NWS	Industrial	Small Industrial	PCR	SEM - Optimized chilled water temperature and/or optimized condenser temperature
107	NWS	Industrial	Small Industrial	PCR	SEM - Preventative refrigeration/cooling system maintenance
108	NWS	Industrial	Small Industrial	PCR	SEM - Optimized condenser pressure
109	NWS	Industrial	Small Industrial	PCR	VSD on chiller compressor
110	NWS	Industrial	Small Industrial	PCR	Free-cooling
111	NWS	Industrial	Small Industrial	PCR	Improve insulation of refrigeration system
112	NWS	Industrial	Small Industrial	Pumps	High/Premium Efficiency Motors (Pumps)
113	NWS	Industrial	Small Industrial	Pumps	Impeller Trimming (Pump)
114	NWS	Industrial	Small Industrial	Pumps	SEM - Optimization of pumping system
115	NWS	Industrial	Small Industrial	Pumps	Premium Efficiency Control with ASDs (Pumps)
116	NWS	Industrial	Small Industrial	Pumps	SEM - Preventative Pump Maintenance
117	NWS	Industrial	Small Industrial	Fans	High/Premium Efficiency Motors (Fans)
118	NWS	Industrial	Small Industrial	Fans	Impeller Trimming or Inlet Guide Vanes
119	WS	Industrial	Small Industrial	HVAC	SEM - Optimized duct design to improve efficiency
120	NWS	Industrial	Small Industrial	Fans	Premium efficiency control, with ASD (Fans)
121	NWS	Industrial	Small Industrial	Fans	Synchronous Belts (Fans)
122	NWS	Industrial	Small Industrial	Fans	SEM - Preventative Fan Maintenance
123	NWS	Industrial	Small Industrial	Motors - Other Applications	Premium Efficiency Control with ASDs (Other motors)
124	NWS	Industrial	Small Industrial	Motors - Other Applications	High/Premium Efficiency Motors
125	NWS	Industrial	Small Industrial	Motors - Other Applications	SEM - Correctly sized motors
126	NWS	Industrial	Small Industrial	Motors - Other Applications	SEM - Optimized motor control
127	NWS	Industrial	Small Industrial	Motors - Other Applications	Synchronous Belts
128	NWS	Industrial	Small Industrial	Motors - Other Applications	SEM - Preventative Motor Maintenance
129	NWS	Industrial	Small Industrial	Compressed Air	Premium efficiency ASD compressor
130	NWS	Industrial	Small Industrial	Compressed Air	SEM - Optimized Distribution System
131	NWS	Industrial	Small Industrial	Compressed Air	Minimize operating air pressure

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
132	NWS	Industrial	Small Industrial	Compressed Air	SEM - Optimized sizing of compressor system
133	NWS	Industrial	Small Industrial	Compressed Air	SEM - Optimized sizes of air receiver tanks
134	NWS	Industrial	Small Industrial	Compressed Air	Use cooler air from outside for make up air
135	NWS	Industrial	Small Industrial	Compressed Air	Premium Efficiency Air Dryer (compressors)
136	NWS	Industrial	Small Industrial	Compressed Air	SEM - Sequencing Control
137	NWS	Industrial	Small Industrial	Compressed Air	Eliminate air leaks
138	NWS	Industrial	Small Industrial	Compressed Air	Synchronous Belts for Air Compressors
139	NWS	Industrial	Small Industrial	Compressed Air	Replace compressed air use with mechanical or electrical
140	NWS	Industrial	Small Industrial	Compressed Air	Premium efficiency ASD compressor
141	NWS	Industrial	Small Industrial	Compressed Air	SEM - Compression ratio optimization (gas compressor)
142	NWS	Industrial	Small Industrial	Compressed Air	Retrofit internal parts of existing centrifugal compressors
143	NWS	Industrial	Small Industrial	Compressed Air	SEM - Gas compressor right sizing
144	NWS	Industrial	Small Industrial	Compressed Air	Volume pocket adjustments
145	NWS	Industrial	Small Industrial	Compressed Air	SEM - Minimum cylinder clearance
146	NWS	Industrial	Small Industrial	Compressed Air	Synchronous Belts for Air or Gas Compressors
147	WS	Industrial	Small Industrial	HVAC	Air Source Heat Pump for Backup Generators
148	NWS	Industrial	Small Industrial	ONPU	High efficiency battery charger (for forklifts)
149	WS	Industrial	Small Industrial	HVAC	Free cooling
150	WS	Industrial	Small Industrial	HVAC	Radiant Heaters
151	WS	Industrial	Small Industrial	HVAC	High efficiency non-packaged HVAC equipment
152	WS	Industrial	Small Industrial	HVAC	Seasonal Temperature Settings Adjustments
153	WS	Industrial	Small Industrial	HVAC	High-efficiency rooftop AC with an EER of 13.5
154	WS	Industrial	Small Industrial	HVAC	Ground Source Heat Pump
155	WS	Industrial	Small Industrial	HVAC	Ventilation Heat Recovery
156	WS	Industrial	Small Industrial	HVAC	Automated Temperature Control
157	WS	Industrial	Small Industrial	HVAC	Reduced Temperature Settings
158	WS	Industrial	Small Industrial	HVAC	Destratification Fans
159	WS	Industrial	Small Industrial	HVAC	Warehouse Loading Dock Seals
160	WS	Industrial	Small Industrial	HVAC	Air Curtains
161	WS	Industrial	Small Industrial	HVAC	SEM - Preventative Packaged HVAC Maintenance
162	WS	Industrial	Small Industrial	HVAC	Heat Recovery from Processes to Heat Ventilation Make-up Air
163	NWS	Industrial	Small Industrial	FL	High efficiency ballasts for lighting
164	NWS	Industrial	Small Industrial	FL	High Efficiency Light fixtures
165	NWS	Industrial	Small Industrial	FL	Efficient Lighting Design
166	NWS	Industrial	Small Industrial	FL	SEM - Lighting controls: on/off timer settings
167	NWS	Industrial	Small Industrial	FL	Lighting controls: occupancy sensors
168	WS	Industrial	Small Industrial	HVAC	SEM - Ventilation Optimization
169	WS	Industrial	Small Industrial	HVAC	Premium efficiency ventilation control with VSD
170	WS	Industrial	Small Industrial	HVAC	Demand-Controlled Ventilation
171	NWS	Industrial	Chlor Alkali	OPU/ONPU	Sub-Metering and Interval Metering
172	NWS	Industrial	Chlor Alkali	OPU/ONPU	Integrated control system
173	NWS	Industrial	Chlor Alkali	OPU/ONPU	HE Dry-Type Transformers
174	NWS	Industrial	Chlor Alkali	OPU/ONPU	Advanced water heater controls
175	NWS	Industrial	Chlor Alkali	OPU/ONPU	Process Heat Recovery to Preheat Makeup Water

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
176	NWS	Industrial	Chlor Alkali	OPU/ONPU	Air Curtains (Oven)
177	NWS	Industrial	Chlor Alkali	OPU/ONPU	Insulation (Oven)
178	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Oven Maintenance
179	NWS	Industrial	Chlor Alkali	OPU/ONPU	Air Curtains (Dryer)
180	NWS	Industrial	Chlor Alkali	OPU/ONPU	Insulation (Dryer)
181	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Dryer Maintenance
182	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Furnace Maintenance
183	NWS	Industrial	Chlor Alkali	OPU/ONPU	Insulation (Furnace)
184	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Kiln Maintenance
185	NWS	Industrial	Chlor Alkali	OPU/ONPU	Insulation (Kiln)
186	NWS	Industrial	Chlor Alkali	OPU/ONPU	High Efficiency Chiller
187	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized Distribution System
188	NWS	Industrial	Chlor Alkali	OPU/ONPU	Floating head pressure controls
189	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium efficiency refrigeration control system
190	NWS	Industrial	Chlor Alkali	OPU/ONPU	Smart Defrost Controls
191	NWS	Industrial	Chlor Alkali	OPU/ONPU	Doors, Covers and Curtains
192	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized chilled water temperature and/or optimized condenser temperature
193	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative refrigeration/cooling system maintenance
194	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized condenser pressure
195	NWS	Industrial	Chlor Alkali	OPU/ONPU	VSD on chiller compressor
196	NWS	Industrial	Chlor Alkali	OPU/ONPU	Free-cooling
197	NWS	Industrial	Chlor Alkali	OPU/ONPU	Improve insulation of refrigeration system
198	NWS	Industrial	Chlor Alkali	OPU/ONPU	High/Premium Efficiency Motors (Pumps)
199	NWS	Industrial	Chlor Alkali	OPU/ONPU	Impeller Trimming (Pump)
200	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimization of pumping system
201	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium Efficiency Control with ASDs (Pumps)
202	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Pump Maintenance
203	NWS	Industrial	Chlor Alkali	OPU/ONPU	High/Premium Efficiency Motors (Fans)
204	NWS	Industrial	Chlor Alkali	OPU/ONPU	Impeller Trimming or Inlet Guide Vanes
205	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized duct design to improve efficiency
206	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium efficiency control, with ASD (Fans)
207	NWS	Industrial	Chlor Alkali	OPU/ONPU	Synchronous Belts (Fans)
208	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Fan Maintenance
209	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium Efficiency Control with ASDs (Other motors)
210	NWS	Industrial	Chlor Alkali	OPU/ONPU	High/Premium Efficiency Motors
211	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Correctly sized motors
212	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized motor control
213	NWS	Industrial	Chlor Alkali	OPU/ONPU	Synchronous Belts
214	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Motor Maintenance
215	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium efficiency ASD compressor
216	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized Distribution System
217	NWS	Industrial	Chlor Alkali	OPU/ONPU	Minimize operating air pressure
218	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized sizing of compressor system

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
219	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Optimized sizes of air receiver tanks
220	NWS	Industrial	Chlor Alkali	OPU/ONPU	Use cooler air from outside for make up air
221	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium Efficiency Air Dryer (compressors)
222	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Sequencing Control
223	NWS	Industrial	Chlor Alkali	OPU/ONPU	Eliminate air leaks
224	NWS	Industrial	Chlor Alkali	OPU/ONPU	Synchronous Belts for Air Compressors
225	NWS	Industrial	Chlor Alkali	OPU/ONPU	Replace compressed air use with mechanical or electrical
226	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium efficiency ASD compressor
227	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Compression ratio optimization (gas compressor)
228	NWS	Industrial	Chlor Alkali	OPU/ONPU	Retrofit internal parts of existing centrifugal compressors
229	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Gas compressor right sizing
230	NWS	Industrial	Chlor Alkali	OPU/ONPU	Volume pocket adjustments
231	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Minimum cylinder clearance
232	NWS	Industrial	Chlor Alkali	OPU/ONPU	Synchronous Belts for Air or Gas Compressors
233	NWS	Industrial	Chlor Alkali	OPU/ONPU	Air Source Heat Pump for Backup Generators
234	NWS	Industrial	Chlor Alkali	OPU/ONPU	High efficiency battery charger (for forklifts)
235	NWS	Industrial	Chlor Alkali	OPU/ONPU	Free cooling
236	NWS	Industrial	Chlor Alkali	OPU/ONPU	Radiant Heaters
237	NWS	Industrial	Chlor Alkali	OPU/ONPU	High efficiency non-packaged HVAC equipment
238	NWS	Industrial	Chlor Alkali	OPU/ONPU	Seasonal Temperature Settings Adjustments
239	NWS	Industrial	Chlor Alkali	OPU/ONPU	High-efficiency rooftop AC with an EER of 13.5
240	NWS	Industrial	Chlor Alkali	OPU/ONPU	Ground Source Heat Pump
241	NWS	Industrial	Chlor Alkali	OPU/ONPU	Ventilation Heat Recovery
242	NWS	Industrial	Chlor Alkali	OPU/ONPU	Automated Temperature Control
243	NWS	Industrial	Chlor Alkali	OPU/ONPU	Reduced Temperature Settings
244	NWS	Industrial	Chlor Alkali	OPU/ONPU	Destratification Fans
245	NWS	Industrial	Chlor Alkali	OPU/ONPU	Warehouse Loading Dock Seals
246	NWS	Industrial	Chlor Alkali	OPU/ONPU	Air Curtains
247	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Preventative Packaged HVAC Maintenance
248	NWS	Industrial	Chlor Alkali	OPU/ONPU	Heat Recovery from Processes to Heat Ventilation Make-up Air
249	NWS	Industrial	Chlor Alkali	FL	High efficiency ballasts for lighting
250	NWS	Industrial	Chlor Alkali	FL	High Efficiency Light fixtures
251	NWS	Industrial	Chlor Alkali	FL	Efficient Lighting Design
252	NWS	Industrial	Chlor Alkali	FL	SEM - Lighting controls: on/off timer settings
253	NWS	Industrial	Chlor Alkali	OPU/ONPU	Lighting controls: occupancy sensors
254	NWS	Industrial	Chlor Alkali	OPU/ONPU	SEM - Ventilation Optimization
255	NWS	Industrial	Chlor Alkali	OPU/ONPU	Premium efficiency ventilation control with VSD
256	NWS	Industrial	Chlor Alkali	OPU/ONPU	Demand-Controlled Ventilation
257	NWS	Industrial	Other	Motors - Other Applications	SEM - Operations and maintenance
258	NWS	Industrial	Other	Motors - Other Applications	SEM - Match Motor Size to Load
259	NWS	Industrial	Other	Motors - Other Applications	Motor Efficiency Upgrade
260	NWS	Industrial	Other	Motors - Other Applications	Variable Speed Drives
261	NWS	Industrial	Other	Pumps	Reduce Overall System Requirements
262	NWS	Industrial	Other	Pumps	SEM - Match Pump Size to Load

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
263	NWS	Industrial	Other	Pumps	Reduce or Control Pump Speed
264	NWS	Industrial	Other	Pumps	Improve Pump Components
265	NWS	Industrial	Other	Pumps	SEM - Operation and Maintenance
266	NWS	Industrial	Other	Compressed Air	Reduce Overall System Requirements
267	NWS	Industrial	Other	Compressed Air	SEM - Match Compressor Size to Load
268	NWS	Industrial	Other	Compressed Air	Compressor Control
269	NWS	Industrial	Other	Compressed Air	Improve Compressor Components
270	NWS	Industrial	Other	Compressed Air	SEM - Operation and Maintenance
271	NWS	Industrial	Other	Fans	Reduce Overall System Requirements
272	NWS	Industrial	Other	Fans	Reduce or Control Fan Speed
273	NWS	Industrial	Other	Fans	Improve Fan Components
274	NWS	Industrial	Other	Fans	SEM - Operation and Maintenance
275	WS	Industrial	Other	HVAC	SEM - Optimized Duct Design to Improve Efficiency
276	NWS	Industrial	Other	PH	Advanced Water Heater Controls
277	NWS	Industrial	Other	PH	Process Heat Recovery to Preheat Makeup Water
278	NWS	Industrial	Other	PH	Air Curtains (Oven)
279	NWS	Industrial	Other	PH	Insulation (Oven)
280	NWS	Industrial	Other	PH	SEM - Preventative Oven Maintenance
281	NWS	Industrial	Other	PH	Air Curtains (Dryer)
282	NWS	Industrial	Other	PH	Insulation (Dryer)
283	NWS	Industrial	Other	PH	SEM - Preventative Dryer Maintenance
284	NWS	Industrial	Other	PH	SEM - Optimized Distribution System
285	NWS	Industrial	Other	PCR	High Efficiency Chiller
286	NWS	Industrial	Other	PCR	Floating head pressure controls
287	NWS	Industrial	Other	PCR	Premium Efficiency Refrigeration Control System
288	NWS	Industrial	Other	PCR	Smart Defrost Controls
289	NWS	Industrial	Other	PCR	Doors, Covers and Curtains
290	NWS	Industrial	Other	PCR	SEM - Optimized chilled water temperature and/or optimized condenser temperature
291	NWS	Industrial	Other	PCR	SEM - Preventative Refrigeration/cooling System Maintenance
292	NWS	Industrial	Other	PCR	SEM - Optimized condenser pressure
293	NWS	Industrial	Other	PCR	Free-cooling
294	NWS	Industrial	Other	PCR	Improve Insulation of Refrigeration System
295	NWS	Industrial	Other	ONPU	HE Dry-Type Transformers
296	WS	Industrial	Other	HVAC	Air Source Heat Pump for Backup Generators
297	NWS	Industrial	Other	ONPU	High efficiency battery charger (for forklifts)
298	WS	Industrial	Other	HVAC	Radiant Heaters
299	WS	Industrial	Other	HVAC	High efficiency non-packaged HVAC equipment
300	WS	Industrial	Other	HVAC	Seasonal Temperature Settings Adjustments
301	WS	Industrial	Other	HVAC	High-efficiency rooftop AC with an EER of 13.5
302	WS	Industrial	Other	HVAC	Ground Source Heat Pump
303	WS	Industrial	Other	HVAC	Ventilation Heat Recovery
304	WS	Industrial	Other	HVAC	Automated Temperature Control
305	WS	Industrial	Other	HVAC	Reduced Temperature Settings

Industrial Measures

Measure ID	Weather Sensitive	Sector	Sub-Sector	End Use	Measure Name
306	WS	Industrial	Other	HVAC	Destratification Fans
307	WS	Industrial	Other	HVAC	Warehouse Loading Dock Seals
308	WS	Industrial	Other	HVAC	SEM - Preventative Packaged HVAC Maintenance
309	WS	Industrial	Other	HVAC	Heat Recovery from Processes to Heat Ventilation Make-up Air
310	NWS	Industrial	Other	FL	High efficiency ballasts for lighting
311	NWS	Industrial	Other	FL	High Efficiency Light fixtures
312	NWS	Industrial	Other	FL	Efficient Lighting Design
313	NWS	Industrial	Other	FL	SEM - Lighting controls: on/off timer settings
314	NWS	Industrial	Other	FL	Lighting controls: occupancy sensors
315	WS	Industrial	Other	HVAC	Ventilation Optimization
316	WS	Industrial	Other	HVAC	Premium efficiency ventilation control with VSD
317	WS	Industrial	Other	HVAC	Demand-Controlled Ventilation

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
1	Per kWh	RET	3	3	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
2	Per kWh	RET	15	15	\$0.0106	0.0120	0.0000014	0.0000	0.0000	0.0000000
3	Per kWh	RET	15	15	\$0.0168	0.0200	0.0000023	0.0000	0.0000	0.0000000
4	Per kWh	RET	15	15	\$0.0042	0.2000	0.0000228	0.0000	0.0000	0.0000000
5	Per kWh	RET	3	3	\$0.0028	0.1000	0.0000114	0.0000	0.0000	0.0000000
6	Per kWh	RET	15	15	\$0.0145	0.2000	0.0000228	0.0000	0.0000	0.0000000
7	Per kWh	RET	15	15	\$0.0140	0.3000	0.0000342	0.0000	0.0000	0.0000000
8	Per kWh	RET	15	15	\$0.0181	0.0500	0.0000057	0.0000	0.0000	0.0000000
9	Per kWh	RET	3	3	\$0.0013	0.0200	0.0000023	0.0000	0.0000	0.0000000
10	Per kWh	RET	15	15	\$0.0028	0.2000	0.0000228	0.0000	0.0000	0.0000000
11	Per kWh	RET	15	15	\$0.0187	0.0300	0.0000034	0.0000	0.0000	0.0000000
12	Per kWh	RET	15	15	\$0.0058	0.1000	0.0000114	0.0000	0.0000	0.0000000
13	Per kWh	RET	15	15	\$0.0241	0.0500	0.0000057	0.0000	0.0000	0.0000000
14	Per kWh	RET	3	3	\$0.0007	0.1000	0.0000114	0.0000	0.0000	0.0000000
15	Per kWh	RET	15	15	\$0.0056	0.1000	0.0000114	0.0000	0.0000	0.0000000
16	Per kWh	RET	15	15	\$0.0111	0.2000	0.0000228	0.0000	0.0000	0.0000000
17	Per kWh	RET	15	15	\$0.0216	0.0500	0.0000057	0.0000	0.0000	0.0000000
18	Per kWh	RET	3	3	\$0.0020	0.0200	0.0000023	0.0000	0.0000	0.0000000
19	Per kWh	RET	15	15	\$0.2604	0.6800	0.0000776	0.0000	0.0000	0.0000000
20	Per kWh	RET	15	15	\$0.0108	0.5250	0.0000599	0.0000	0.0000	0.0000000
21	Per kWh	RET	20	20	\$1.7241	0.1000	0.0000000	0.0000	0.0000	0.0000000
22	Per kWh	RET	20	20	\$1.7241	0.2500	0.0000285	0.0000	0.0000	0.0000000
23	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
24	Per kWh	RET	15	15	\$0.0404	0.1680	0.0000192	0.0000	0.0000	0.0000000
25	Per kWh	RET	20	20	\$0.5172	0.5100	0.0000582	0.0000	0.0000	0.0000000
26	Per kWh	RET	20	20	\$0.8836	0.2000	0.0000228	0.0000	0.0000	0.0000000
27	Per kWh	RET	25	25	\$0.0172	0.0700	0.0000080	0.0000	0.0000	0.0000000
28	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
29	Per kWh	RET	20	20	\$0.0237	0.0800	0.0000091	0.0000	0.0000	0.0000000
30	Per kWh	RET	10	10	\$0.0517	0.0500	0.0000057	0.0000	0.0000	0.0000000
31	Per kWh	RET	15	15	\$0.1034	0.0300	0.0000034	0.0000	0.0000	0.0000000
32	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
33	Per kWh	RET	15	15	\$3.3405	0.1500	0.0000171	0.0000	0.0000	0.0000000
34	Per kWh	RET	11	11	\$0.0075	0.2500	0.0000308	0.0000	0.0000	0.0000000
35	Per kWh	RET	16	16	\$0.0740	0.4500	0.0000555	0.0000	0.0000	0.0000000
36	Per kWh	RET	16	16	\$0.0215	0.1500	0.0000185	0.0000	0.0000	0.0000000
37	Per kWh	RET	8	8	\$0.0155	0.1500	0.0000185	0.0000	0.0000	0.0000000
38	Per kWh	RET	8	8	\$0.1900	0.1500	0.0000185	0.0000	0.0000	0.0000000
39	Per kWh	RET	15	15	\$0.0860	0.2000	0.0000228	0.0000	0.0000	0.0000000
40	Per kWh	RET	10	10	\$0.0298	0.3000	0.0000342	0.0000	0.0000	0.0000000
41	Per kWh	RET	15	15	\$0.1721	0.2000	0.0000228	0.0000	0.0000	0.0000000



Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
42	Per kWh	RET	15	15	\$0.0860	0.1000	0.0000114	0.0000	0.0000	0.0000000
43	Per kWh	RET	3	3	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
44	Per kWh	RET	15	15	\$0.0106	0.0120	0.0000014	0.0000	0.0000	0.0000000
45	Per kWh	RET	15	15	\$0.0168	0.0200	0.0000023	0.0000	0.0000	0.0000000
46	Per kWh	RET	15	15	\$0.0042	0.2000	0.0000228	0.0000	0.0000	0.0000000
47	Per kWh	RET	3	3	\$0.0028	0.1000	0.0000114	0.0000	0.0000	0.0000000
48	Per kWh	RET	15	15	\$0.0145	0.2000	0.0000228	0.0000	0.0000	0.0000000
49	Per kWh	RET	15	15	\$0.0140	0.3000	0.0000342	0.0000	0.0000	0.0000000
50	Per kWh	RET	15	15	\$0.0181	0.0500	0.0000057	0.0000	0.0000	0.0000000
51	Per kWh	RET	3	3	\$0.0013	0.0200	0.0000023	0.0000	0.0000	0.0000000
52	Per kWh	RET	15	15	\$0.0028	0.2000	0.0000228	0.0000	0.0000	0.0000000
53	Per kWh	RET	15	15	\$0.0187	0.0300	0.0000034	0.0000	0.0000	0.0000000
54	Per kWh	RET	15	15	\$0.0058	0.1000	0.0000114	0.0000	0.0000	0.0000000
55	Per kWh	RET	15	15	\$0.0241	0.0500	0.0000057	0.0000	0.0000	0.0000000
56	Per kWh	RET	3	3	\$0.0007	0.1000	0.0000114	0.0000	0.0000	0.0000000
57	Per kWh	RET	15	15	\$0.0056	0.1000	0.0000114	0.0000	0.0000	0.0000000
58	Per kWh	RET	15	15	\$0.0111	0.2000	0.0000228	0.0000	0.0000	0.0000000
59	Per kWh	RET	15	15	\$0.0216	0.0500	0.0000057	0.0000	0.0000	0.0000000
60	Per kWh	RET	3	3	\$0.0020	0.0200	0.0000023	0.0000	0.0000	0.0000000
61	Per kWh	RET	15	15	\$0.2604	0.6800	0.0000776	0.0000	0.0000	0.0000000
62	Per kWh	RET	15	15	\$0.0108	0.5250	0.0000599	0.0000	0.0000	0.0000000
63	Per kWh	RET	20	20	\$1.7241	0.1000	0.0000000	0.0000	0.0000	0.0000000
64	Per kWh	RET	20	20	\$1.7241	0.2500	0.0000285	0.0000	0.0000	0.0000000
65	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
66	Per kWh	RET	15	15	\$0.0404	0.1680	0.0000192	0.0000	0.0000	0.0000000
67	Per kWh	RET	20	20	\$0.5172	0.5100	0.0000582	0.0000	0.0000	0.0000000
68	Per kWh	RET	20	20	\$0.8836	0.2000	0.0000228	0.0000	0.0000	0.0000000
69	Per kWh	RET	25	25	\$0.0172	0.0700	0.0000080	0.0000	0.0000	0.0000000
70	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
71	Per kWh	RET	20	20	\$0.0237	0.0800	0.0000091	0.0000	0.0000	0.0000000
72	Per kWh	RET	10	10	\$0.0517	0.0500	0.0000057	0.0000	0.0000	0.0000000
73	Per kWh	RET	15	15	\$0.1034	0.0300	0.0000034	0.0000	0.0000	0.0000000
74	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
75	Per kWh	RET	15	15	\$3.3405	0.1500	0.0000171	0.0000	0.0000	0.0000000
76	Per kWh	RET	11	11	\$0.0075	0.2500	0.0000308	0.0000	0.0000	0.0000000
77	Per kWh	RET	16	16	\$0.0740	0.4500	0.0000555	0.0000	0.0000	0.0000000
78	Per kWh	RET	16	16	\$0.0215	0.1500	0.0000185	0.0000	0.0000	0.0000000
79	Per kWh	RET	8	8	\$0.0155	0.1500	0.0000185	0.0000	0.0000	0.0000000
80	Per kWh	RET	8	8	\$0.1900	0.1500	0.0000185	0.0000	0.0000	0.0000000
81	Per kWh	RET	15	15	\$0.0860	0.2000	0.0000228	0.0000	0.0000	0.0000000
82	Per kWh	RET	10	10	\$0.0298	0.3000	0.0000342	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
83	Per kWh	RET	15	15	\$0.1721	0.2000	0.0000228	0.0000	0.0000	0.0000000
84	Per kWh	RET	15	15	\$0.0860	0.1000	0.0000114	0.0000	0.0000	0.0000000
85	Per kWh	RET	15	15	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
86	Per kWh	RET	10	10	\$0.0000	0.0800	0.0000091	0.0000	0.0000	0.0000000
87	Per kWh	RET	30	30	\$0.0000	0.0100	0.0000011	0.0000	0.0000	0.0000000
88	Per kWh	RET	20	20	\$0.0029	0.0300	0.0000034	0.0000	0.0000	0.0000000
89	Per kWh	RET	20	20	\$0.0243	0.0600	0.0000068	0.0000	0.0000	0.0000000
90	Per kWh	RET	20	20	\$0.0313	0.1500	0.0000171	0.0000	0.0000	0.0000000
91	Per kWh	RET	15	15	\$0.0167	0.0500	0.0000057	0.0000	0.0000	0.0000000
92	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
93	Per kWh	RET	20	20	\$0.0031	0.1500	0.0000171	0.0000	0.0000	0.0000000
94	Per kWh	RET	15	15	\$0.0017	0.0500	0.0000057	0.0000	0.0000	0.0000000
95	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
96	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
97	Per kWh	RET	15	15	\$0.0017	0.0500	0.0000057	0.0000	0.0000	0.0000000
98	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
99	Per kWh	RET	15	15	\$0.0003	0.0500	0.0000057	0.0000	0.0000	0.0000000
100	Per kWh	RET	20	20	\$0.1427	0.1900	0.0000217	0.0000	0.0000	0.0000000
101	Per kWh	RET	25	25	\$0.0168	0.0300	0.0000034	0.0000	0.0000	0.0000000
102	Per kWh	RET	15	15	\$0.0023	0.0650	0.0000074	0.0000	0.0000	0.0000000
103	Per kWh	RET	15	15	\$0.1960	0.0900	0.0000103	0.0000	0.0000	0.0000000
104	Per kWh	RET	16	16	\$0.0013	0.1000	0.0000114	0.0000	0.0000	0.0000000
105	Per kWh	RET	5	5	\$0.0063	0.0700	0.0000080	0.0000	0.0000	0.0000000
106	Per kWh	RET	3	3	\$0.0000	0.0205	0.0000023	0.0000	0.0000	0.0000000
107	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
108	Per kWh	RET	3	3	\$0.0000	0.0600	0.0000068	0.0000	0.0000	0.0000000
109	Per kWh	RET	15	15	\$0.0503	0.3000	0.0000342	0.0000	0.0000	0.0000000
110	Per kWh	RET	12	12	\$0.0226	0.2100	0.0000240	0.0000	0.0000	0.0000000
111	Per kWh	RET	10	10	\$0.0369	0.0500	0.0000057	0.0000	0.0000	0.0000000
112	Per kWh	RET	15	15	\$0.0251	0.0440	0.0000050	0.0000	0.0000	0.0000000
113	Per kWh	RET	20	20	\$0.0147	0.1500	0.0000171	0.0000	0.0000	0.0000000
114	Per kWh	RET	15	15	\$0.0293	0.1350	0.0000154	0.0000	0.0000	0.0000000
115	Per kWh	RET	15	15	\$0.0314	0.2000	0.0000228	0.0000	0.0000	0.0000000
116	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
117	Per kWh	RET	15	15	\$0.0281	0.0200	0.0000023	0.0000	0.0000	0.0000000
118	Per kWh	RET	3	3	\$0.0084	0.1500	0.0000171	0.0000	0.0000	0.0000000
119	Per kWh	RET	15	15	\$0.1290	0.1000	0.0000114	0.0000	0.0000	0.0000000
120	Per kWh	RET	10	10	\$0.0447	0.2000	0.0000228	0.0000	0.0000	0.0000000
121	Per kWh	RET	10	10	\$0.0042	0.0200	0.0000023	0.0000	0.0000	0.0000000
122	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
123	Per kWh	RET	15	15	\$0.0314	0.2000	0.0000228	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
124	Per kWh	RET	15	15	\$0.0251	0.0200	0.0000023	0.0000	0.0000	0.0000000
125	Per kWh	RET	15	15	\$0.0159	0.0200	0.0000023	0.0000	0.0000	0.0000000
126	Per kWh	RET	15	15	\$0.0010	0.0500	0.0000057	0.0000	0.0000	0.0000000
127	Per kWh	RET	10	10	\$0.0021	0.0200	0.0000023	0.0000	0.0000	0.0000000
128	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
129	Per kWh	RET	10	10	\$0.1211	0.1250	0.0000143	0.0000	0.0000	0.0000000
130	Per kWh	RET	10	10	\$0.0084	0.1000	0.0000114	0.0000	0.0000	0.0000000
131	Per kWh	RET	1	1	\$0.0000	0.2000	0.0000228	0.0000	0.0000	0.0000000
132	Per kWh	RET	20	20	\$0.0583	0.1000	0.0000114	0.0000	0.0000	0.0000000
133	Per kWh	RET	10	10	\$0.0302	0.1200	0.0000137	0.0000	0.0000	0.0000000
134	Per kWh	RET	20	20	\$0.0007	0.0400	0.0000046	0.0000	0.0000	0.0000000
135	Per kWh	RET	20	20	\$0.0310	0.0840	0.0000096	0.0000	0.0000	0.0000000
136	Per kWh	RET	5	5	\$0.0126	0.1000	0.0000114	0.0000	0.0000	0.0000000
137	Per kWh	RET	3	3	\$0.0070	0.1500	0.0000171	0.0000	0.0000	0.0000000
138	Per kWh	RET	10	10	\$0.0021	0.0200	0.0000023	0.0000	0.0000	0.0000000
139	Per kWh	RET	20	20	\$0.0335	0.5600	0.0000639	0.0000	0.0000	0.0000000
140	Per kWh	RET	10	10	\$0.0732	0.1250	0.0000143	0.0000	0.0000	0.0000000
141	Per kWh	RET	20	20	\$0.0014	0.1500	0.0000171	0.0000	0.0000	0.0000000
142	Per kWh	RET	20	20	\$0.0153	0.0500	0.0000057	0.0000	0.0000	0.0000000
143	Per kWh	RET	10	10	\$0.0568	0.1000	0.0000114	0.0000	0.0000	0.0000000
144	Per kWh	RET	20	20	\$0.0000	0.1000	0.0000114	0.0000	0.0000	0.0000000
145	Per kWh	RET	5	5	\$0.0025	0.1000	0.0000114	0.0000	0.0000	0.0000000
146	Per kWh	RET	10	10	\$0.0012	0.0200	0.0000023	0.0000	0.0000	0.0000000
147	Per kWh	RET	15	15	\$0.3904	0.6800	0.0000776	0.0000	0.0000	0.0000000
148	Per kWh	RET	20	20	\$0.0216	0.1000	0.0000114	0.0000	0.0000	0.0000000
149	Per kWh	RET	15	15	\$0.0162	0.5250	0.0000599	0.0000	0.0000	0.0000000
150	Per kWh	RET	20	20	\$2.5844	0.1000	0.0000000	0.0000	0.0000	0.0000000
151	Per kWh	RET	20	20	\$2.5844	0.2500	0.0000285	0.0000	0.0000	0.0000000
152	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
153	Per kWh	RET	15	15	\$0.0606	0.1680	0.0000192	0.0000	0.0000	0.0000000
154	Per kWh	RET	20	20	\$0.7753	0.5100	0.0000582	0.0000	0.0000	0.0000000
155	Per kWh	RET	20	20	\$1.3245	0.2000	0.0000228	0.0000	0.0000	0.0000000
156	Per kWh	RET	25	25	\$0.0258	0.0700	0.0000080	0.0000	0.0000	0.0000000
157	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
158	Per kWh	RET	20	20	\$0.0355	0.0800	0.0000091	0.0000	0.0000	0.0000000
159	Per kWh	RET	10	10	\$0.0775	0.0500	0.0000057	0.0000	0.0000	0.0000000
160	Per kWh	RET	15	15	\$0.1551	0.0300	0.0000034	0.0000	0.0000	0.0000000
161	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
162	Per kWh	RET	15	15	\$5.0073	0.1500	0.0000171	0.0000	0.0000	0.0000000
163	Per kWh	RET	11	11	\$0.0112	0.2500	0.0000308	0.0000	0.0000	0.0000000
164	Per kWh	RET	16	16	\$0.1109	0.4500	0.0000555	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
165	Per kWh	RET	16	16	\$0.0322	0.1500	0.0000185	0.0000	0.0000	0.0000000
166	Per kWh	RET	8	8	\$0.0232	0.1500	0.0000185	0.0000	0.0000	0.0000000
167	Per kWh	RET	8	8	\$0.2848	0.1500	0.0000185	0.0000	0.0000	0.0000000
168	Per kWh	RET	15	15	\$0.1290	0.2000	0.0000228	0.0000	0.0000	0.0000000
169	Per kWh	RET	10	10	\$0.0447	0.3000	0.0000342	0.0000	0.0000	0.0000000
170	Per kWh	RET	15	15	\$0.2580	0.2000	0.0000228	0.0000	0.0000	0.0000000
171	Per kWh	RET	15	15	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
172	Per kWh	RET	10	10	\$0.0000	0.0800	0.0000091	0.0000	0.0000	0.0000000
173	Per kWh	RET	30	30	\$0.0000	0.0100	0.0000011	0.0000	0.0000	0.0000000
174	Per kWh	RET	20	20	\$0.0019	0.0300	0.0000034	0.0000	0.0000	0.0000000
175	Per kWh	RET	20	20	\$0.0162	0.0600	0.0000068	0.0000	0.0000	0.0000000
176	Per kWh	RET	20	20	\$0.0209	0.1500	0.0000171	0.0000	0.0000	0.0000000
177	Per kWh	RET	15	15	\$0.0111	0.0500	0.0000057	0.0000	0.0000	0.0000000
178	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
179	Per kWh	RET	20	20	\$0.0021	0.1500	0.0000171	0.0000	0.0000	0.0000000
180	Per kWh	RET	15	15	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
181	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
182	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
183	Per kWh	RET	15	15	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
184	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
185	Per kWh	RET	15	15	\$0.0002	0.0500	0.0000057	0.0000	0.0000	0.0000000
186	Per kWh	RET	20	20	\$0.0952	0.1900	0.0000217	0.0000	0.0000	0.0000000
187	Per kWh	RET	25	25	\$0.0112	0.0300	0.0000034	0.0000	0.0000	0.0000000
188	Per kWh	RET	15	15	\$0.0016	0.0650	0.0000074	0.0000	0.0000	0.0000000
189	Per kWh	RET	15	15	\$0.1307	0.0900	0.0000103	0.0000	0.0000	0.0000000
190	Per kWh	RET	16	16	\$0.0009	0.1000	0.0000114	0.0000	0.0000	0.0000000
191	Per kWh	RET	5	5	\$0.0042	0.0700	0.0000080	0.0000	0.0000	0.0000000
192	Per kWh	RET	3	3	\$0.0000	0.0205	0.0000023	0.0000	0.0000	0.0000000
193	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
194	Per kWh	RET	3	3	\$0.0000	0.0600	0.0000068	0.0000	0.0000	0.0000000
195	Per kWh	RET	15	15	\$0.0335	0.3000	0.0000342	0.0000	0.0000	0.0000000
196	Per kWh	RET	12	12	\$0.0151	0.2100	0.0000240	0.0000	0.0000	0.0000000
197	Per kWh	RET	10	10	\$0.0246	0.0500	0.0000057	0.0000	0.0000	0.0000000
198	Per kWh	RET	15	15	\$0.0168	0.0440	0.0000050	0.0000	0.0000	0.0000000
199	Per kWh	RET	20	20	\$0.0098	0.1500	0.0000171	0.0000	0.0000	0.0000000
200	Per kWh	RET	15	15	\$0.0196	0.1350	0.0000154	0.0000	0.0000	0.0000000
201	Per kWh	RET	15	15	\$0.0210	0.2000	0.0000228	0.0000	0.0000	0.0000000
202	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
203	Per kWh	RET	15	15	\$0.0188	0.0200	0.0000023	0.0000	0.0000	0.0000000
204	Per kWh	RET	3	3	\$0.0056	0.1500	0.0000171	0.0000	0.0000	0.0000000
205	Per kWh	RET	15	15	\$0.0860	0.1000	0.0000114	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
206	Per kWh	RET	10	10	\$0.0298	0.2000	0.0000228	0.0000	0.0000	0.0000000
207	Per kWh	RET	10	10	\$0.0028	0.0200	0.0000023	0.0000	0.0000	0.0000000
208	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
209	Per kWh	RET	15	15	\$0.0210	0.2000	0.0000228	0.0000	0.0000	0.0000000
210	Per kWh	RET	15	15	\$0.0168	0.0200	0.0000023	0.0000	0.0000	0.0000000
211	Per kWh	RET	15	15	\$0.0106	0.0200	0.0000023	0.0000	0.0000	0.0000000
212	Per kWh	RET	15	15	\$0.0007	0.0500	0.0000057	0.0000	0.0000	0.0000000
213	Per kWh	RET	10	10	\$0.0014	0.0200	0.0000023	0.0000	0.0000	0.0000000
214	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
215	Per kWh	RET	10	10	\$0.0808	0.1250	0.0000143	0.0000	0.0000	0.0000000
216	Per kWh	RET	10	10	\$0.0056	0.1000	0.0000114	0.0000	0.0000	0.0000000
217	Per kWh	RET	1	1	\$0.0000	0.2000	0.0000228	0.0000	0.0000	0.0000000
218	Per kWh	RET	20	20	\$0.0389	0.1000	0.0000114	0.0000	0.0000	0.0000000
219	Per kWh	RET	10	10	\$0.0201	0.1200	0.0000137	0.0000	0.0000	0.0000000
220	Per kWh	RET	20	20	\$0.0005	0.0400	0.0000046	0.0000	0.0000	0.0000000
221	Per kWh	RET	20	20	\$0.0207	0.0840	0.0000096	0.0000	0.0000	0.0000000
222	Per kWh	RET	5	5	\$0.0084	0.1000	0.0000114	0.0000	0.0000	0.0000000
223	Per kWh	RET	3	3	\$0.0046	0.1500	0.0000171	0.0000	0.0000	0.0000000
224	Per kWh	RET	10	10	\$0.0014	0.0200	0.0000023	0.0000	0.0000	0.0000000
225	Per kWh	RET	20	20	\$0.0224	0.5600	0.0000639	0.0000	0.0000	0.0000000
226	Per kWh	RET	10	10	\$0.0488	0.1250	0.0000143	0.0000	0.0000	0.0000000
227	Per kWh	RET	20	20	\$0.0009	0.1500	0.0000171	0.0000	0.0000	0.0000000
228	Per kWh	RET	20	20	\$0.0102	0.0500	0.0000057	0.0000	0.0000	0.0000000
229	Per kWh	RET	10	10	\$0.0379	0.1000	0.0000114	0.0000	0.0000	0.0000000
230	Per kWh	RET	20	20	\$0.0000	0.1000	0.0000114	0.0000	0.0000	0.0000000
231	Per kWh	RET	5	5	\$0.0017	0.1000	0.0000114	0.0000	0.0000	0.0000000
232	Per kWh	RET	10	10	\$0.0008	0.0200	0.0000023	0.0000	0.0000	0.0000000
233	Per kWh	RET	15	15	\$0.2604	0.6800	0.0000776	0.0000	0.0000	0.0000000
234	Per kWh	RET	20	20	\$0.0144	0.1000	0.0000114	0.0000	0.0000	0.0000000
235	Per kWh	RET	15	15	\$0.0108	0.5250	0.0000599	0.0000	0.0000	0.0000000
236	Per kWh	RET	20	20	\$1.7241	0.1000	0.0000000	0.0000	0.0000	0.0000000
237	Per kWh	RET	20	20	\$1.7241	0.2500	0.0000285	0.0000	0.0000	0.0000000
238	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
239	Per kWh	RET	15	15	\$0.0404	0.1680	0.0000192	0.0000	0.0000	0.0000000
240	Per kWh	RET	20	20	\$0.5172	0.4760	0.0000543	0.0000	0.0000	0.0000000
241	Per kWh	RET	20	20	\$0.8836	0.2000	0.0000228	0.0000	0.0000	0.0000000
242	Per kWh	RET	25	25	\$0.0172	0.0700	0.0000080	0.0000	0.0000	0.0000000
243	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
244	Per kWh	RET	20	20	\$0.0237	0.0800	0.0000091	0.0000	0.0000	0.0000000
245	Per kWh	RET	10	10	\$0.0517	0.0500	0.0000057	0.0000	0.0000	0.0000000
246	Per kWh	RET	15	15	\$0.1034	0.0300	0.0000034	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
247	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
248	Per kWh	RET	15	15	\$3.3405	0.1500	0.0000171	0.0000	0.0000	0.0000000
249	Per kWh	RET	11	11	\$0.0075	0.2500	0.0000308	0.0000	0.0000	0.0000000
250	Per kWh	RET	16	16	\$0.0740	0.4500	0.0000555	0.0000	0.0000	0.0000000
251	Per kWh	RET	16	16	\$0.0215	0.1500	0.0000185	0.0000	0.0000	0.0000000
252	Per kWh	RET	8	8	\$0.0155	0.1500	0.0000185	0.0000	0.0000	0.0000000
253	Per kWh	RET	8	8	\$0.1900	0.1500	0.0000171	0.0000	0.0000	0.0000000
254	Per kWh	RET	15	15	\$0.0860	0.2000	0.0000228	0.0000	0.0000	0.0000000
255	Per kWh	RET	10	10	\$0.0298	0.3000	0.0000342	0.0000	0.0000	0.0000000
256	Per kWh	RET	15	15	\$0.1721	0.2000	0.0000228	0.0000	0.0000	0.0000000
257	Per kWh	RET	3	3	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
258	Per kWh	RET	15	15	\$0.0106	0.0120	0.0000014	0.0000	0.0000	0.0000000
259	Per kWh	RET	15	15	\$0.0168	0.0200	0.0000023	0.0000	0.0000	0.0000000
260	Per kWh	RET	15	15	\$0.0042	0.2000	0.0000228	0.0000	0.0000	0.0000000
261	Per kWh	RET	3	3	\$0.0028	0.1000	0.0000114	0.0000	0.0000	0.0000000
262	Per kWh	RET	15	15	\$0.0145	0.2000	0.0000228	0.0000	0.0000	0.0000000
263	Per kWh	RET	15	15	\$0.0140	0.3000	0.0000342	0.0000	0.0000	0.0000000
264	Per kWh	RET	15	15	\$0.0181	0.0500	0.0000057	0.0000	0.0000	0.0000000
265	Per kWh	RET	3	3	\$0.0013	0.0200	0.0000023	0.0000	0.0000	0.0000000
266	Per kWh	RET	15	15	\$0.0028	0.2000	0.0000228	0.0000	0.0000	0.0000000
267	Per kWh	RET	15	15	\$0.0187	0.0300	0.0000034	0.0000	0.0000	0.0000000
268	Per kWh	RET	15	15	\$0.0058	0.1000	0.0000114	0.0000	0.0000	0.0000000
269	Per kWh	RET	15	15	\$0.0241	0.0500	0.0000057	0.0000	0.0000	0.0000000
270	Per kWh	RET	3	3	\$0.0007	0.1000	0.0000114	0.0000	0.0000	0.0000000
271	Per kWh	RET	15	15	\$0.0056	0.1000	0.0000114	0.0000	0.0000	0.0000000
272	Per kWh	RET	15	15	\$0.0111	0.2000	0.0000228	0.0000	0.0000	0.0000000
273	Per kWh	RET	15	15	\$0.0216	0.0500	0.0000057	0.0000	0.0000	0.0000000
274	Per kWh	RET	3	3	\$0.0020	0.0200	0.0000023	0.0000	0.0000	0.0000000
275	Per kWh	RET	15	15	\$0.0860	0.1000	0.0000114	0.0000	0.0000	0.0000000
276	Per kWh	RET	20	20	\$0.0019	0.0300	0.0000034	0.0000	0.0000	0.0000000
277	Per kWh	RET	20	20	\$0.0162	0.0600	0.0000068	0.0000	0.0000	0.0000000
278	Per kWh	RET	20	20	\$0.0209	0.1500	0.0000171	0.0000	0.0000	0.0000000
279	Per kWh	RET	15	15	\$0.0111	0.0500	0.0000057	0.0000	0.0000	0.0000000
280	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
281	Per kWh	RET	20	20	\$0.0021	0.1500	0.0000171	0.0000	0.0000	0.0000000
282	Per kWh	RET	15	15	\$0.0011	0.0500	0.0000057	0.0000	0.0000	0.0000000
283	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
284	Per kWh	RET	25	25	\$0.0112	0.0300	0.0000034	0.0000	0.0000	0.0000000
285	Per kWh	RET	20	20	\$0.0952	0.1900	0.0000217	0.0000	0.0000	0.0000000
286	Per kWh	RET	15	15	\$0.0016	0.0650	0.0000074	0.0000	0.0000	0.0000000
287	Per kWh	RET	15	15	\$0.1307	0.0900	0.0000103	0.0000	0.0000	0.0000000

Industrial Measures

Measure ID	Measure Unit Name	Retrofit (RET), Replace-on-Burnout (ROB), or New Construction (NEW)	Baseline Unit Lifetime (Years)	Efficient Unit Lifetime (Years)	Total Incremental Cost	Annual kWh Savings	Annual kW Coincident Peak Savings	Annual Gas Savings (Therms)	Annual kWh Increases	Annual kW Coincident Peak Increases
288	Per kWh	RET	16	16	\$0.0009	0.1000	0.0000114	0.0000	0.0000	0.0000000
289	Per kWh	RET	5	5	\$0.0042	0.0700	0.0000080	0.0000	0.0000	0.0000000
290	Per kWh	RET	3	3	\$0.0000	0.0205	0.0000023	0.0000	0.0000	0.0000000
291	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
292	Per kWh	RET	3	3	\$0.0000	0.0600	0.0000068	0.0000	0.0000	0.0000000
293	Per kWh	RET	12	12	\$0.0151	0.3000	0.0000342	0.0000	0.0000	0.0000000
294	Per kWh	RET	10	10	\$0.0246	0.0500	0.0000057	0.0000	0.0000	0.0000000
295	Per kWh	RET	30	30	\$0.0000	0.0100	0.0000011	0.0000	0.0000	0.0000000
296	Per kWh	RET	15	15	\$0.2604	0.6800	0.0000776	0.0000	0.0000	0.0000000
297	Per kWh	RET	20	20	\$0.0144	0.1000	0.0000114	0.0000	0.0000	0.0000000
298	Per kWh	RET	20	20	\$1.7241	0.1000	0.0000000	0.0000	0.0000	0.0000000
299	Per kWh	RET	20	20	\$1.7241	0.2500	0.0000285	0.0000	0.0000	0.0000000
300	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
301	Per kWh	RET	15	15	\$0.0404	0.1680	0.0000192	0.0000	0.0000	0.0000000
302	Per kWh	RET	20	20	\$0.5172	0.5100	0.0000582	0.0000	0.0000	0.0000000
303	Per kWh	RET	20	20	\$0.8836	0.2000	0.0000228	0.0000	0.0000	0.0000000
304	Per kWh	RET	25	25	\$0.0172	0.0700	0.0000080	0.0000	0.0000	0.0000000
305	Per kWh	RET	3	3	\$0.0000	0.0700	0.0000080	0.0000	0.0000	0.0000000
306	Per kWh	RET	20	20	\$0.0237	0.0800	0.0000091	0.0000	0.0000	0.0000000
307	Per kWh	RET	10	10	\$0.0517	0.0500	0.0000057	0.0000	0.0000	0.0000000
308	Per kWh	RET	3	3	\$0.0000	0.0500	0.0000057	0.0000	0.0000	0.0000000
309	Per kWh	RET	15	15	\$3.3405	0.1500	0.0000171	0.0000	0.0000	0.0000000
310	Per kWh	RET	11	11	\$0.0075	0.2500	0.0000308	0.0000	0.0000	0.0000000
311	Per kWh	RET	16	16	\$0.0740	0.4500	0.0000555	0.0000	0.0000	0.0000000
312	Per kWh	RET	16	16	\$0.0215	0.1500	0.0000185	0.0000	0.0000	0.0000000
313	Per kWh	RET	8	8	\$0.0155	0.1500	0.0000185	0.0000	0.0000	0.0000000
314	Per kWh	RET	8	8	\$0.1900	0.1500	0.0000185	0.0000	0.0000	0.0000000
315	Per kWh	RET	15	15	\$0.0860	0.2000	0.0000228	0.0000	0.0000	0.0000000
316	Per kWh	RET	10	10	\$0.0298	0.3000	0.0000342	0.0000	0.0000	0.0000000
317	Per kWh	RET	15	15	\$0.1721	0.2000	0.0000228	0.0000	0.0000	0.0000000

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
1	5.71	1	7,725,775,885	1	12.8%	5.0%	100.0%	100.0%	37%	100.0%	18,175,625
2	0.61	0	7,725,775,885	1	12.8%	20.0%	100.0%	100.0%	20%	100.0%	39,298,648
3	0.64	0	7,725,775,885	1	12.8%	20.0%	100.0%	100.0%	91%	100.0%	180,773,782
4	25.53	1	7,725,775,885	1	12.8%	35.0%	100.0%	100.0%	9%	100.0%	30,947,685
5	4.50	1	7,725,775,885	1	48.0%	50.0%	100.0%	100.0%	81%	100.0%	1,510,541,789
6	7.36	1	7,725,775,885	1	48.0%	20.0%	100.0%	100.0%	20%	100.0%	147,369,931
7	11.49	1	7,725,775,885	1	48.0%	35.0%	100.0%	100.0%	93%	100.0%	1,212,117,680
8	1.48	1	7,725,775,885	1	48.0%	10.0%	100.0%	100.0%	4%	100.0%	14,736,993
9	1.96	1	7,725,775,885	1	48.0%	5.0%	100.0%	100.0%	37%	100.0%	68,158,593
10	37.91	1	7,725,775,885	1	12.0%	30.0%	100.0%	100.0%	84%	100.0%	234,870,827
11	0.86	0	7,725,775,885	1	12.0%	10.0%	100.0%	100.0%	78%	100.0%	72,763,903
12	9.22	1	7,725,775,885	1	12.0%	25.0%	100.0%	100.0%	72%	100.0%	165,791,172
13	1.11	1	7,725,775,885	1	12.0%	15.0%	100.0%	100.0%	91%	100.0%	127,106,565
14	18.75	1	7,725,775,885	1	12.0%	75.0%	100.0%	100.0%	37%	100.0%	255,594,723
15	9.57	1	7,725,775,885	1	7.0%	15.0%	100.0%	100.0%	75%	100.0%	60,444,698
16	9.67	1	7,725,775,885	1	7.0%	10.0%	100.0%	100.0%	89%	100.0%	48,355,758
17	1.24	1	7,725,775,885	1	7.0%	20.0%	100.0%	100.0%	35%	100.0%	37,610,034
18	1.25	1	7,725,775,885	1	7.0%	50.0%	100.0%	100.0%	37%	100.0%	99,397,948
19	1.40	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	100%	100.0%	205,044,289
20	26.06	1	7,725,775,885	1	3.3%	10.0%	100.0%	100.0%	79%	100.0%	20,307,381
21	0.03	0	7,725,775,885	1	3.3%	30.0%	100.0%	100.0%	78%	100.0%	59,776,273
22	0.10	0	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	70%	100.0%	142,597,287
23	87991.21	1	7,725,775,885	1	3.3%	100.0%	100.0%	100.0%	42%	100.0%	107,584,560
24	2.22	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	70%	100.0%	142,597,287
25	0.68	0	7,725,775,885	1	3.3%	5.0%	100.0%	100.0%	88%	100.0%	11,299,562
26	0.16	0	7,725,775,885	1	3.3%	40.0%	100.0%	100.0%	91%	100.0%	93,452,150
27	3.35	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	46%	100.0%	93,706,788
28	87991.21	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	42%	100.0%	86,067,648
29	2.32	1	7,725,775,885	1	3.3%	40.0%	100.0%	100.0%	93%	100.0%	95,743,893
30	0.36	0	7,725,775,885	1	3.3%	30.0%	100.0%	100.0%	65%	100.0%	50,036,369
31	0.16	0	7,725,775,885	1	3.3%	30.0%	100.0%	100.0%	49%	100.0%	38,004,723
32	62850.88	1	7,725,775,885	1	3.3%	100.0%	100.0%	100.0%	36%	100.0%	92,306,279
33	0.02	0	7,725,775,885	1	3.3%	60.0%	100.0%	100.0%	69%	100.0%	105,802,094



Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
34	13.75	1	7,725,775,885	1	2.4%	100.0%	100.0%	100.0%	85%	100.0%	155,965,782
35	3.49	1	7,725,775,885	1	2.4%	100.0%	100.0%	100.0%	74%	100.0%	134,594,378
36	4.01	1	7,725,775,885	1	2.4%	100.0%	100.0%	100.0%	100%	100.0%	183,075,258
37	3.02	1	7,725,775,885	1	2.4%	80.0%	100.0%	100.0%	100%	100.0%	146,460,206
38	0.25	0	7,725,775,885	1	2.4%	80.0%	100.0%	100.0%	99%	100.0%	145,361,755
39	1.24	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	88%	100.0%	180,792,989
40	3.76	1	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	88%	100.0%	180,792,989
41	0.62	0	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	99%	100.0%	201,968,625
42	0.62	0	7,725,775,885	1	3.3%	80.0%	100.0%	100.0%	100%	100.0%	205,044,289
43	5.71	1	2,548,346,542	1	12.8%	5.0%	100.0%	100.0%	37%	100.0%	5,995,228
44	0.61	0	2,548,346,542	1	12.8%	20.0%	100.0%	100.0%	20%	100.0%	12,962,656
45	0.64	0	2,548,346,542	1	12.8%	20.0%	100.0%	100.0%	91%	100.0%	59,628,217
46	25.53	1	2,548,346,542	1	12.8%	35.0%	100.0%	100.0%	9%	100.0%	10,208,092
47	4.50	1	2,548,346,542	1	48.0%	50.0%	100.0%	100.0%	81%	100.0%	498,252,085
48	7.36	1	2,548,346,542	1	48.0%	20.0%	100.0%	100.0%	20%	100.0%	48,609,960
49	11.49	1	2,548,346,542	1	48.0%	35.0%	100.0%	100.0%	93%	100.0%	399,816,917
50	1.48	1	2,548,346,542	1	48.0%	10.0%	100.0%	100.0%	4%	100.0%	4,860,996
51	1.96	1	2,548,346,542	1	48.0%	5.0%	100.0%	100.0%	37%	100.0%	22,482,106
52	37.91	1	2,548,346,542	1	12.0%	30.0%	100.0%	100.0%	84%	100.0%	77,472,123
53	0.86	0	2,548,346,542	1	12.0%	10.0%	100.0%	100.0%	78%	100.0%	24,001,168
54	9.22	1	2,548,346,542	1	12.0%	25.0%	100.0%	100.0%	72%	100.0%	54,686,204
55	1.11	1	2,548,346,542	1	12.0%	15.0%	100.0%	100.0%	91%	100.0%	41,926,090
56	18.75	1	2,548,346,542	1	12.0%	75.0%	100.0%	100.0%	37%	100.0%	84,307,899
57	9.57	1	2,548,346,542	1	7.0%	15.0%	100.0%	100.0%	75%	100.0%	19,937,679
58	9.67	1	2,548,346,542	1	7.0%	10.0%	100.0%	100.0%	89%	100.0%	15,950,143
59	1.24	1	2,548,346,542	1	7.0%	20.0%	100.0%	100.0%	35%	100.0%	12,405,667
60	1.25	1	2,548,346,542	1	7.0%	50.0%	100.0%	100.0%	37%	100.0%	32,786,405
61	1.40	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	96%	100.0%	64,674,092
62	26.06	1	2,548,346,542	1	3.3%	10.0%	100.0%	100.0%	79%	100.0%	6,698,388
63	0.03	0	2,548,346,542	1	3.3%	30.0%	100.0%	100.0%	78%	100.0%	19,717,199
64	0.10	0	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	70%	100.0%	47,035,703
65	87991.25	1	2,548,346,542	1	3.3%	100.0%	100.0%	100.0%	42%	100.0%	35,486,758
66	2.22	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	70%	100.0%	47,035,703

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
67	0.68	0	2,548,346,542	1	3.3%	5.0%	100.0%	100.0%	88%	100.0%	3,727,160
68	0.16	0	2,548,346,542	1	3.3%	40.0%	100.0%	100.0%	91%	100.0%	30,825,184
69	3.35	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	46%	100.0%	30,909,176
70	87991.26	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	42%	100.0%	28,389,407
71	2.32	1	2,548,346,542	1	3.3%	40.0%	100.0%	100.0%	93%	100.0%	31,581,115
72	0.36	0	2,548,346,542	1	3.3%	30.0%	100.0%	100.0%	65%	100.0%	16,504,492
73	0.16	0	2,548,346,542	1	3.3%	30.0%	100.0%	100.0%	49%	100.0%	12,535,855
74	62850.92	1	2,548,346,542	1	3.3%	100.0%	100.0%	100.0%	36%	100.0%	30,447,219
75	0.02	0	2,548,346,542	1	3.3%	60.0%	100.0%	100.0%	69%	100.0%	34,898,812
76	13.75	1	2,548,346,542	1	2.4%	100.0%	100.0%	100.0%	85%	100.0%	51,445,301
77	3.49	1	2,548,346,542	1	2.4%	100.0%	100.0%	100.0%	74%	100.0%	44,395,944
78	4.01	1	2,548,346,542	1	2.4%	100.0%	100.0%	100.0%	96%	100.0%	57,744,725
79	3.02	1	2,548,346,542	1	2.4%	80.0%	100.0%	100.0%	99%	100.0%	47,995,616
80	0.25	0	2,548,346,542	1	2.4%	80.0%	100.0%	100.0%	99%	100.0%	47,635,649
81	1.24	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	88%	100.0%	59,634,552
82	3.76	1	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	88%	100.0%	59,634,552
83	0.62	0	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	98%	100.0%	66,185,954
84	0.62	0	2,548,346,542	1	3.3%	80.0%	100.0%	100.0%	99%	100.0%	67,193,862
85	267474.57	1	6,391,505,278	1	52.3%	100.0%	100.0%	100.0%	86%	100.0%	2,871,045,162
86	299012.08	1	6,391,505,278	1	52.3%	83.0%	100.0%	100.0%	95%	100.0%	2,630,906,298
87	94977.29	1	6,391,505,278	1	2.1%	100.0%	100.0%	100.0%	99%	100.0%	136,341,258
88	7.13	1	6,391,505,278	1	11.4%	90.0%	100.0%	100.0%	76%	100.0%	501,766,563
89	1.70	1	6,391,505,278	1	11.4%	70.0%	100.0%	100.0%	69%	100.0%	352,126,445
90	3.29	1	6,391,505,278	1	11.4%	9.0%	100.0%	100.0%	78%	100.0%	51,647,633
91	1.61	1	6,391,505,278	1	11.4%	90.0%	100.0%	100.0%	42%	100.0%	276,216,773
92	62850.94	1	6,391,505,278	1	11.4%	100.0%	100.0%	100.0%	36%	100.0%	263,323,025
93	32.96	1	6,391,505,278	1	11.4%	9.0%	100.0%	100.0%	78%	100.0%	51,647,633
94	16.07	1	6,391,505,278	1	11.4%	90.0%	100.0%	100.0%	42%	100.0%	276,216,773
95	62850.94	1	6,391,505,278	1	11.4%	100.0%	100.0%	100.0%	36%	100.0%	263,323,025
96	62850.94	1	6,391,505,278	1	11.4%	100.0%	100.0%	100.0%	36%	100.0%	263,323,025
97	16.07	1	6,391,505,278	1	11.4%	90.0%	100.0%	100.0%	42%	100.0%	276,216,773
98	62850.95	1	6,391,505,278	1	11.4%	100.0%	100.0%	100.0%	36%	100.0%	263,323,025
99	80.35	1	6,391,505,278	1	11.4%	90.0%	100.0%	100.0%	42%	100.0%	276,216,773

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
100	0.91	0	6,391,505,278	1	7.5%	15.0%	100.0%	100.0%	81%	100.0%	58,282,535
101	1.48	1	6,391,505,278	1	7.5%	90.0%	100.0%	100.0%	93%	100.0%	400,870,121
102	14.83	1	6,391,505,278	1	7.5%	10.0%	100.0%	100.0%	75%	100.0%	35,656,592
103	0.25	0	6,391,505,278	1	7.5%	80.0%	100.0%	100.0%	83%	100.0%	316,526,289
104	42.27	1	6,391,505,278	1	7.5%	15.0%	100.0%	100.0%	87%	100.0%	62,014,039
105	2.25	1	6,391,505,278	1	7.5%	40.0%	100.0%	100.0%	61%	100.0%	115,617,387
106	25768.96	1	6,391,505,278	1	7.5%	60.0%	100.0%	100.0%	83%	100.0%	237,394,717
107	62850.96	1	6,391,505,278	1	7.5%	100.0%	100.0%	100.0%	41%	100.0%	196,644,326
108	75421.13	1	6,391,505,278	1	7.5%	60.0%	100.0%	100.0%	83%	100.0%	237,394,717
109	3.19	1	6,391,505,278	1	7.5%	80.0%	100.0%	100.0%	83%	100.0%	316,526,289
110	4.07	1	6,391,505,278	1	7.5%	35.0%	100.0%	100.0%	79%	100.0%	132,261,079
111	0.51	0	6,391,505,278	1	7.5%	80.0%	100.0%	100.0%	61%	100.0%	231,234,774
112	0.94	0	6,391,505,278	1	13.8%	80.0%	100.0%	100.0%	99%	100.0%	697,137,345
113	7.03	1	6,391,505,278	1	13.8%	15.0%	100.0%	100.0%	98%	100.0%	129,725,495
114	2.46	1	6,391,505,278	1	13.8%	80.0%	100.0%	100.0%	99%	100.0%	697,137,345
115	3.41	1	6,391,505,278	1	13.8%	70.0%	100.0%	100.0%	85%	100.0%	527,023,541
116	62850.96	1	6,391,505,278	1	13.8%	100.0%	100.0%	100.0%	46%	100.0%	403,883,097
117	0.38	0	6,391,505,278	1	7.6%	80.0%	100.0%	100.0%	99%	100.0%	384,402,835
118	2.25	1	6,391,505,278	1	7.6%	70.0%	100.0%	100.0%	99%	100.0%	336,352,481
119	0.41	0	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	99%	100.0%	430,927,780
120	1.67	1	6,391,505,278	1	7.6%	70.0%	100.0%	100.0%	93%	100.0%	318,560,536
121	1.79	1	6,391,505,278	1	7.6%	40.0%	100.0%	100.0%	99%	100.0%	193,653,821
122	62850.97	1	6,391,505,278	1	7.6%	100.0%	100.0%	100.0%	46%	100.0%	222,701,895
123	3.41	1	6,391,505,278	1	22.0%	70.0%	100.0%	100.0%	89%	100.0%	878,877,449
124	0.43	0	6,391,505,278	1	22.0%	80.0%	100.0%	100.0%	99%	100.0%	1,109,205,157
125	0.67	0	6,391,505,278	1	22.0%	70.0%	100.0%	100.0%	99%	100.0%	970,554,512
126	26.61	1	6,391,505,278	1	22.0%	70.0%	100.0%	100.0%	96%	100.0%	941,217,852
127	3.64	1	6,391,505,278	1	22.0%	40.0%	100.0%	100.0%	99%	100.0%	554,602,578
128	62850.98	1	6,391,505,278	1	22.0%	100.0%	100.0%	100.0%	46%	100.0%	642,612,559
129	0.39	0	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	88%	100.0%	397,334,972
130	4.46	1	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	80%	100.0%	360,399,608
131	85748.41	1	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	61%	100.0%	273,097,840
132	1.18	1	6,391,505,278	1	8.8%	70.0%	100.0%	100.0%	92%	100.0%	362,358,302

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
133	1.49	1	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	44%	100.0%	199,227,113
134	39.27	1	6,391,505,278	1	8.8%	60.0%	100.0%	100.0%	55%	100.0%	187,195,138
135	1.86	1	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	88%	100.0%	397,334,972
136	1.61	1	6,391,505,278	1	8.8%	60.0%	100.0%	100.0%	68%	100.0%	230,006,582
137	2.71	1	6,391,505,278	1	8.8%	100.0%	100.0%	100.0%	61%	100.0%	341,372,300
138	3.64	1	6,391,505,278	1	8.8%	40.0%	100.0%	100.0%	93%	100.0%	210,419,647
139	11.48	1	6,391,505,278	1	8.8%	10.0%	100.0%	100.0%	97%	100.0%	54,703,512
140	0.64	0	6,391,505,278	1	8.8%	70.0%	100.0%	100.0%	84%	100.0%	332,977,899
141	74.92	1	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	34%	100.0%	152,218,468
142	2.25	1	6,391,505,278	1	8.8%	50.0%	100.0%	100.0%	70%	100.0%	195,869,352
143	0.66	0	6,391,505,278	1	8.8%	80.0%	100.0%	100.0%	62%	100.0%	279,813,360
144	686669.96	1	6,391,505,278	1	8.8%	30.0%	100.0%	100.0%	52%	100.0%	88,560,929
145	7.95	1	6,391,505,278	1	8.8%	60.0%	100.0%	100.0%	43%	100.0%	146,902,014
146	5.99	1	6,391,505,278	1	8.8%	40.0%	100.0%	100.0%	93%	100.0%	210,419,647
147	0.93	0	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	96%	100.0%	414,767,989
148	3.18	1	6,391,505,278	1	2.4%	100.0%	100.0%	100.0%	88%	100.0%	132,904,788
149	17.39	1	6,391,505,278	1	8.5%	10.0%	100.0%	100.0%	79%	100.0%	42,958,113
150	0.02	0	6,391,505,278	1	8.5%	30.0%	100.0%	100.0%	78%	100.0%	126,450,371
151	0.07	0	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	70%	100.0%	301,649,446
152	87991.34	1	6,391,505,278	1	8.5%	100.0%	100.0%	100.0%	42%	100.0%	227,583,734
153	1.48	1	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	70%	100.0%	301,649,446
154	0.45	0	6,391,505,278	1	8.5%	5.0%	100.0%	100.0%	88%	100.0%	23,903,025
155	0.10	0	6,391,505,278	1	8.5%	40.0%	100.0%	100.0%	91%	100.0%	197,688,119
156	2.23	1	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	46%	100.0%	198,226,779
157	87991.34	1	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	42%	100.0%	182,066,987
158	1.55	1	6,391,505,278	1	8.5%	40.0%	100.0%	100.0%	93%	100.0%	202,536,057
159	0.24	0	6,391,505,278	1	8.5%	30.0%	100.0%	100.0%	65%	100.0%	105,846,636
160	0.10	0	6,391,505,278	1	8.5%	30.0%	100.0%	100.0%	49%	100.0%	80,394,964
161	62851.01	1	6,391,505,278	1	8.5%	100.0%	100.0%	100.0%	36%	100.0%	195,264,151
162	0.02	0	6,391,505,278	1	8.5%	60.0%	100.0%	100.0%	69%	100.0%	223,813,116
163	9.17	1	6,391,505,278	1	6.4%	100.0%	100.0%	100.0%	85%	100.0%	346,904,686
164	2.33	1	6,391,505,278	1	6.4%	100.0%	100.0%	100.0%	74%	100.0%	299,369,642
165	2.67	1	6,391,505,278	1	6.4%	100.0%	100.0%	100.0%	96%	100.0%	389,382,811

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
166	2.02	1	6,391,505,278	1	6.4%	80.0%	100.0%	100.0%	99%	100.0%	323,642,856
167	0.16	0	6,391,505,278	1	6.4%	80.0%	100.0%	100.0%	99%	100.0%	321,215,534
168	0.83	0	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	88%	100.0%	382,448,405
169	2.51	1	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	88%	100.0%	382,448,405
170	0.41	0	6,391,505,278	1	8.5%	80.0%	100.0%	100.0%	98%	100.0%	424,463,864
171	267474.95	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	76%	100.0%	567,716,509
172	299012.34	1	7,518,866,724	1	10.0%	90.0%	100.0%	100.0%	99%	100.0%	672,295,866
173	94977.98	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	99%	100.0%	746,995,407
174	10.69	1	7,518,866,724	1	10.0%	90.0%	100.0%	100.0%	82%	100.0%	558,005,569
175	2.54	1	7,518,866,724	1	10.0%	15.0%	100.0%	100.0%	82%	100.0%	93,000,928
176	4.94	1	7,518,866,724	1	10.0%	9.0%	100.0%	100.0%	82%	100.0%	55,800,557
177	2.41	1	7,518,866,724	1	10.0%	90.0%	100.0%	100.0%	10%	100.0%	67,229,587
178	62851.03	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	15%	100.0%	112,049,311
179	49.41	1	7,518,866,724	1	10.0%	9.0%	100.0%	100.0%	82%	100.0%	55,800,557
180	24.09	1	7,518,866,724	1	10.0%	90.0%	100.0%	100.0%	10%	100.0%	67,229,587
181	62851.03	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	15%	100.0%	112,049,311
182	62851.03	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
183	24.09	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
184	62851.03	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
185	120.44	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
186	1.37	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	90%	100.0%	67,976,582
187	2.21	1	7,518,866,724	1	10.0%	93.0%	100.0%	100.0%	76%	100.0%	527,976,354
188	22.23	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	74%	100.0%	55,277,660
189	0.37	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	85%	100.0%	513,932,840
190	63.36	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	90%	100.0%	67,976,582
191	3.37	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	75%	100.0%	56,024,656
192	25769.04	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	85%	100.0%	513,932,840
193	62851.04	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	15%	100.0%	112,049,311
194	75421.21	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	85%	100.0%	513,932,840
195	4.79	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	85%	100.0%	513,932,840
196	6.11	1	7,518,866,724	1	10.0%	35.0%	100.0%	100.0%	60%	100.0%	156,869,035
197	0.76	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	43%	100.0%	256,966,420
198	1.40	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	77%	100.0%	466,125,134

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
199	10.53	1	7,518,866,724	1	10.0%	15.0%	100.0%	100.0%	97%	100.0%	109,808,325
200	3.69	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	92%	100.0%	555,764,583
201	5.11	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	84%	100.0%	444,462,267
202	62851.05	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	37%	100.0%	276,388,301
203	0.57	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	25%	100.0%	149,399,081
204	3.37	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	48%	100.0%	250,990,457
205	0.62	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	59%	100.0%	352,581,832
206	2.51	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	40%	100.0%	209,158,714
207	2.68	1	7,518,866,724	1	10.0%	40.0%	100.0%	100.0%	99%	100.0%	298,798,163
208	62851.06	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	37%	100.0%	276,388,301
209	5.11	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	62%	100.0%	326,810,491
210	0.64	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	25%	100.0%	149,399,081
211	1.01	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	97%	100.0%	511,131,607
212	39.89	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	76%	100.0%	401,323,282
213	5.46	1	7,518,866,724	1	10.0%	40.0%	100.0%	100.0%	78%	100.0%	233,809,562
214	62851.06	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	37%	100.0%	276,388,301
215	0.58	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	84%	100.0%	507,956,877
216	6.69	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	78%	100.0%	472,101,097
217	85748.44	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	15%	100.0%	89,639,449
218	1.77	1	7,518,866,724	1	10.0%	70.0%	100.0%	100.0%	78%	100.0%	413,088,460
219	2.23	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	27%	100.0%	161,351,008
220	58.87	1	7,518,866,724	1	10.0%	60.0%	100.0%	100.0%	39%	100.0%	174,796,925
221	2.79	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	84%	100.0%	507,956,877
222	2.42	1	7,518,866,724	1	10.0%	75.0%	100.0%	100.0%	63%	100.0%	352,955,330
223	4.07	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	15%	100.0%	112,049,311
224	5.46	1	7,518,866,724	1	10.0%	40.0%	100.0%	100.0%	92%	100.0%	277,882,291
225	17.20	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	94%	100.0%	70,964,564
226	0.96	0	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
227	112.31	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
228	3.37	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
229	0.99	0	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
230	686670.45	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
231	11.92	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
232	8.98	1	7,518,866,724	1	10.0%	0.0%	100.0%	100.0%	99%	100.0%	0
233	1.40	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	94%	100.0%	567,716,509
234	4.76	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	84%	100.0%	634,946,096
235	26.06	1	7,518,866,724	1	10.0%	10.0%	100.0%	100.0%	60%	100.0%	44,819,724
236	0.03	0	7,518,866,724	1	10.0%	30.0%	100.0%	100.0%	69%	100.0%	154,628,049
237	0.10	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	60%	100.0%	358,557,795
238	87991.43	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	45%	100.0%	336,147,933
239	2.22	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	60%	100.0%	358,557,795
240	0.63	0	7,518,866,724	1	10.0%	5.0%	100.0%	100.0%	92%	100.0%	34,735,286
241	0.16	0	7,518,866,724	1	10.0%	40.0%	100.0%	100.0%	76%	100.0%	227,086,604
242	3.35	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	45%	100.0%	268,918,347
243	87991.43	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	45%	100.0%	268,918,347
244	2.32	1	7,518,866,724	1	10.0%	30.0%	100.0%	100.0%	89%	100.0%	201,688,760
245	0.36	0	7,518,866,724	1	10.0%	30.0%	100.0%	100.0%	52%	100.0%	116,531,284
246	0.16	0	7,518,866,724	1	10.0%	20.0%	100.0%	100.0%	43%	100.0%	64,241,605
247	62851.10	1	7,518,866,724	1	10.0%	100.0%	100.0%	100.0%	15%	100.0%	112,049,311
248	0.02	0	7,518,866,724	1	10.0%	60.0%	100.0%	100.0%	82%	100.0%	372,003,713
249	13.75	1	7,518,866,724	1	0.0%	100.0%	100.0%	100.0%	82%	100.0%	0
250	3.49	1	7,518,866,724	1	0.0%	100.0%	100.0%	100.0%	82%	100.0%	0
251	4.01	1	7,518,866,724	1	0.0%	100.0%	100.0%	100.0%	88%	100.0%	0
252	3.02	1	7,518,866,724	1	0.0%	80.0%	100.0%	100.0%	99%	100.0%	0
253	0.24	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	97%	100.0%	585,644,399
254	1.24	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	84%	100.0%	507,956,877
255	3.76	1	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	84%	100.0%	507,956,877
256	0.62	0	7,518,866,724	1	10.0%	80.0%	100.0%	100.0%	97%	100.0%	585,644,399
257	5.71	1	1,999,688,020	1	22.0%	5.0%	100.0%	100.0%	37%	100.0%	8,085,785
258	0.61	0	1,999,688,020	1	22.0%	20.0%	100.0%	100.0%	20%	100.0%	17,482,779
259	0.64	0	1,999,688,020	1	22.0%	20.0%	100.0%	100.0%	91%	100.0%	80,420,782
260	25.53	1	1,999,688,020	1	22.0%	35.0%	100.0%	100.0%	9%	100.0%	13,767,688
261	4.50	1	1,999,688,020	1	13.8%	50.0%	100.0%	100.0%	81%	100.0%	112,626,554
262	7.36	1	1,999,688,020	1	13.8%	20.0%	100.0%	100.0%	20%	100.0%	10,987,956
263	11.49	1	1,999,688,020	1	13.8%	35.0%	100.0%	100.0%	93%	100.0%	90,375,942
264	1.48	1	1,999,688,020	1	13.8%	10.0%	100.0%	100.0%	4%	100.0%	1,098,796

Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
265	1.96	1	1,999,688,020	1	13.8%	5.0%	100.0%	100.0%	37%	100.0%	5,081,930
266	37.91	1	1,999,688,020	1	8.8%	30.0%	100.0%	100.0%	84%	100.0%	44,647,559
267	0.86	0	1,999,688,020	1	8.8%	10.0%	100.0%	100.0%	78%	100.0%	13,831,989
268	9.22	1	1,999,688,020	1	8.8%	25.0%	100.0%	100.0%	72%	100.0%	31,515,924
269	1.11	1	1,999,688,020	1	8.8%	15.0%	100.0%	100.0%	91%	100.0%	24,162,208
270	18.75	1	1,999,688,020	1	8.8%	75.0%	100.0%	100.0%	37%	100.0%	48,587,049
271	9.57	1	1,999,688,020	1	7.6%	15.0%	100.0%	100.0%	75%	100.0%	17,040,318
272	9.67	1	1,999,688,020	1	7.6%	10.0%	100.0%	100.0%	89%	100.0%	13,632,254
273	1.24	1	1,999,688,020	1	7.6%	20.0%	100.0%	100.0%	35%	100.0%	10,602,865
274	1.25	1	1,999,688,020	1	7.6%	50.0%	100.0%	100.0%	37%	100.0%	28,021,856
275	0.62	0	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	59%	100.0%	79,545,497
276	10.69	1	1,999,688,020	1	11.4%	90.0%	100.0%	100.0%	82%	100.0%	169,769,832
277	2.54	1	1,999,688,020	1	11.4%	15.0%	100.0%	100.0%	82%	100.0%	28,294,972
278	4.94	1	1,999,688,020	1	11.4%	9.0%	100.0%	100.0%	82%	100.0%	16,976,983
279	2.41	1	1,999,688,020	1	11.4%	90.0%	100.0%	100.0%	10%	100.0%	20,454,197
280	62851.13	1	1,999,688,020	1	11.4%	100.0%	100.0%	100.0%	15%	100.0%	34,090,328
281	49.41	1	1,999,688,020	1	11.4%	9.0%	100.0%	100.0%	82%	100.0%	16,976,983
282	24.09	1	1,999,688,020	1	11.4%	90.0%	100.0%	100.0%	10%	100.0%	20,454,197
283	62851.13	1	1,999,688,020	1	11.4%	100.0%	100.0%	100.0%	15%	100.0%	34,090,328
284	2.21	1	1,999,688,020	1	11.4%	93.0%	100.0%	100.0%	76%	100.0%	160,633,624
285	1.37	1	1,999,688,020	1	7.5%	10.0%	100.0%	100.0%	90%	100.0%	13,490,679
286	22.23	1	1,999,688,020	1	7.5%	10.0%	100.0%	100.0%	74%	100.0%	10,970,442
287	0.37	0	1,999,688,020	1	7.5%	80.0%	100.0%	100.0%	85%	100.0%	101,995,463
288	63.36	1	1,999,688,020	1	7.5%	10.0%	100.0%	100.0%	90%	100.0%	13,490,679
289	3.37	1	1,999,688,020	1	7.5%	10.0%	100.0%	100.0%	75%	100.0%	11,118,691
290	25769.14	1	1,999,688,020	1	7.5%	80.0%	100.0%	100.0%	85%	100.0%	101,995,463
291	62851.14	1	1,999,688,020	1	7.5%	100.0%	100.0%	100.0%	15%	100.0%	22,237,383
292	75421.31	1	1,999,688,020	1	7.5%	80.0%	100.0%	100.0%	85%	100.0%	101,995,463
293	8.73	1	1,999,688,020	1	7.5%	35.0%	100.0%	100.0%	60%	100.0%	31,132,336
294	0.76	0	1,999,688,020	1	7.5%	80.0%	100.0%	100.0%	43%	100.0%	50,997,732
295	94978.96	1	1,999,688,020	1	2.4%	100.0%	100.0%	100.0%	99%	100.0%	46,852,348
296	1.40	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	96%	100.0%	129,767,018
297	4.76	1	1,999,688,020	1	2.4%	100.0%	100.0%	100.0%	88%	100.0%	41,581,459



Industrial Measures

MEASURE DESCRIPTION	MEASURE SELECTION		APPLICABILITY								
Measure ID	Measure TRC calculated for 2018	Passed Measure Screening? (1=Yes, 0=No)	Total Sub-Sector Units	Measure Units per Sub-Sector Unit	Applicability	Technical Feasibility	Distribution of Measure Permutation by Measure Size	Distribution of Measure Permutation by Efficiency Level	Not Yet Adopted Rate	Annual Replacement Eligibility	Total Applicable Measure Units
298	0.03	0	1,999,688,020	1	8.5%	30.0%	100.0%	100.0%	78%	100.0%	39,562,088
299	0.10	0	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	70%	100.0%	94,376,013
300	87991.49	1	1,999,688,020	1	8.5%	100.0%	100.0%	100.0%	42%	100.0%	71,203,331
301	2.22	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	70%	100.0%	94,376,013
302	0.68	0	1,999,688,020	1	8.5%	5.0%	100.0%	100.0%	88%	100.0%	7,478,456
303	0.16	0	1,999,688,020	1	8.5%	40.0%	100.0%	100.0%	91%	100.0%	61,849,994
304	3.35	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	46%	100.0%	62,018,523
305	87991.49	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	42%	100.0%	56,962,665
306	2.32	1	1,999,688,020	1	8.5%	40.0%	100.0%	100.0%	93%	100.0%	63,366,751
307	0.36	0	1,999,688,020	1	8.5%	30.0%	100.0%	100.0%	65%	100.0%	33,115,869
308	62851.16	1	1,999,688,020	1	8.5%	100.0%	100.0%	100.0%	36%	100.0%	61,091,615
309	0.02	0	1,999,688,020	1	8.5%	60.0%	100.0%	100.0%	69%	100.0%	70,023,631
310	13.75	1	1,999,688,020	1	6.4%	100.0%	100.0%	100.0%	85%	100.0%	108,534,862
311	3.49	1	1,999,688,020	1	6.4%	100.0%	100.0%	100.0%	74%	100.0%	93,662,738
312	4.01	1	1,999,688,020	1	6.4%	100.0%	100.0%	100.0%	96%	100.0%	121,824,845
313	3.02	1	1,999,688,020	1	6.4%	80.0%	100.0%	100.0%	99%	100.0%	101,257,014
314	0.25	0	1,999,688,020	1	6.4%	80.0%	100.0%	100.0%	99%	100.0%	100,497,587
315	1.24	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	88%	100.0%	119,655,302
316	3.76	1	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	88%	100.0%	119,655,302
317	0.62	0	1,999,688,020	1	8.5%	80.0%	100.0%	100.0%	98%	100.0%	132,800,532

Industrial Measures

MEASURE DESCRIPTION		MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2	
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MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
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MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
Measure ID	Reference 1	Reference 2
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MEASURE DESCRIPTION	MEASURE DOCUMENTATION	
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MEASURE DESCRIPTION		MEASURE DOCUMENTATION	
Measure ID		Reference 1	Reference 2
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299	ICF		
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Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
1	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
2	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
3	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
4	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
5	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
6	Industrial efficiency	2019	0.169%	2038	0.845%	2038	0.845%
7	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
8	Industrial efficiency	2019	0.002%	2038	0.009%	2038	0.009%
9	Industrial efficiency	2019	0.189%	2038	0.945%	2038	0.945%
10	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
11	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
12	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
13	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
14	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
15	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
16	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
17	Industrial efficiency	2019	0.001%	2038	0.004%	2038	0.004%
18	Industrial efficiency	2019	0.116%	2038	0.582%	2038	0.582%
19	Industrial efficiency	2019	0.013%	2038	0.026%	2038	0.026%
20	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
21	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
22	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
23	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
24	Industrial efficiency	2019	0.088%	2038	0.175%	2038	0.175%
25	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
26	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
27	Industrial efficiency	2019	0.081%	2038	0.162%	2038	0.162%
28	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
29	Industrial efficiency	2019	0.042%	2038	0.083%	2038	0.083%
30	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
31	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
32	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
33	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
34	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
35	Industrial efficiency	2019	0.244%	2038	0.488%	2038	0.488%
36	Industrial efficiency	2019	0.322%	2038	0.645%	2038	0.645%
37	Industrial efficiency	2019	0.113%	2038	0.565%	2038	0.565%
38	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
39	Industrial efficiency	2019	0.001%	2038	0.007%	2038	0.007%
40	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
41	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
42	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
43	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
44	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
45	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
46	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
47	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
48	Industrial efficiency	2019	0.169%	2038	0.845%	2038	0.845%
49	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
50	Industrial efficiency	2019	0.002%	2038	0.009%	2038	0.009%
51	Industrial efficiency	2019	0.189%	2038	0.945%	2038	0.945%
52	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
53	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
54	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
55	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
56	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
57	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
58	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
59	Industrial efficiency	2019	0.001%	2038	0.004%	2038	0.004%
60	Industrial efficiency	2019	0.116%	2038	0.582%	2038	0.582%
61	Industrial efficiency	2019	0.013%	2038	0.026%	2038	0.026%
62	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
63	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
64	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
65	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
66	Industrial efficiency	2019	0.088%	2038	0.175%	2038	0.175%
67	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
68	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
69	Industrial efficiency	2019	0.081%	2038	0.162%	2038	0.162%
70	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
71	Industrial efficiency	2019	0.042%	2038	0.083%	2038	0.083%
72	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
73	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
74	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
75	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
76	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
77	Industrial efficiency	2019	0.244%	2038	0.488%	2038	0.488%
78	Industrial efficiency	2019	0.322%	2038	0.645%	2038	0.645%
79	Industrial efficiency	2019	0.113%	2038	0.565%	2038	0.565%
80	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
81	Industrial efficiency	2019	0.001%	2038	0.007%	2038	0.007%
82	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
83	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
84	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
85	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
86	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
87	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
88	Industrial efficiency	2019	0.062%	2038	0.308%	2038	0.308%
89	Industrial efficiency	2019	0.001%	2038	0.005%	2038	0.005%
90	Industrial efficiency	2019	0.014%	2038	0.069%	2038	0.069%
91	Industrial efficiency	2019	0.003%	2038	0.013%	2038	0.013%
92	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
93	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
94	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
95	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
96	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
97	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
98	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
99	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
100	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
101	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
102	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
103	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
104	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
105	Industrial efficiency	2019	0.067%	2038	0.335%	2038	0.335%
106	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
107	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
108	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
109	Industrial efficiency	2019	0.024%	2038	0.119%	2038	0.119%
110	Industrial efficiency	2019	0.053%	2038	0.265%	2038	0.265%
111	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
112	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
113	Industrial efficiency	2019	0.060%	2038	0.302%	2038	0.302%
114	Industrial efficiency	2019	0.025%	2038	0.123%	2038	0.123%
115	Industrial efficiency	2019	0.027%	2038	0.137%	2038	0.137%
116	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
117	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
118	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
119	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
120	Industrial efficiency	2019	0.011%	2038	0.056%	2038	0.056%
121	Industrial efficiency	2019	0.014%	2038	0.068%	2038	0.068%
122	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
123	Industrial efficiency	2019	0.027%	2038	0.137%	2038	0.137%
124	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
125	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
126	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
127	Industrial efficiency	2019	0.057%	2038	0.283%	2038	0.283%
128	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
129	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
130	Industrial efficiency	2019	0.146%	2038	0.728%	2038	0.728%
131	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
132	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
133	Industrial efficiency	2019	0.016%	2038	0.078%	2038	0.078%
134	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
135	Industrial efficiency	2019	0.002%	2038	0.008%	2038	0.008%
136	Industrial efficiency	2019	0.083%	2038	0.417%	2038	0.417%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
137	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
138	Industrial efficiency	2019	0.057%	2038	0.283%	2038	0.283%
139	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
140	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
141	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
142	Industrial efficiency	2019	0.004%	2038	0.019%	2038	0.019%
143	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
144	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
145	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
146	Industrial efficiency	2019	0.097%	2038	0.484%	2038	0.484%
147	Industrial efficiency	2019	0.001%	2038	0.002%	2038	0.002%
148	Industrial efficiency	2019	0.012%	2038	0.062%	2038	0.062%
149	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
150	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
151	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
152	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
153	Industrial efficiency	2019	0.018%	2038	0.035%	2038	0.035%
154	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
155	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
156	Industrial efficiency	2019	0.016%	2038	0.032%	2038	0.032%
157	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
158	Industrial efficiency	2019	0.006%	2038	0.012%	2038	0.012%
159	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
160	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
161	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
162	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
163	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
164	Industrial efficiency	2019	0.083%	2038	0.166%	2038	0.166%
165	Industrial efficiency	2019	0.126%	2038	0.251%	2038	0.251%
166	Industrial efficiency	2019	0.057%	2038	0.287%	2038	0.287%
167	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
168	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
169	Industrial efficiency	2019	0.297%	2038	0.594%	2038	0.594%
170	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
171	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
172	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
173	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
174	Industrial efficiency	2019	0.095%	2038	0.473%	2038	0.473%
175	Industrial efficiency	2019	0.006%	2038	0.030%	2038	0.030%
176	Industrial efficiency	2019	0.035%	2038	0.174%	2038	0.174%
177	Industrial efficiency	2019	0.011%	2038	0.057%	2038	0.057%
178	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
179	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
180	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
181	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
182	Industrial efficiency	2019	0.200%	2038	1.000%	2038	0.000%
183	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.000%
184	Industrial efficiency	2019	0.200%	2038	1.000%	2038	0.000%
185	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.000%
186	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
187	Industrial efficiency	2019	0.003%	2038	0.015%	2038	0.015%
188	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
189	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
190	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
191	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
192	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
193	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
194	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
195	Industrial efficiency	2019	0.050%	2038	0.251%	2038	0.251%
196	Industrial efficiency	2019	0.085%	2038	0.427%	2038	0.427%
197	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
198	Industrial efficiency	2019	0.001%	2038	0.007%	2038	0.007%
199	Industrial efficiency	2019	0.093%	2038	0.467%	2038	0.467%
200	Industrial efficiency	2019	0.064%	2038	0.322%	2038	0.322%
201	Industrial efficiency	2019	0.055%	2038	0.275%	2038	0.275%
202	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
203	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
204	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%



Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
205	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
206	Industrial efficiency	2019	0.030%	2038	0.152%	2038	0.152%
207	Industrial efficiency	2019	0.035%	2038	0.173%	2038	0.173%
208	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
209	Industrial efficiency	2019	0.055%	2038	0.275%	2038	0.275%
210	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
211	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
212	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
213	Industrial efficiency	2019	0.089%	2038	0.446%	2038	0.446%
214	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
215	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
216	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
217	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
218	Industrial efficiency	2019	0.002%	2038	0.012%	2038	0.012%
219	Industrial efficiency	2019	0.048%	2038	0.238%	2038	0.238%
220	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
221	Industrial efficiency	2019	0.008%	2038	0.042%	2038	0.042%
222	Industrial efficiency	2019	0.146%	2038	0.728%	2038	0.728%
223	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
224	Industrial efficiency	2019	0.089%	2038	0.446%	2038	0.446%
225	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
226	Industrial efficiency	2019	0.001%	2038	0.006%	2038	0.000%
227	Industrial efficiency	2019	0.200%	2038	1.000%	2038	0.000%
228	Industrial efficiency	2019	0.015%	2038	0.073%	2038	0.000%
229	Industrial efficiency	2019	0.003%	2038	0.014%	2038	0.000%
230	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.000%
231	Industrial efficiency	2019	0.200%	2038	1.000%	2038	0.000%
232	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.000%
233	Industrial efficiency	2019	0.001%	2038	0.007%	2038	0.007%
234	Industrial efficiency	2019	0.033%	2038	0.163%	2038	0.163%
235	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
236	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
237	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
238	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
239	Industrial efficiency	2019	0.009%	2038	0.045%	2038	0.045%
240	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
241	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
242	Industrial efficiency	2019	0.008%	2038	0.042%	2038	0.042%
243	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
244	Industrial efficiency	2019	0.004%	2038	0.021%	2038	0.021%
245	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
246	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
247	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
248	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
249	Industrial efficiency	2019	0.500%	2038	1.000%	2038	0.000%
250	Industrial efficiency	2019	0.244%	2038	0.488%	2038	0.000%
251	Industrial efficiency	2019	0.322%	2038	0.645%	2038	0.000%
252	Industrial efficiency	2019	0.113%	2038	0.565%	2038	0.000%
253	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
254	Industrial efficiency	2019	0.001%	2038	0.007%	2038	0.007%
255	Industrial efficiency	2019	0.059%	2038	0.295%	2038	0.295%
256	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
257	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
258	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
259	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
260	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
261	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
262	Industrial efficiency	2019	0.169%	2038	0.845%	2038	0.845%
263	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
264	Industrial efficiency	2019	0.002%	2038	0.009%	2038	0.009%
265	Industrial efficiency	2019	0.189%	2038	0.945%	2038	0.945%
266	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
267	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
268	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
269	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
270	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
271	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
272	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%

Industrial Measures

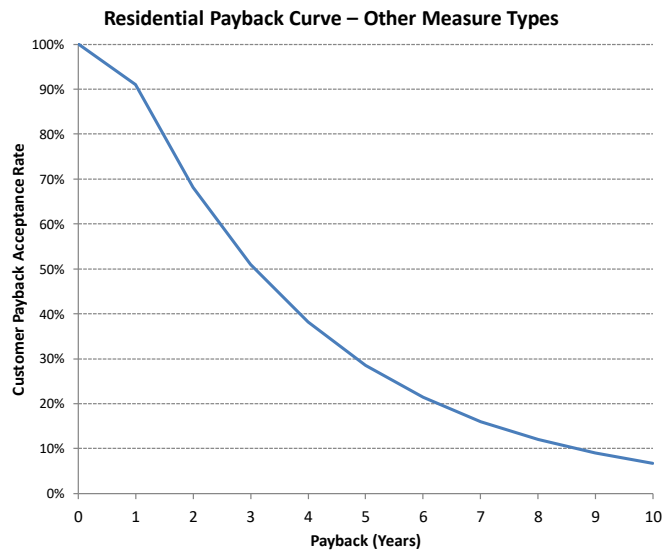
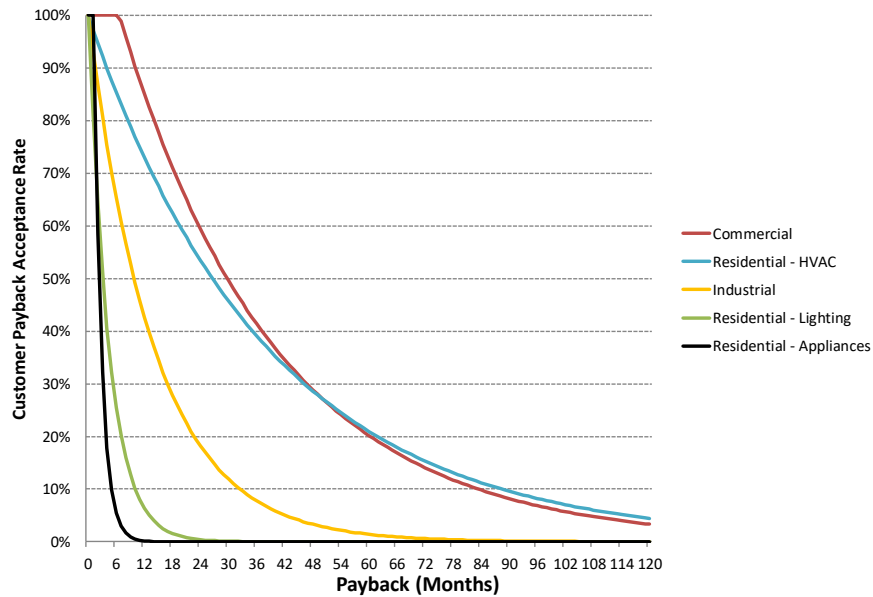
MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
273	Industrial efficiency	2019	0.001%	2038	0.004%	2038	0.004%
274	Industrial efficiency	2019	0.116%	2038	0.582%	2038	0.582%
275	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
276	Industrial efficiency	2019	0.095%	2038	0.473%	2038	0.473%
277	Industrial efficiency	2019	0.006%	2038	0.030%	2038	0.030%
278	Industrial efficiency	2019	0.035%	2038	0.174%	2038	0.174%
279	Industrial efficiency	2019	0.011%	2038	0.057%	2038	0.057%
280	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
281	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
282	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
283	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
284	Industrial efficiency	2019	0.003%	2038	0.015%	2038	0.015%
285	Industrial efficiency	2019	0.000%	2038	0.001%	2038	0.001%
286	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
287	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
288	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
289	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
290	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
291	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
292	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
293	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
294	Industrial efficiency	2019	0.000%	2038	0.002%	2038	0.002%
295	Industrial efficiency	2019	0.100%	2038	0.500%	2038	0.500%
296	Industrial efficiency	2019	0.013%	2038	0.026%	2038	0.026%
297	Industrial efficiency	2019	0.033%	2038	0.163%	2038	0.163%
298	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
299	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
300	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
301	Industrial efficiency	2019	0.088%	2038	0.175%	2038	0.175%
302	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
303	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
304	Industrial efficiency	2019	0.081%	2038	0.162%	2038	0.162%
305	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
306	Industrial efficiency	2019	0.042%	2038	0.083%	2038	0.083%

Industrial Measures

MEASURE DESCRIPTION		PARTICIPATION					
Measure ID	Program	First Year of Participation (So Year)	First Year Annual Participation Rate (So)	Year of Maximum Annual Participation (Smax Year)	Maximum Annual Participation Rate (Smax)	Final Year of Participation (Fo Year)	Final Year Annual Participation Rate (Fo)
307	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
308	Industrial efficiency	2019	0.200%	2038	1.000%	2038	1.000%
309	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
310	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
311	Industrial efficiency	2019	0.244%	2038	0.488%	2038	0.488%
312	Industrial efficiency	2019	0.322%	2038	0.645%	2038	0.645%
313	Industrial efficiency	2019	0.113%	2038	0.565%	2038	0.565%
314	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%
315	Industrial efficiency	2019	0.007%	2038	0.014%	2038	0.014%
316	Industrial efficiency	2019	0.500%	2038	1.000%	2038	1.000%
317	Industrial efficiency	2019	0.000%	2038	0.000%	2038	0.000%

## Appendix B: Payback Acceptance Curves and Participation Approaches Utilized, and Net-to-Gross Assumptions

Payback Curves<sup>1</sup>



<sup>1</sup> To collect the data used to develop the payback curves in the first graph, customers were asked about payback acceptance in months. To collect the data used to develop the "Residential Payback Curve - Other," the survey asked customers about payback acceptance in years.

**Payback Acceptance Data Sources:**

1. Commercial. ICF survey of 231 non-residential customers on decision making criteria for selecting efficient HVAC units. Conducted in 2013 for a confidential utility.
2. Residential HVAC. ICF survey of 300 residential customers on decision making criteria for selecting efficient HVAC units. Conducted in 2013 for a confidential utility.
3. Industrial. U.S. Department of Energy, Industrial Assessment Center (IAC) data on industrial efficient measure implementation in Louisiana. Data accessed in 2014.
4. Residential Lighting. ICF survey of 300 residential customers on decision making criteria for selecting efficient lighting. Conducted in 2013 for a confidential utility.
5. Residential Appliance. ICF survey of 300 residential customers on decision making criteria for selecting efficient appliances. Conducted in 2013 for a confidential utility.
6. Residential - Other Measure Types. Based upon national survey of residential customers by the Shelton Group (2006).

**Notes:**

- The above payback acceptance curves plot months or years of simple payback against customer stated payback acceptance rates, with the exception of the industrial curve where actual payback from implemented efficiency measures was utilized to develop the curve. As stated in the body of this report, payback acceptance curves were not used in forecasting participation for all measures - they were used only for measures where payback is a valid proxy for financial acceptance.
- The table below shows which Participation Approach (see Approach section of main report for descriptions of Approach A and Approach B) was used by measure group by program, the payback curve used, where applicable, and net-to-gross ratios.

Long-Term Demand Side Management Potential in the Entergy Louisiana Service Area, Draft Report, October 2018

Sector	Program Name	Measure Bundle	Participation Approach	Payback Acceptance Curve	Net to Gross Ratio
Residential	Lighting, Appliances and Electronics	Standard LED	B	Not Applicable	0.70
		Specialty LED	B	Not Applicable	0.70
		Window AC	A	Residential - Appliances	0.70
		Electronics	A	Residential - Appliances	0.70
		ENERGY STAR Dehumidifier	A	Residential - Appliances	0.70
		ENERGY STAR Pool Pump	A	Residential - Appliances	0.70
	ENERGY STAR New Homes	Water Heater	A	Residential - Appliances	0.70
		Lighting - New homes	B	Not Applicable	0.90
		Sell & Duct sealing- New homes	B	Not Applicable	0.90
		HVAC - New homes	B	Not Applicable	0.90
	HVAC and Tune-up	WH - New homes	B	Not Applicable	0.90
		AC Tune up	A	Residential - Other	0.80
		HP replacement	A	Residential - HVAC	0.80
		AC replacement	A	Residential - HVAC	0.80
	Appliances Recycling	Duct Sealing	A	Residential - HVAC	0.80
		All - Recycling	B	Not Applicable	0.70
	Home Audit and Retrofit	Shell	A	Residential - Other	0.85
		DI (Water Fixture & WH Insulation)	A	Residential - Other	0.85
		DI (Advanced Power Strip)	A	Residential - Other	0.85
		Duct Sealing	A	Residential - Other	0.85
		Audit - only	B	Not Applicable	0.85
Air sealing		A	Residential - Other	0.85	
Income-Qualified Weatherization	Online Audit / Behavioral	B	Not Applicable	0.85	
Home Energy Use Benchmarking	All - Income-Qualified	B	Not Applicable	1.00	
	HER	B	Not Applicable	1.00	
Commercial	Commercial Prescriptive & Custom	Real-time Feedback (online platform)	B	Not Applicable	1.00
		Unitary HVAC 2015	A	Commercial	0.80
		Unitary HVAC 2016 and beyond	A	Commercial	0.80
		Chillers	A	Commercial	0.80
		VFD	A	Commercial	0.80
		Other HVAC	A	Commercial	0.80
		Reduced Wattage T8/T5 Lamps	A	Commercial	0.80
		Linear Florescent Fixture Upgrade	A	Commercial	0.80
		A-Line LED Bulbs	A	Commercial	0.80
		Reflector LED Bulbs	A	Commercial	0.80
		Efficient High Bay Lighting	A	Commercial	0.80
		Lighting Controls	A	Commercial	0.80
		LED Exit Signs	A	Commercial	0.80
		Refrigeration	A	Commercial	0.80
		Water Heating	A	Commercial	0.80
		Food Service	A	Commercial	0.80
		Commercial Prescriptive & Custom- Other	A	Commercial	0.80
	Small Business Solutions	AC Tune-up	A	Commercial	0.95
		Lighting Direct Install	A	Commercial	0.95
		Refrigeration Direct Install	A	Commercial	0.95
		Plumbing Fixture Direct Install	A	Commercial	0.95
		Other	A	Commercial	0.95
	RetroCommissioning	RCx of 100,000+ sqft Commercial Buildings	B	Not Applicable	0.90
		RCx of Mid-size Commercial Buildings	B	Not Applicable	0.90
	Commercial New Construction	ASHRAE90.1-2010 Baseline	B	Not Applicable	0.80
		ASHRAE90.1-2013 Baseline	B	Not Applicable	0.80
		ASHRAE90.1-2016 Baseline	B	Not Applicable	0.80
	Midstream Commercial Lighting	Reduced Wattage T8/T5 Lamps	A	Commercial	0.80
		A-Line LED Bulbs	A	Commercial	0.80
		Reflector LED Bulbs	A	Commercial	0.80
Industrial	Industrial Prescriptive & Custom	Prescriptive & Custom	A	Industrial	0.70
	Strategic Energy Management	SEM	A	Industrial	0.70

**BEFORE THE  
LOUISIANA PUBLIC SERVICE COMMISSION**

<b>ENTERGY LOUISIANA, LLC REQUEST TO</b>	)	
<b>INITIATE 2017 INTEGRATED RESOURCE</b>	)	
<b>PLANNING PROCESS PURSUANT TO THE</b>	)	<b>DOCKET NO. I-34694</b>
<b>GENERAL ORDER NO. R-30021</b>	)	
<b>(CORRECTED) DATED APRIL 20, 2012</b>	)	

**APPENDIX C**

**HIGHLY SENSITIVE  
PROTECTED MATERIALS  
FILED UNDER SEAL**

**INTENTIONALLY  
OMITTED**

**OCTOBER 2018**