

PENNSYLVANIA ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION MARKET POTENTIAL STUDY REPORT

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Prepared For:

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Prepared By:

PENNSYLVANIA STATEWIDE EVALUATOR



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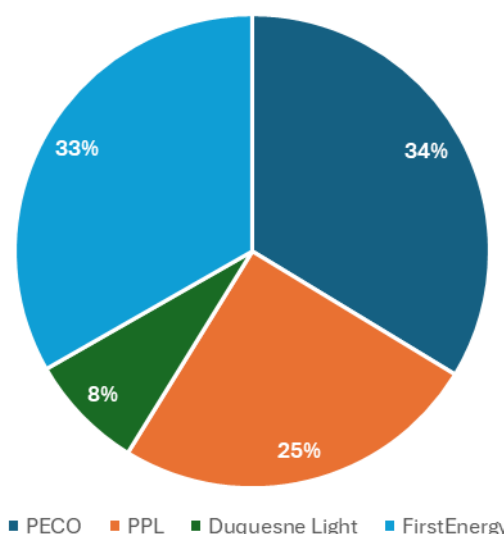
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Phase V Energy Efficiency and Peak Demand Reduction Market Potential Study

To prepare for a potential Phase V of Act 129, the SWE performed an energy efficiency and peak demand reduction market potential study. The purpose was to determine what cost-effective electric energy efficiency (EE) and associated peak demand reduction savings are feasible for the four electricity distribution companies (EDCs) subject to Act 129. Consistent with Act 129 eligibility requirements, this study is limited to “traditional” (i.e., non-distributed generation) electric efficiency measures and distributed generation, namely behind-the-meter combined heat and power (CHP) generation and solar photovoltaic (PV) generation.

- Significant cost-effective, achievable energy efficiency potential available in all EDC service territories and sectors.
- Increased existing efficient lighting saturation yields decreased C&I lighting potential relative to Phase IV savings to date.
- Modeled traditional EE acquisition costs are higher relative to Phase IV savings to date and Phase IV EEPDR Market Potential Study.
- Increases to modeled acquisition costs partially offset by lower cost CHP and solar PV potential.

Distribution of Act 129 EE Energy Savings Potential by EDC Territory



Summary of Act 129 EE Potential Results (over the 5-year phase)



Total Act 129 EE Potential
3,627 GWh | 479 MW

Potential Breakdown by Component



Traditional Energy Efficiency
2,857 GWh | 375 MW



Combined Heat and Power
381 GWh | 53 MW



Solar Photovoltaic
389 GWh | 51 MW

Acquisition Cost

\$337.2 per MWh

(Nominal dollars, over the 5-year phase)

Statewide Total Resource Cost Test Benefit-Cost Ratio

1.82 : 1

Each dollar invested in traditional EE returns \$1.82 in benefits to the Pennsylvania statewide economy



Net Benefits

\$1.4 Billion

Present value 2026 dollars for EE measures installed over the 5-year phase (assuming 100% Act 129 budgets for traditional EE)

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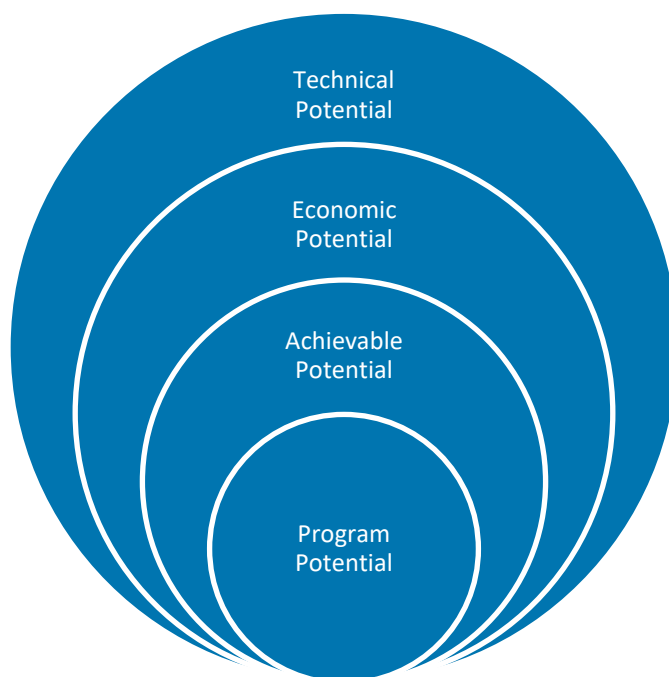
DEFINITIONS & ACRONYMS

IMPORTANT DEFINITIONS

The four standard types of energy efficiency (EE) potential are shown in Figure 1. This study defined the first three levels, Technical Potential, Economic Potential, and Achievable Potential, according to industry-standard definitions. For Program Potential, the Statewide Evaluator (SWE) team was directed to account for the specific budget constraints that Act 129 requires and which limit the potential of EE and peak demand reduction (PDR). This requirement necessitates precision in this study's definitions, as described below.

Two Program Potential scenarios were modeled and each optimized the results of a comprehensive portfolio of measures. The first such scenario assumed incentive levels that cover 50 percent of incremental costs (100 percent for low-income participants). The first is referred to as *Program Potential*. The second scenario further adjusted the Program Potential such that the exact nominal dollar budget amounts as established in Act 129 were met; this is referred to as *Act 129 Traditional EE Potential*.

Figure 1: The Four Standard Efficiency Potential Scenarios



Technical Potential

The SWE team used *Technical Potential* in its generally understood meaning, according to industry standards: It is an estimate of the potential for EE savings, using all available and feasible technology and ignoring all barriers to adoption. Within the EE model and results, Technical Potential is treated as a step toward Economic Potential and is not reported.

Economic Potential

The SWE team used *Economic Potential* in the way the term is used in the industry. It involves the total, technically feasible and cost-effective efficiency available in the state. The Economic Potential scenario ignores all barriers to adoption and assumes all customers adopt all efficiency opportunities, as appropriate.

Achievable Potential

The SWE team also defined *Achievable Potential* per industry standards, as the subset of Economic Potential expected to be achievable, recognizing real-world barriers. This scenario assumes aggressive and well-designed, marketed, and implemented programs that cover 100 percent of incremental costs of all efficiency measures.

Program Potential

The SWE team defined *Program Potential* according to industry standards, as the subset of the estimated Achievable Potential that efficiency programs can deliver, providing incentives that eliminate market barriers covering on average 50 percent of incremental costs (100 percent for low-income participants). The only distinction from standard definitions of *Program Potential* is that the modeled portfolio was optimized for achieving savings from a comprehensive portfolio of traditional EE measures. Most reported results in the *Traditional Energy Efficiency Results* section of this report are from this scenario and exclude any additional potential from combined heat and power (CHP) and solar photovoltaic (PV) opportunities.

Act 129 Traditional EE Potential

The SWE team defined *Act 129 Traditional EE Potential* as the Program Potential results adjusted to meet precise Act 129 budget requirements. The term “traditional” as used in reference to this scenario denotes that potential for CHP and PV are excluded. Act 129 Traditional EE Potential is based on, but differs somewhat from, the modeling of Program Potential. The full Program Potential modeling assumed typical incentive cost coverage. It resulted in savings potential for 5-year budgets generally more than the Phase V Act 129 electric distribution companies (EDC) spending constraints. In contrast, the Act 129 Traditional EE Potential precisely matched the 5-year budgets. Therefore, the detailed modeling outputs for EE Program Potential provided much more granular data on how savings break out by segment, market, end-use, and measure, whereas the Act 129 Traditional EE Potential results were simply a calibration of those overall savings levels to the available EDC budgets.

Act 129 EE Potential

The SWE team defined the *Act 129 EE Potential* as the result of combining the Act 129 Traditional EE potential, capped at 94 percent of the total Act 129 budget, with assumed budget allocations for CHP and solar PV of 1 percent and 5 percent, respectively. No budget allocation was assumed for demand response (DR). Throughout the report, the terms *Act 129 CHP Potential* and *Act 129 PV Potential* reflect the estimated potential for each respective component assuming the budget allocations noted above.

ACRONYMS AND ABBREVIATIONS

AEPS	Alternative Energy Portfolio Standards
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BAU	Business As Usual, used exclusively for the investigation of solar PV potential
BCR	Benefit-Cost Ratio
CBECS	Commercial Buildings Energy Consumption Survey (U.S. Energy Information Administration)
CHP	Combined heat and power
C&I	Commercial and Industrial (utility market sector)
DEP	Pennsylvania Department of Environmental Protection
DR	Demand response
DOE	U.S. Department of Energy
Duquesne Light	Duquesne Light Company
EDC	Electric distribution companies in Pennsylvania subject to Act 129: Duquesne Light, Met-Ed, PECO, FirstEnergy Corporation
EE	Energy Efficiency
EE&C	Energy Efficiency and Conservation
EEPDR MPS	Energy Efficiency and Peak Demand Reduction Market Potential Study
EIA	U.S. Energy Information Administration
FE	FirstEnergy Corporation
FPL	Federal Poverty Level
GSL	General Service Lamp
GW	Gigawatt
GWh	Gigawatt-hour
HEAR	Home Electrification and Appliance Rebate Program
HER	Home Efficiency Rebate Program
IC	Internal Combustion
IRA	Inflation Reduction Act
KW	Kilowatt
KWh	Kilowatt-hour
LED	Light-Emitting Diode
LI	Low-Income
LMI	Low- and Moderate-Income
MECS	Manufacturing Energy Consumption Survey (EIA)
MPS	Market Potential Study
MW	Megawatt
MW,ac	Megawatt, Alternating Current
MW,dc	Megawatt, Direct Current
MWh	Megawatt-hour
NLI	Non-Low-Income
NPV	Net Present Value
O&M	Operations and Maintenance
PDR	Peak Demand Reduction
PECO	PECO Energy Company (Exelon)
PPL	PPL Electric Utilities Corporation
PA PUC	Pennsylvania Public Utility Commission
PV	Photovoltaic
PY	Program Year (June 1 to May 31)

RECS	Residential Energy Consumption Survey (EIA)
RISE PA	Reducing Industrial Sector Emissions in Pennsylvania
SWE	Statewide Evaluator (Act 129 monitoring and verification body for electric distribution companies' Energy Efficiency and Conservation Plans)
T&D	Transmission and Distribution
TRC	Total Resource Cost
TRM	Technical Reference Manual characterizing many variables of energy efficiency measures, assisting jurisdictions in setting avoided-cost rates, determining cost-effectiveness of measures, and other metrics for use in the evaluation, measurement, and verification of an energy efficiency program's performance in Pennsylvania
TUS	Bureau of Technical Utility Services (Pennsylvania Public Utility Commission)

EXECUTIVE SUMMARY

The Pennsylvania Public Utility Commission (PA PUC or Commission) contracted with the Act 129 Statewide Evaluator (SWE) to provide audit and planning consulting services for Phase IV of the Commonwealth’s Act 129 Energy Efficiency and Conservation (EE&C) programs. To prepare for a potential Phase V of Act 129, the SWE team performed an energy efficiency and peak demand reduction market potential study (EEPDR MPS). The purpose of this study was to determine what cost-effective electric energy efficiency (EE), and associated peak demand reduction (PDR), savings are feasible for the four electricity distribution companies (EDCs) subject to Act 129.¹ Consistent with Act 129 eligibility requirements, this study is limited to electric efficiency measures and distributed generation, namely behind-the-meter combined heat and power (CHP) generation and solar photovoltaic (PV) generation.

This EEPDR MPS informs the Commission’s plans for a potential Phase V of Act 129 programs. The Commission can use the results of the EEPDR MPS to determine if Phase V of Act 129 will be cost-effective. If it is, the Commission can also use the results to establish performance targets for the EDCs and to direct additional cost-effective programming. Since legislated budget caps on investments in efficiency services constrain such EDC programming, this EEPDR MPS has estimated energy savings potential commensurate with these budgets. The budget constraints are shown in Table 1.

Table 1: EDC Specific Budget Constraints, 2026–2030 Total (Nominal Dollars)^a

EDC	Total Phase V Budget (\$MM)
PECO	\$427.4
PPL	\$307.5
Duquesne Light	\$97.7
FirstEnergy	\$390.3
Statewide^a	\$1,222.9

Note(s): ^a Statewide refers to the combined results for all four EDCs subject to Act 129.

The SWE team modeled the traditional energy efficiency potential and integrated this with budget-constrained estimates of solar PV and CHP potential to derive the Act 129 EE Potential. This decision was in part because CHP projects have unique attributes (for example, CHP system size, sporadic adoption, site dependency, long lead times from design to operation, etc.) that require more rigorous assessment. While solar PV projects have become increasingly common in EDC program portfolios during Phase IV, uncertainty persists regarding supporting policies such as tax incentives and net-metering that have historically created a favorable environment for PV project development. Thus, the SWE team blended in a 5 percent and 1 percent spending allocation for solar PV and CHP respectively, drawn proportionally from all traditional EE sectors, to derive the overall Act 129 EE

¹ See Act 129 of 2008. November 14, 2008. [Weblink](#). The Act applies to the four EDCs with 100,000 or more customers: PECO Energy Company (PECO), PPL Electric Utilities Corporation (PPL), Duquesne Light Company (Duquesne Light) and FirstEnergy Corporation (FirstEnergy). Phase IV is scheduled to end May 31, 2026, and Phase V, if implemented, would begin June 1, 2026.

Potential. This Act 129 EE Potential constitutes the central results of this study. The value balances the historically mixed performance in Pennsylvania for acquiring CHP savings in EE&C programs and the increasing prevalence of solar PV contributions to EDC Phase IV savings to-date.

In this study, the four legacy FirstEnergy EDCs (Met-Ed, Penelec, Penn Power, and West Penn Power) are merged into a single “FirstEnergy” EDC. The study results are presented for the unified FirstEnergy EDC, as this is how the PA PUC will set Phase V goals. However, due to the timing of the consolidation and Commission approval, much of the technical research supporting the Phase V EEPDR MPS was conducted separately for the four legacy EDCs. The SWE team combined the results for the four legacy EDCs during the reporting process, but many tables and figures in this report display study inputs and assumptions separately. These separate inputs reflect the underlying technical and economic research and modeling procedures for the legacy FirstEnergy EDCs.

HIGH-LEVEL RESULTS SUMMARY

In the tables below, and throughout this report, the report refers to each year in the period June 1, 2026, through May 31, 2031 (the assumed period for Phase V), by the calendar year in which it begins. The full study also analyzed a period continuing through May 31, 2036, to assess longer-term potential.

Table 2 summarizes the key economic findings for the three primary EE scenarios presenting the present value costs, benefits, and benefit-cost ratios (BCR). Note that these results reflect the economics affecting the statewide economy based on a Total Resource Cost (TRC) test, and did not reflect program budgets nor the cost-effectiveness on the electric utility system alone. As shown, substantial cost-effective efficiency potential remains. The Economic Potential scenario results, consistent with standard industry practice, do not include any non-measure program costs. That is, this scenario aims to quantify the potential from the cost and benefits of the efficiency measures themselves, without assuming any program intervention. Consequently, non-measure program costs are first incorporated in the Achievable Potential scenario. This is why costs do not fall in similar proportion to benefits when moving from Economic Potential to Achievable Potential. In addition, because the Program Potential scenario assumes incentives covering a smaller share of incremental measure costs, it was not surprising to find an increase in the benefit-cost ratio (BCR) compared to the Achievable Potential scenario as the latter captured significant savings, even for only marginally cost-effective measures, which were a smaller share in the former.

Table 2: Traditional EE Potential Benefits and Costs by EDC and Scenario, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Economic Potential			Achievable Potential			Program Potential		
	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)
PECO	\$1,914.3	\$4,465.9	2.33	\$1,200.7	\$1,907.0	1.59	\$793.5	\$1,355.6	1.71
PPL	\$2,392.5	\$6,014.4	2.51	\$1,397.1	\$2,476.1	1.77	\$902.9	\$1,694.1	1.88
Duquesne Light	\$564.8	\$1,531.3	2.71	\$335.4	\$625.3	1.86	\$229.6	\$452.6	1.97
FirstEnergy	\$2,697.4	\$6,483.6	2.40	\$1,532.7	\$2,626.9	1.71	\$954.4	\$1,762.9	1.85
Statewide	\$7,569.0	\$18,495.1	2.44	\$4,465.9	\$7,635.3	1.71	\$2,880.4	\$5,265.2	1.83

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 3 shows the estimated Act 129 Traditional EE Potential in Pennsylvania consistent with Act 129 spending caps. As can be seen, the SWE team estimated an overall utility program acquisition cost of \$402/MWh. Full capture of this Act 129 Traditional EE Potential would result in total incremental annual savings of 3,039.6 GWh and 399 MW of peak demand savings.

Table 3: Act 129 Traditional EE Potential Summary, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Acquisition Costs (\$/MWh)	Budget (\$MM)	TRC Costs (\$MM)	TRC Benefits (\$MM)	Net TRC Benefits (\$MM)	TRC BCR (X:1)	Energy Savings (GWh)	Peak Demand Reduction (MW)
PECO	\$419.9	\$427.4	\$578.3	\$987.9	\$409.6	1.71	1,017.8	133
PPL	\$404.8	\$307.5	\$456.0	\$855.7	\$399.7	1.88	759.6	101
Duquesne Light	\$404.1	\$97.7	\$132.2	\$260.6	\$128.4	1.97	241.8	33
FirstEnergy	\$382.5	\$390.3	\$536.3	\$992.1	\$455.8	1.85	1,020.4	132
Statewide	\$402.3	\$1,222.9	\$1,702.8	\$3,096.3	\$1,393.5	1.82	3,039.6	399

Note(s): ^a Budgets and acquisition costs are in nominal dollars. Benefits, costs, and net benefits are in real (2026) dollars. GWh and peak MW are the sum of first-year incremental annual savings from 2026 through 2030. Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the Demand Response (DR) Market Potential Study (MPS).

Table 4 shows Act 129 Traditional EE Potential energy savings in GWh and as a percentage of 2009/2010 load, assuming that savings are captured evenly across Phase V. This results in annual savings of 0.41 percent of the 2009/2010 load forecast. Table 5 shows Act 129 Traditional EE Potential's coincident peak demand savings, in MW and as a percentage of 2007/2008 peak demand, again under the assumption that coincident peak savings are captured evenly across

Phase V.² This results in a 0.30 percent peak demand reduction each year from 2007/2008 peak load levels. Note that peak MW demand reduction per modeled GWh saved is reduced relative to the findings of the previous EEPDR MPS—an outcome driven by an evolving measure mix and a change of established convention to present demand impacts as the average of summer and winter peak coincident reductions.

Table 4: Act 129 Traditional EE Potential GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	203.6	203.6	203.6	203.6	203.6	1,017.8
PPL	151.9	151.9	151.9	151.9	151.9	759.6
Duquesne Light	48.4	48.4	48.4	48.4	48.4	241.8
FirstEnergy	204.1	204.1	204.1	204.1	204.1	1,020.4
Statewide	607.9	607.9	607.9	607.9	607.9	3,039.6
% of 2009/2010 load forecast	0.41%	0.41%	0.41%	0.41%	0.41%	2.07%

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 5: Act 129 Traditional EE Potential MW Peak Demand Reduction by EDC and Year^{a,b}

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
PECO	27	27	27	27	27	133
PPL	20	20	20	20	20	101
Duquesne Light	7	7	7	7	7	33
FirstEnergy	26	26	26	26	26	132
Statewide	80	80	80	80	80	399
% of 2007/2008 load	0.30%	0.30%	0.30%	0.30%	0.30%	1.50%

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the DR MPS.

The Act 129 Traditional EE Potential presented above assumes that the entirety of the Phase V budgets would be spent on traditional energy efficiency programs (i.e., excluding CHP and PV potential). The SWE team integrated budget constrained estimates of traditional energy efficiency, PV, and CHP potential to derive the Act 129 EE Potential. The Act 129 EE Potential assumed 94 percent of program budgets were allocated to traditional EE, 1 percent to CHP, and the remaining 5 percent to solar PV, the result is the Act 129 EE Potential. Energy savings and peak demand reductions are summarized in Table 6 and Table 7, respectively. As presented in Table 8, the Act 129 EE Potential portfolio has an acquisition cost of \$337.2 per MWh saved. For comparison, the modeled statewide average Act 129 Potential acquisition cost from the Phase IV EEPDR MPS was

² See Act 129 of 2008. November 14, 2008. [Weblink](#). Page 55. The reference years of 2009/2010 for energy and 2007/2008 for demand are established practice in Act 129 documents.

\$271.0 per MWh saved (in nominal dollars). The actual Program Year (PY) 15 (June 1, 2023–May 31, 2024) acquisition costs were \$290.0.³

Table 6: Act 129 EE Potential GWh Savings by EDC, Year, and Component^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
Traditional EE Potential (94% Budget Allocation)						
PECO	191.3	191.3	191.3	191.3	191.3	956.7
PPL	142.8	142.8	142.8	142.8	142.8	714.0
Duquesne Light	45.5	45.5	45.5	45.5	45.5	227.3
FirstEnergy	191.8	191.8	191.8	191.8	191.8	959.2
Statewide	571.4	571.4	571.4	571.4	571.4	2,857.2
CHP (1% Budget Allocation)						
PECO	26.6	26.6	26.6	26.6	26.6	133.0
PPL	19.1	19.1	19.1	19.1	19.1	95.7
Duquesne Light	6.1	6.1	6.1	6.1	6.1	30.4
FirstEnergy	24.3	24.3	24.3	24.3	24.3	121.5
Statewide	76.1	76.1	76.1	76.1	76.1	380.7
Solar PV (5% Budget Allocation)						
PECO	21.7	24.0	26.4	29.0	31.8	132.9
PPL	16.5	18.1	19.8	21.7	23.6	99.6
Duquesne Light	4.9	5.4	6.0	6.5	7.2	30.0
FirstEnergy	20.7	22.8	25.1	27.5	30.1	126.2
Statewide	63.8	70.3	77.3	84.7	92.7	388.7
Act 129 EE Potential						
PECO	239.6	241.9	244.3	247.0	249.8	1,222.6
PPL	178.4	180.0	181.8	183.6	185.6	909.4
Duquesne Light	56.5	57.0	57.5	58.1	58.7	287.7
FirstEnergy	236.9	239.0	241.2	243.6	246.2	1,206.9
Statewide	711.4	717.9	724.8	732.3	740.2	3,626.6

Note(s): ^a Totals may not equal sum of column or row due to rounding

³ See SWE Final Annual Report: Act 129 Program Year 15. December 4, 2024. [Weblink](#). Note: Values only reported to the cents per kWh in the source document.

Table 7: Act 129 EE Potential MW Peak Demand Reduction by EDC, Year, and Component^a

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
Traditional EE Potential (94% Budget Allocation)						
PECO	25	25	25	25	25	125
PPL	19	19	19	19	19	95
Duquesne Light	6	6	6	6	6	31
FirstEnergy	25	25	25	25	25	124
Statewide	75	75	75	75	75	375
CHP (1% Budget Allocation)						
PECO	4	4	4	4	4	19
PPL	3	3	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	3	3	17
Statewide	11	11	11	11	11	53
Solar PV (5% Budget Allocation)						
PECO	3	3	3	4	4	17
PPL	2	2	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	4	4	17
Statewide	8	9	10	11	12	51
Act 129 EE Potential						
PECO	32	32	32	32	33	161
PPL	24	24	24	25	25	122
Duquesne Light	8	8	8	8	8	40
FirstEnergy	31	31	32	32	32	158
Statewide	94	95	96	97	98	479

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 8: Act 129 EE Potential Energy Savings, Peak Demand Reductions, and Acquisition Costs by EDC^{a,b}

EDC	Acquisition Cost (\$/MWh)	Budget (\$MM)	Energy Savings (GWh)	Peak Demand Reduction (MW)
PECO	\$349.6	\$427.4	1,222.6	161
PPL	\$338.1	\$307.5	909.4	122
Duquesne Light	\$339.6	\$97.7	287.7	40
FirstEnergy	\$323.4	\$390.3	1,206.9	158
Statewide	\$337.2	\$1,222.9	3,626.6	479

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Budgets and acquisition costs are in nominal dollars. MWh and peak MW are the sum of first-year incremental annual savings for 2026–2030. Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the DR MPS.

CONCLUSION

There is significant potential for EE savings in Pennsylvania, and a comprehensive portfolio of measures can cost-effectively capture a subset of those potential savings within the budget constraints set forth in Act 129. The full study provides the estimated Program Potential for traditional EE and associated peak demand reductions and analyzes budget-constrained potential for solar PV and CHP. The addition of solar PV and CHP to the portfolio lowers the overall acquisition cost relative to the traditional EE potential alone. The Act 129 EE Potential reflects actual estimated savings when limiting budgets to the Act 129 spending limits, including traditional EE and associated peak demand reductions, as well as CHP and solar PV for each EDC and statewide.

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1.0 INTRODUCTION

The PA PUC contracted with the Act 129 SWE team to provide audit and planning consulting services for Phase IV of the Commonwealth's Act 129 EE&C programs. To prepare for a potential Phase V of Act 129, the SWE team performed this EEPDR MPS. The purpose of this study was to determine what cost-effective electric EE and peak demand reduction savings the four EDCs subject to Act 129 could achieve.

Act 129 requires the PA PUC to establish an EE&C program, including the following characteristics:

- Adopt an “[EE&C] program to require [EDCs] to adopt and implement cost-effective energy efficiency and conservation plans to reduce energy peak demand and consumption within the service territory of each [EDC] in this commonwealth.”⁴
- Adopt additional incremental reductions in consumption if the benefits of the EE&C program exceed its costs.⁵
- Evaluate the costs and benefits of the Act 129 EE&C programs in Pennsylvania by November 30, 2013, and every five years thereafter.⁶
- Ensure that the EE&C Program contains “an evaluation process, including a process to monitor and verify data collection, quality assurance, and results of each plan and the program.”⁷

This EEPDR MPS informs the Commission's plans for a potential Phase V of Act 129 programs. The Commission can use the results of the EEPDR MPS to determine if Phase V of Act 129 is cost-effective, and if so, to inform performance targets for the EDCs and to direct additional cost-effective programming. The Commission's goals include ensuring that EE investments make best use of ratepayer funds with the highest return. This study presents details about traditional energy efficiency Program Potential and Act 129 EE Potential. In addition, Appendix A presents the modeling results from the Economic Potential and Achievable Potential traditional EE scenarios, statewide and for individual EDCs. Throughout this report, the term “traditional EE” is used to refer to energy efficiency measures exclusive of CHP and PV. For full definitions of these potential scenarios, please see the *Important Definitions* section of this report.

This study estimated the potential for Phase V EE and associated peak demand reductions. Section 2.0 describes the methods for estimating traditional EE potential under a scenario that considers the constraints from the current legislated caps on EE investment. Section 3.0 provides the results of that estimation. Section 4.0 discusses the results of a sensitivity analysis on the EE potential when braiding of external funding from two pending programs to be administered by the Pennsylvania Department of Environmental Protection (DEP) is considered. Section 5.0 describes the methods for estimating the budget-constrained potential for CHP and the associated results, Section 6.0 describes the methods for estimating the potential for solar PV and the associated results, and Section 7.0 summarizes the results of this study and offers conclusions from these results, including the results of the Act 129 EE Potential scenario for each EDC for Phase V of Act 129.

⁴ See Act 129 of 2008. November 14, 2008. [Weblink](#). Page 55.

⁵ See Act 129 of 2008. November 14, 2008. [Weblink](#). Page 55.

⁶ See Act 129 of 2008. November 14, 2008. [Weblink](#). Page 55.

⁷ See Act 129 of 2008. November 14, 2008. [Weblink](#). Page 51.

1.1 SCOPE

This study estimated the traditional EE, CHP, Solar PV, and associated peak demand reduction potential in Pennsylvania. The results in Section 3.0 contain estimated statewide traditional EE potential, and individual potential estimates for each EDC. The study assessed the potential across 10 years (June 2026 through May 2036), although the report emphasizes results for the first five years, aligned with EDC planning and goal setting.⁸ The calendar years 2026–2030, used for concision, refer to the timeframe of June 1, 2026, through May 31, 2031.

Act 129 EE Potential can most directly inform efficiency savings for the EDCs corresponding to the Act 129 Phase V funding levels. To build toward those results, the SWE team modeled the Program Potential scenario with the assumption that incentives cover on average 50 percent of incremental costs (100 percent of low-income participants). The team modeled a low-income spending carve-out consistent with historical EDC spending levels in the low-income sector: approximately 13 percent of EE budgets.

In modeling energy savings, the SWE team considered all electric efficiency saving measures other than non-CHP fuel switching and fuel switching opportunities that replace electric heating with fossil fuels. Consistent with the Phase IV EEPDR MPS approach, the team assessed CHP separately and blended in a 1 percent spending allocation to that category, drawing proportionally from all traditional EE sectors. This value balances the historically mixed performance in Pennsylvania for acquiring CHP savings in EE&C programs with the fact that low-cost savings are available in all EDC territories—according to previously modeled results. In addition, in response to the increasing prevalence of solar PV in the EDC portfolios, the SWE team also developed a budget constrained estimate of solar PV potential capped at a 5 percent spending allocation. It is these results with CHP and solar PV blended in, and budgets calibrated precisely to Act 129 budget caps, that have constituted the *Act 129 EE Potential*.

2.0 TRADITIONAL ENERGY EFFICIENCY METHODS

2.1 OVERVIEW

This study modeled the potential achievable traditional EE in Pennsylvania’s EDCs’ territories, fully considering legislated investment constraints. The SWE team analyzed the entire electric EE potential in buildings and industries for all retail customers in each EDC territory.⁹ All customer classes were addressed: residential (including low-income customers), and commercial and industrial (C&I). Separately, small and large C&I subsectors and low-income and non-low-income residential sectors were assessed. This study addressed only electric efficiency. Although the SWE team recognized there were ancillary fossil fuel savings from electric efficiency measures (in assessing measure cost-effectiveness), the team did not consider measures that primarily addressed fossil fuel efficiency, nor did it report on fossil fuel impacts. The team also did not

⁸ Appendix A contains results for the full 10-year time horizon for the Program Potential.

⁹ This study did not address any electric transportation efficiency, nor did it assess any additional efficiency that could offset privately owned distributed electric generation. The SWE team deemed those measures not to sufficiently affect EDC retail loads to alter the results.

consider fuel-switching measures other than CHP (addressed in Section 5.0) and electric-to-fossil-fuel switching. Potential for solar PV is discussed in Section 6.0.

The SWE team analyzed the EE potential for 10 years (June 2026 through May 2036), to coincide with Year 1 of the Act 129 Phase V EDC planning cycle. The report refers to each PY by the calendar year in which it begins. Note that because the primary interest is on the Program Potential scenarios for the 5-year Phase V planning period, the SWE team addressed those 5-year results in Section 3.0 and throughout this report.

In addition, the SWE team received clear guidance regarding several specific requirements for this EEPDR MPS, which differed from a standard study design for program potential:

- Modeling a comprehensive mix of measures rather than a mix that represents past programs (as in analysis of a program plan)
- Modeling the low-income sector by carving out a spending allocation consistent with historical Act 129 spending proportions within Act 129 EE programs in Pennsylvania (13.4 percent)
- Modeling budget-constrained achievable share of CHP savings and incorporating those savings into the EE results (1 percent CHP spending carve-out)
- Modeling budget-constrained achievable share of solar PV savings and incorporating those savings into the EE results (5 percent solar PV spending carve-out)
- Modeling EE within expected Phase V budget levels

The SWE team kept CHP as a stand-alone analysis because the cost-effective achievable potential for CHP was generally quite large. However, because it can come from a few very large systems that cannot be assumed to be captured in any given program year, the team treated this analysis differently from other EE resources. The SWE team used data from existing CHP projects in Phase IV to develop the Phase V CHP potential, however, no iterative CHP potential analysis was conducted for Phase V. Consequently, and to maintain full transparency regarding these two different savings opportunities, Section 3.0 addresses results from the traditional EE models, whereas Section 5.0 presents results for CHP. However, when fundamental results and conclusions are presented in Section 7.0, the team integrated traditional efficiency and CHP results. In Section 7.0, the SWE team incorporated CHP potential into the EE results as a 1 percent spending carve-out, drawn proportionally from all EE sector budgets.

This study has significantly benefited from the associated baseline studies that collected large amounts of primary data on the types of buildings found in the EDCs, their construction practices, the existing penetration of energy-consuming technologies, the typical operational characteristics, and the electric loads associated with end-uses.^{10,11} This granular breakdown of primary data allowed the SWE team to segment the major sectors into different building types. For the low- and non-low-income residential sector, the team modeled single-family and multifamily buildings separately. For the C&I sector, the team disaggregated the loads and efficiency potential by the building types shown in Table 9, consistent with the sampling plan developed for the baseline study.

¹⁰ See the *2023 Residential Baseline Study*, Docket No. M-2023-3044490. Issued March 25, 2024. [Weblink](#).

¹¹ See the *2023 Non-Residential Baseline Study*, Docket No. M-2023-3044490. Issued March 25, 2024. [Weblink](#).

Table 9: Modeled C&I Building Types

Small C&I	Large C&I
Small office	Large office
Small retail	Large retail
Small education - college / university	Large education - college / university
Small education - other	Large education - other
Small grocery	Large grocery
Small health - hospital	Large health - hospital
Small health - other	Large health - other
Small industrial manufacturing	Large industrial manufacturing
Small institutional / public services	Large institutional / public services
Small lodging	Large lodging
Small miscellaneous / other	Large miscellaneous / other
Small warehouse	Large warehouse
Small restaurant	Large restaurant

To determine the cost-effectiveness of the EE measures, the SWE team relied on the widely accepted Total Resource Cost (TRC) Test as the screening criterion, consistent with Pennsylvania practice, as described in the 2026 TRC Test Order. The TRC Test considers the full costs and benefits of efficiency measures from the perspective of the Pennsylvania economy. The primary costs comprised the incremental cost of the efficiency measures and the non-measure-related program delivery costs incurred by the EDCs. The primary benefits were from electric energy savings across measure lifetimes, with values based on the societal avoided costs of generation, transmission, and distribution. The SWE team has accounted for all of these impacts in the estimation of a measure's costs and benefits across its lifetime, or for a maximum of 15 years, the longest measure life allowed under Act 129.¹² The team has also provided all costs and benefits in terms of net present value (NPV), in 2026 real dollars, of the current and future costs and benefits. The next subsection offers a description of the methods and some of the major assumptions related to cost-effectiveness screening.

2.2 COMBINED TOP-DOWN / BOTTOM-UP METHOD

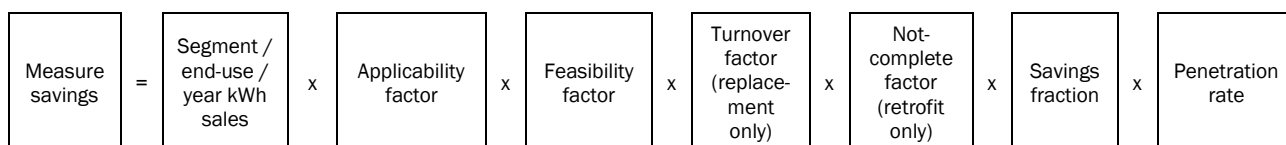
The general approach for this study, in all market sectors, was to begin with a top-down method. This approach ensured that all results were calibrated to the actual electric loads and forecasts for each EDC. In general terms, the top-down approach started with the energy sales forecast and disaggregated it first into new and existing construction, then into separate loads for each building type or market segment, and then into each major end-use within each building type. From this information, the team determined the percentage of the applicable end-use energy that might be

¹² See Act 129 of 2008. November 14, 2008. [Weblink](#). Act 129 defines a TRC test as “a standard test that is met if, over the effective life of each plan not to exceed 15 years, the NPV of the avoided monetary cost of supplying electricity is greater than the NPV of the monetary cost of [EE] conservation measures.” 66 Pa. C.S. § 2806.1(m).

offset by the installation of a given efficiency measure in each year, applying actual measure level savings. The approach merged the top-down estimates of applicable energy use to individual bottom-up measure-level estimates of incremental costs, savings, lifetimes, and other measure-level parameters. Appendix B contains energy forecasts used in the analysis. Appendix C provides energy sales disaggregation data.

Figure 2 offers the central equation for estimating measure savings potential.

Figure 2: Equation for Deriving Measure Savings



For Figure 2, the team applied the following definitions:

Applicability is the fraction of the end-use electric load for each building type and year attributable to a particular end-use load to which a high-efficiency measure can be applied. For example, for replacing office interior linear fluorescent lighting with higher-efficiency light-emitting diode (LED) technology, the team used the portion of the office building's total interior lighting electrical load attributable to linear fluorescent lighting.

Feasibility is the fraction of applicable end-use sales for which it is technically feasible to apply an efficiency measure. Numbers below 100 percent reflect engineering or other technical barriers that would preclude adoption of the measure. Feasibility was not reduced for economic or behavioral barriers that would reduce penetration estimates. Rather, it reflects technical or physical constraints that would make measure adoption impossible or ill-advised. An example might be omitting home energy reports potential for master-metered buildings.

Turnover is the percentage of existing equipment that will be naturally replaced each year, due to failure, remodeling, or renovation. This applies only to natural replacement (replacement upon failure) and renovation market opportunities. In general, turnover factors are assumed to be 1 divided by the baseline equipment measure life (for example, assuming that 10 percent or 1/10 of existing stock of equipment is replaced each year for a measure with a 10-year estimated life).

Not-complete is the percentage of existing equipment that does not already represent the high-efficiency option. This applies only to retrofit (early retirement or other time-independent efficiency opportunities) markets. For example, if 30 percent of current single-family homes already have Wi-Fi-connected thermostats, then the not-complete factor for that efficiency measure would be 70 percent (1.0 – 0.3), indicating that only 70 percent of the total potential from thermostats remains.

Savings fraction represents the percent savings of the high-efficiency technology, compared to the energy use from either existing stock or new baseline equipment for retrofit and non-retrofit markets, respectively. Savings fractions are based on individual measure data and assumptions about existing stock efficiency, standard practice for new purchases, and high-efficiency options. Note that for some measures, this savings fraction could change over the life of the measure, if one assumes

early replacements of baseline equipment are replaced with new standard efficiency equipment at some point prior to the end of the efficiency measure lifetime.

Annual penetrations are the measure penetrations (adoption rate) as a percentage of the total efficiency measure opportunity remaining in any given year.

The product of these factors is the total energy-saving potential for each measure. The SWE team then derived the costs by applying the average cost per energy unit saved for each measure to the total potential for that measure. Note that the SWE team sometimes modeled additional future costs in subsequent years to account for impacts on operations and maintenance (O&M) costs (for example, replacement lamps over a fixture's lifetime).

Appendices D, E, and F present all factors. The next subsection offers details on how the SWE team developed the individual factors and other model inputs.

2.3 EFFICIENCY MEASURES

The SWE team analyzed more than 200 efficiency technologies, and separately assessed each technology across all applicable permutations of market and building type or segment, and building end-use application (for example, buildings with electric resistance heating, heat pumps, or gas furnaces), resulting in more than 6,000 efficiency measures. The SWE team then ran separate models for each scenario and EDC. Measures addressed all sectors and major end-use categories. Separately assessing measures for different markets was important because the same measure typically has different costs and savings depending on the market application. The SWE team defined the market characteristics as follows:

Market-driven measures, often referred to as replace on burnout, occur when natural market forces are driving an investment in a new piece of equipment. For example, the replacement of an air-conditioning unit that has failed or the planned remodeling of interior lighting are points at which investments in equipment are made and become opportunities for more efficient investment. These measures are time dependent, and the efficiency opportunity exists only at the time of this natural investment. If it is not adopted in one of these moments, the savings from that measure are typically lost for the life of the piece of equipment. For these measures, the applicable baseline is the standard efficiency of new equipment or practices, rather than the efficiency of the existing equipment. Correspondingly, the incremental cost of the measure is the difference in cost between the efficient equipment and newer standard efficiency equipment. Where applicable, the SWE team estimated all standard new efficiencies consistent with the 2026 Technical Reference Manual (TRM).^{13,14} These often reflect the minimum allowable efficiency by building code or federal standard, to the extent that they exist.

Retrofit measures, also referred to as early replacement measures, happen when there is no natural market planned investment. Examples include the addition of controls to an existing unitary air-conditioning unit, or the retirement and replacement of a refrigerator before the end of its useful life, only for reasons of improving efficiency performance. Retrofit measures are not time dependent and

¹³ See the 2026 TRM, Volume 2: Residential Measures, Docket No. M-2023-3044491, Adopted September 12, 2024. [Weblink](#).

¹⁴ See the 2026 TRM, Volume 3: Commercial & Industrial Measures, Docket No. M-2023-3044491, Adopted September 12, 2024. [Weblink](#).

therefore exist as efficiency opportunities throughout the study period—until captured or eliminated as a stock adjustment from an assumed market-driven turnover. For retrofit measures, since the counterfactual condition is no action, the initial incremental cost is the full installed cost of the measure, including equipment and labor. The savings assume a baseline of the existing equipment or practice. In the counterfactual case, for early equipment replacement measures, there is a time in the future when the existing equipment would have failed and needed replacement, anyway. Thus, the entire replacement capital investment cycle is permanently shifted. This results in present-value cost savings, but also a shift in savings, because the baseline shifts to an assumed, more efficient piece of equipment that would have been installed before the end of the retrofit measure lifetime.

New construction measures occur as new buildings are under construction or a major renovation project is under way. These are really a type of market-driven measure since market forces drive new construction activity. However, the SWE team separately modeled these measures because, rather than being triggered by a turnover rate, they are driven by the new construction forecast. In addition, some new construction-specific measures, such as integrated building design and commissioning, were considered. These apply only to new construction.

2.4 ENERGY FORECASTS

2.4.1 Electricity Forecast

The SWE team based the annual electric sales forecasts on each EDC's most current forecast. In consultation with the Commission and the EDCs, the SWE team assessed the underlying methods and assumptions in the forecasts to understand how much, if any, assumed future efficiency program savings were embedded in them. For years in which any measure might still be providing savings, based on its lifetime and not covered by any forecasts, the SWE team extrapolated future years' impacts from the average annual growth rate for the initial forecast period.

2.4.2 Forecast Disaggregation by Building Vintage, Segment, and End-Use

The SWE team initially disaggregated the forecasts into estimated load associated with new construction and existing buildings. The entire stock of existing buildings presents efficiency opportunities in every year, whereas new construction efficiency opportunities are tied only to the buildings that complete construction in that year. The EDCs' data was not disaggregated to the necessary level of granularity, so the SWE team complemented these data with information from the Act 129 SWE baseline studies, as well as from other sources of regional data where gaps persisted. The team segmented residential loads into low-income and non-low-income categories, using data from the American Community Survey (U.S. Census).¹⁵

The SWE team then broke down forecasts, by building type, into major end-uses (for example, heating and cooling) using the U.S. Energy Information Administration's 2020 Residential Energy

¹⁵ See the American Community Survey (ACS). [Weblink](#).

Consumption Survey (RECS)¹⁶, 2018 Commercial Building Energy Consumption Survey (CBECS)¹⁷, and 2018 Manufacturing Energy Consumption Survey (MECS)¹⁸ for the Mid-Atlantic region.

Appendix C presents the final 2026 electric load disaggregation.

2.5 MEASURE CHARACTERIZATION

In addition to all the measure-specific factors defined from the top-down method, the SWE team defined the following attributes for each measure:

- Measure lifetime (both baseline and high-efficiency options, if different, or if retrofit accounting for future cost and savings shifts), capped at 15 years
- Measure savings (all energy sources when applicable)
- Measure incremental cost
- O&M impacts, if applicable (relative to baseline equipment)
- Water use impacts, if applicable (relative to baseline equipment)

2.5.1 Energy Savings

For each technology, the SWE team estimated the energy use of baseline and high-efficiency measures. Where applicable, consistency was maintained with the 2026 TRM estimates.¹⁹ For measures not in the TRM, the SWE team estimated savings via recent studies from other nearby jurisdictions, other nearby TRMs, and other data sources, as needed. For retrofit measures relying on existing conditions, or where the TRM requires customer-specific inputs, the team relied primarily on the new baseline data, supplemented with secondary research, industry best practices, or standard engineering analyses.

2.5.2 Costs

The Pennsylvania measure costs were drawn from the Pennsylvania Incremental Cost Database,²⁰ supplemented with secondary research and alternative sources where necessary.

2.5.3 Lifetimes

Where possible, the SWE team adopted measure lives from the 2026 TRM. Where unavailable, the SWE team used other available resources for measure lifetime information, relying primarily on recent studies conducted in nearby jurisdictions, primarily New York and New Jersey. These data sources are generally based on other primary research studies and TRMs, as well as manufacturer-published estimates. As required by PA TRC Order best practices, the team capped measure lifetimes at 15 years for this study, even for measures that typically have longer useful lifetimes.

¹⁶ See the Residential Energy Consumption Survey (RECS). [Weblink](#).

¹⁷ See the Commercial Building Energy Consumption Survey (CBECS). [Weblink](#).

¹⁸ See the Manufacturing Energy Consumption Survey (MECS). [Weblink](#).

¹⁹ See the 2026 TRM Final Order, Docket No. M-2023-3044491. Adopted September 12, 2024. [Weblink](#).

²⁰ See the 2026 TRC Test Final Order, Exhibit 5: 2026 Incremental Measure Cost Database, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#).

2.5.4 Operations and Maintenance Impacts

O&M impacts are benefits unrelated to energy costs of operations. They represent, for example, replacement lamp purchases for new high-efficiency fixtures, or changes in labor time and costs for servicing high-efficiency versus standard-efficiency measures. High-efficiency equipment can often reduce O&M costs because of higher-quality components that require less-frequent servicing. On the other hand, some high-efficiency technologies require enhanced servicing, or have expensive components that need to be replaced prior to the end of the measures' lifetimes. For most measures, O&M impacts are very minimal, because many efficient and baseline technologies have the same O&M costs over time. Where they are significant, the SWE team has included them, basing estimates on the SWE team's engineering and cost analyses, information in the 2026 TRM, and other relevant data.

2.5.5 Special Considerations for Lighting

Because lighting, both in the residential and C&I sectors, has historically played a large role in EE programs, this study's treatment of it warrants special discussion. Consistent with the previous EEPDR MPS study and as discussed with and approved by the Bureau of Technical Utility Service (TUS), this study assumes virtually no potential for residential lighting, despite EDCs still pursuing significant lighting savings in Phase IV. As of the Phase V TRM, implementation of most prevalent types of screw-based general service LED lamps are limited to direct install programs due to the U.S. Department of Energy's (DOE) codification of the 45 lumen per watt "backstop" requirement for general service lamps (GSLs). This is anticipated to greatly diminish reported savings for residential lighting in Phase V.

Historically, C&I lighting has been a high contributor of savings in most EE portfolios. EDC reported data²¹ show that lighting savings have averaged 56 percent of total portfolio savings for PY8–PY15. Within the C&I portfolio, lighting plays an outsized role averaging 64 percent of incremental annual savings for PY8–PY15. In the most extreme case, lighting savings accounted for fully 72 percent of total reported portfolio savings for one EDC in PY15. In this case, the magnitude of the reported lighting savings suggests that approximately 10 percent of *total lighting energy consumption* was saved in a single year.

Given the significance of this end-use and the rapidly developing market, the EEPDR MPS makes several assumptions regarding commercial lighting to align the estimated potential with available market data. The Non-Residential Baseline study indicates that LED lighting saturations are already high and increasing quickly; statewide, the percentage of sites with LEDs jumped from 60 percent in 2018 to 82 percent in 2023.²² By count, LED technologies represent 60 percent of commercial lighting statewide and 40 percent of total installed wattage.

The relevant Phase V TRM entry defines the baseline for mid-stream lighting programs as the "the least efficient lighting product the participant could choose to purchase with comparable characteristics and performance," which essentially assumes a federal standard compliant fluorescent for most common lamps and fixture types.²³ While in practice EM&V activities should

²¹ See Electric Distribution Company Act 129 Reporting. [Weblink](#).

²² See the 2023 *Non-Residential Baseline Study*, Docket No. M-2023-3044490. [Weblink](#).

²³ See the 2026 TRM, Volume 3: Commercial & Industrial Measures, Docket No. M-2023-3044491, Adopted September 12, 2024. [Weblink](#).

seek to confirm that, on average, such midstream measures are replacing the assumed baseline, there is increasing risk that LEDs will begin replacing LEDs, particularly as early LED linear replacement lamps (or TLEDs) begin to fail. A recent analysis in Connecticut estimated that by as early as 2028, nearly all new TLEDs will be replacing failed TLEDs yielding minimal or no savings.²⁴

To address this issue, this EEPDR MPS study assumes that opportunities for both market-driven (such as mid-stream) and retrofit measures are limited to the projected stock of baseline lighting equipment and once converted to LEDs will no longer represent a future opportunity (i.e., no backsliding is assumed). To estimate the LED lighting saturation in 2026, data from the 2018 and 2023 Non-Residential Baseline studies was used to establish a linear trend. With retrofit lighting measures representing the predominant form of C&I lighting in the study, incremental costs are significantly higher compared to current program activity and the available market is smaller which has the effect of reducing overall potential savings and increasing acquisition costs.

These assumptions result in significantly lower potential for C&I lighting relative to both historical EDC achievement and previous estimates of potential. Finally, it is assumed that EDC programs will highly leverage the remaining potential in both the Achievable, Program Potential, and Act 129 Traditional EE scenarios capturing the vast majority of it by the conclusion of Phase V.

2.5.6 Special Considerations for Home Energy Reports

Home energy report programs encourage conservation through greater awareness of consumption patterns and engagement with EDC resources to help reduce energy use and lower bills. Home energy report program vendors provide participants with account-specific information that allows customers to view their energy use over time. Behavior reports compare energy use of recipient homes with clusters of similar homes and provide comparisons with other efficient and average homes. This so-called “neighbor” comparison is believed to create cognitive dissonance in participants and spur them to modify their energy use behaviors to be more energy efficient.

A growing list of evaluation studies, including analyses of home energy report persistence investigated by the Phase II and Phase III SWE teams, have observed energy savings among treated households for two years after exposure was discontinued. Consequently, the 2026 TRM provides guidance to EDCs for calculating first-year incremental savings and lifetime savings from home energy report programs using a multi-year measure life with a “decay” perspective.

In summary, the 2026 TRM allows full, evaluated first-year incremental savings to be claimed for the first two years that reports are continuously provided to the same households. Beyond this, an EDC may continue to implement such a program and treat these same customers, but claimable incremental first-year savings drop precipitously year over year.

This study assumed that an EDC would administer home energy reports to a treatment group for two consecutive years, and then cease implementation, to avoid diminishing returns on claimable savings. Consistent with the TRM, the SWE team estimated residual impacts that count toward lifetime savings and cost-effectiveness for the third through fifth year of the measure’s life (those in which treatment has ceased after two years of treatment), after which they essentially fall to zero. The SWE team further assumed that the applicable market for home energy reports was segmented

²⁴ See DNV. Connecticut C&I Lighting Saturation and Remaining Potential Study. June 30, 2022. [Weblink](#).

into five treatment groups of equal size. The first group would be treated for first and second year of Phase V, the second group for the second and third year, and so on, until all homes are treated for two years.

2.6 COST-EFFECTIVENESS ANALYSIS

The SWE team used the TRC Test consistent with the 2026 TRC Test Final Order.²⁵ All cost-effectiveness analyses assessed the NPV of all expected costs and benefits across each measure's lifetime. Costs were primarily the measure costs, and program non-measure costs (for example, marketing and administration).²⁶ Primary benefits were the savings in avoided costs of electric generation, transmission and distribution (T&D), avoided costs of natural gas and any additional O&M benefits and/or impacts from replacement cycle deferrals.

The SWE team discounted all future costs and benefits to the present, using a real discount rate of 3 percent, consistent with the 2026 TRC Test Final Order. The discount rate assumed that initial measure costs would be incurred at the beginning of the year, whereas annual energy savings would be incurred halfway through the year, reflecting an even adoption of measures by participants over the entire year.

Electric avoided costs were specific to each EDC and were derived from the 2026 TRC Test Final Order's Avoided Cost Calculator. The team also adopted natural gas avoided costs from the 2026 TRC Cost Test Final Order's Avoided Cost Calculator based on current Pennsylvania and regional data.

New to Phase V, the value of avoided arrears has been incorporated into the low-income benefits, given that energy efficiency and the resulting reduction in energy burden leads to fewer arrears. This new benefit leads to increased cost-effectiveness for low-income measures resulting in higher potential across all scenarios.

The SWE team provided electric avoided costs for six separate time periods (on-peak summer, off-peak winter, and so on). Further, electric capacity costs reflected the costs at the time of system peak. Therefore, it was necessary to apply electric energy load shapes to each measure, as well as coincidence factors reflecting the share of total connected load savings on average, expected during the system peak. The SWE team relied on load shapes and coincidence factors from the Phase V Avoided Cost Calculator.²⁷ The calculator contains profiles organized by sector, building type, and end-use. Each profile contains six values that sum to 100 percent. Profiles for the lighting end-use come from the Act 129 SWE Commercial and Residential Light Metering Study²⁸. Other end-use

²⁵ See the *2026 TRC Test Final Order*, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#).

²⁶ For individual measure screening, the SWE team did not specify any non-measure program costs because adoption of an additional measure in a program rarely affects the non-measure costs. The SWE team considered program costs only for assessing overall cost-effectiveness of hypothetical programs capturing the Achievable, Program, and Act 129 EE Potential.

²⁷ See the *2026 TRC Test Final Order*, Exhibit 1: 2026 Avoided Cost Calculator, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#).

²⁸ See Pennsylvania 2014 Commercial & Residential Light Metering Study. [Weblink](#).

profiles were developed using load shape data produced by the National Renewable Energy Laboratory (NREL) and organized in its ResStock²⁹ and ComStock³⁰ datasets.

2.7 ANALYSIS OF ECONOMIC POTENTIAL

These analyses allowed the SWE team to estimate a total Technical Potential for each of the measures included, and then the subset of those that passed the cost-effectiveness criteria, to arrive at the estimated Economic Potential. However, the total Economic Potential was significantly less than the sum of each separate measure potential on its own. This variance was because of interactions between measures and competition among measures as discussed previously. Interactions can result from installation of multiple measures in the same facility. For example, assume a building insulation project reduces the heating load. If a high-efficiency air-source heat pump is subsequently installed, the energy savings from the heat pump will be lower because the overall heating load of the building has been reduced. As a result, interactions between measures would be accounted for to avoid double-counting energy savings. Since the economic potential scenario assumes all possible measures are adopted, interactions assume every building installs all applicable measures. The SWE team accounted for interactions by grouping all measures that interact, and then for each measure, adjusting the potential savings opportunities to account for prior assumed measures in the grouping.

In general, the SWE team applied measures in descending order of the number of other measures with which they interact. Therefore, the team tended to rank first whole-building measures, such as integrated new building design, commissioning, and home energy reports, because all measures can theoretically interact. As a result, the whole-building measures that affect multiple end-uses tended to show up as measures with a large share of the overall potential. Because programs cannot persuade all building owners to adopt all measures, the eventual mix in Pennsylvania programs was not likely to reflect the economic potential measure mix.

Measures that compete also needed adjustment, such as when two or more efficiency measures could be used in an application, but only one can be chosen—for example, choosing between installing an LED tube, an LED fixture retrofit kit, or a brand-new LED fixture in the same application. In this case, the total penetration for all competing measures is 100 percent, with priority given to the measures as they ranked from highest savings to lowest savings. If the first measure was applicable in all situations, it would then have 100 percent penetration while all other competing measures would show no potential. On the other hand, if the first measure could only be installed in 50 percent of opportunities, then the second measure would capture the remaining 50 percent of opportunities. To estimate the economic potential, the team generally assumed 100 percent installation of all eligible market-driven efficiency measure opportunities, distributed evenly over the study period.

For all years except 2026, the SWE team also performed stock adjustments to reflect any shifts in the theoretically eligible efficiency opportunities. For example, if 10 percent of office buildings were to do early-retirement retrofits of their air conditioners, then that share of existing air conditioners would be removed from turning over in the following years until the end of the air conditioners' measure life.

²⁹ See National Renewable Energy Laboratory, ResStock. [Weblink](#).

³⁰ See National Renewable Energy Laboratory, ComStock. [Weblink](#).

A notable change in economic potential over the prior EEPDR MPS is driven in part by the new benefit of avoided arrears.³¹ This benefit leads to more low-income measures screening, particularly measures with both high costs and savings. Measures outside of low-income have contributed to the increase in economic potential as well, by either having higher efficiencies or through having larger applicability.

2.8 ANALYSIS OF ACHIEVABLE POTENTIAL

The primary additional steps moving from the Economic Potential scenario to the Achievable Potential scenario were the inclusion of program non-measure costs and the application of penetration rates that reflected known barriers to adoption, which differed by measure. Program non-measure costs might involve general marketing, data tracking, technical assistance services, planning, evaluation and verification, program staffing, and general administration costs. Although the potential study is not intended to distinctly plan and model a specific portfolio of programs, the SWE team developed reasonable estimates of these other costs by major market and/or program delivery category, such as C&I new construction and low-income retrofit.

The Economic Potential scenario provided a reliable upper bound on the amount of potential available. However, in a practical sense, many market barriers limit that potential. Experience has shown that even when an efficiency program pays 100 percent of the measure costs—such as in a direct install application—not all customers are willing to adopt it, typically because of non-financial market barriers. Further, it will typically take time for a program to achieve its maximum adoption levels because of building implementation infrastructure and the cumulative impact of ongoing marketing campaigns.

Consequently, the SWE team modeled the Achievable Potential scenario with 100 percent incentive coverage of measures' incremental cost. The modeling also assumed higher spending on the non-measure side than in the Program Potential scenarios, to cover costs such as increased marketing, administration, and capacity building for critical jobs (carried out by implementation contractors). Achievable Potential is an estimate of what established and well-run efficiency programs with sizable budgets paying 100 percent incentives can achieve.

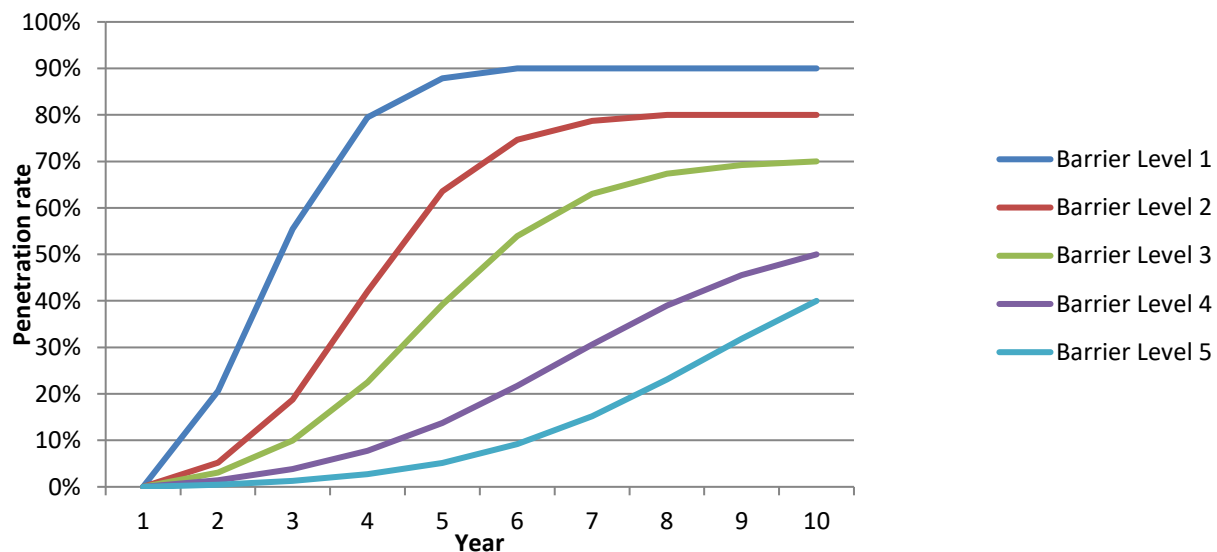
Curves indicating adoption over time in the SWE team's model are shown in Figure 3, dependent on the level of barriers assumed for each measure. These specific curves reflected the maximum assumptions at 100 percent cost coverage and full customer awareness, from unconstrained and aggressive marketing campaigns. These curves reflected typical product adoption "S-curves" (from market adoption literature and EE program experience). They showed that early-on penetration was typically low because one mostly captures the early adopters—people who are particularly open and aware of new products and ideas. It then reached rapid growth, where overall awareness and interest increased, and more mass-market adoption could be captured.

Finally, the penetration growth tailed off as one got closer to maximum adoption. The SWE team used these curves for market-driven measures to reflect the share of new purchasers who could be convinced to adopt efficiency at the appropriate time. For retrofit measures, adoption can also follow a similar trajectory, however, it is instead most often affected by real-world constraints around work force, budgets, and the pace one desires to capture efficiency. The choice of individual customer

³¹ See 2026 TRC Test Final Order, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#).

adoptions still follows the S-curve, but efficiency programs generally cannot market to and serve all willing customers in any given year. For example, low-income programs, which cover 100 percent of all costs and directly install all efficiency measures for the participant, have been operating around the United States since the 1970s. Nevertheless, many low-income households have yet to be reached.

Figure 3: Illustrative Participant Adoption (Penetration) Rates for Market-Driven Measures.



Most measures started with some existing penetration rate, since Pennsylvania already implements programs which have resulted in the installation of efficiency measures. In this case, the curves were shifted to the left until the Year 1 value matched the estimated existing penetration.

2.9 ANALYSIS OF PROGRAM POTENTIAL

One of the key features of Program Potential, as with Achievable Potential, is the specification of program penetration over time. Projecting program penetration is typically subjective and difficult to estimate. However, the SWE team applied a penetration model that considered factors related to the level of market barriers for a particular measure, as well as assumptions about overall awareness, willingness to pay some portion of the incremental cost, and the cost-effectiveness to the participant of the measure. For the Achievable Potential scenario, the SWE team assumed 100 percent program cost coverage, so in theory, the cost-effectiveness to the program participant had no effect on adoption rates.

When modeling Program Potential, the team assumed that program incentives would be offered covering, on average, 50 percent of incremental measure costs (100 percent for low-income participants)—slightly above what EDC programs are currently averaging. The assumption of reduced

incentives relative to the Achievable Potential scenario introduces some participant costs.³² Here, the participant cost-effectiveness aspect of the penetration model came into play. To adjust the penetrations assumed in the Achievable Potential scenario, the model considered the participant's BCR, based on average retail electric rates. Although BCRs influence penetrations in this model, extensive program experience has shown that simply the existence of a program providing a rebate can result in significant penetration, compared to natural market practice, even when the actual cost-effectiveness is very poor.³³

The team also modified the approach to measure interactions and mutual exclusivity among measures. Because the SWE team modeled relatively low levels of efficiency capture due to the Act 129 budget constraints, it did not assume all customers would adopt all measures. Rather, the team recognized that in current practice, many participating customers would simply adopt a single measure. Even when the customer might adopt multiple interacting measures, if the savings were based on the 2026 TRM, any interactions would not likely be considered in the estimated program-tracked savings. Therefore, the team reduced the assumptions around measure interactions, as appropriate, for certain measures in Program Potential scenario.

For measures that are mutually exclusive, the team selected the share of total potential penetration that could be expected to be captured, based on historical program experience. The team did not simply assume the measure with the highest savings would capture all the potential — as would be the case for determining economic potential. For example, new LED fixtures with integrated advanced network controls will save the most energy and lifetime costs, but most current efficiency programs capture much higher adoption of the alternative LED tubes because of the much lower barriers to adoption and lower initial costs.

As with the Achievable Potential, the Program Potential scenario includes assumptions of non-measure program costs to estimate program budgets as well as program and portfolio cost-effectiveness. The SWE team applied these as a percentage of the incentive costs in the model based on the types of programs discussed earlier.³⁴ These non-measure cost percentages were primarily informed by the actual historical program spending for the EDCs. The Commission clarified in the 2021 TRC Test Final Order that for Phase IV directly installed equipment costs should be tracked as incremental measure costs (IMCs) and incentives – inclusive of equipment and labor costs. The Commission included this same clarification in the 2026 TRC Test Final Order.³⁵ Therefore, the breakdown of incentive and non-incentive costs from the EDC annual reports for Phase IV could be used to directly inform estimates of non-incentive program costs for Phase V.

³² Note that this approach to Program Potential differs from that used in the previous EEPDR MPS. Previously, assumed incentive levels were varied until the modeled program budgets approximately equaled the Act 129 budgets by EDC. This study assumes fixed and consistent incentive levels across EDCs to provide insights into a reasonable EE portfolio between the Achievable Potential scenario and business-as-usual EDC programs.

³³ An example of this is the fact that many customers are willing to install new windows and residential solar photovoltaics, despite generally very poor or no net economic gains.

³⁴ Note that because the SWE team did not model specific EDC program plans, measures are bundled into programs tied to broad market categories, such as low-income retrofit, small commercial retrofit, and C&I new construction.

³⁵ See *2021 TRC Test Final Order*, Docket No. M-2019-3006868. Entered December 19, 2019. [Weblink](#). See *2026 TRC Test Final Order*, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#).

The Order also provided Commission guidance that at least 50 percent of Phase IV EE&C plan spending was required to come from incentives, and 50 percent or less to be attributed to non-incentive cost categories. It is noted that this requirement is at the portfolio level, and not the program or sector level, allowing for policy preferences for incentive-based spending while still allowing EDCs flexibility to offer programs with non-incentive costs exceeding 50 percent. However, the SWE team has implemented a cap on non-incentive program costs of 50 percent at the program level in cases where the EDC data suggested a higher ratio of non-incentive costs.

To estimate these non-measure program costs, the team relied on a review of the historical spending of the EDCs. The SWE team expected that individual EDCs would develop and file plans which reflect individually focused EDC-specific portfolio, addressing specific challenges and opportunities in their territories that will likely differ somewhat from these pro forma estimates. Table 10 shows the modeled breakouts for measure and non-measure costs as percentages of total program cost.

Table 10: Program Potential Incentive and Non-Incentive Program Cost Assumptions

Program category	Incentives (% program costs)	Non-incentives (% program costs)
Non-low-income residential new construction	50.00%	50.0%
Non-low-income residential equipment replacement	50.00%	50.0%
Non-low-income residential retrofit	60.56%	39.4%
Low-income residential new construction	66.28%	33.7%
Low-income residential equipment replacement	66.28%	33.7%
Low-income residential retrofit	68.13%	31.9%
Small C&I new construction	73.72%	26.3%
Small C&I equipment replacement	73.72%	26.3%
Small C&I retrofit	68.46%	31.5%
Large C&I new construction	50.00%	50.0%
Large C&I equipment replacement	50.00%	50.0%
Large C&I retrofit	50.00%	50.0%

2.10 ANALYSIS OF ACT 129 TRADITIONAL EE POTENTIAL

The Program Potential analysis for this study assumed incentives covering on average 50 percent of incremental EE measure costs (100 percent for low-income participants). Given this assumption, it was unlikely that the modeled program potential would exactly match the targeted budget result for a given EDC. However, the SWE team determined that using this common incentive cost coverage assumption yielded modeled program budgets that were acceptably close to the program budgets established by Act 129. As such, precise calibration could therefore be done linearly based on that model instance's portfolio-level acquisition cost. Throughout the presentation of results in Section 3.0 the actual results of these Program Potential model instances are presented. However, for the final estimates of specific savings targets, it is recognized that the difference between the resulting budgets from the Program Potential modeling and the potential as constrained by Act 129 defined

budgets could be significant. Consequently, to derive the Act 129 EE Potential, the SWE team used the non-low-income portfolio-level acquisition cost from the Program Potential models to calculate a savings target in megawatt-hours (MWh) that is precisely aligned with the expected budgets for Phase V.³⁶ Consistent with the approach used for the previous EEPDR MPS, an assumed low-income budget carve-out of 13.3 percent of total portfolio budget was calculated by dividing the LI portfolio budget actual expenditures in nominal dollars by the total actual portfolio expenditures in nominal dollars for all EDCs. The SWE team gathered the numbers from the PY15 Final Annual Reports from each EDC, specifically the table “Comparison of P4TD Expenditures to Phase IV EE&C Plan.”³⁷

It is important to emphasize here that the linear scaling approach the team used for non-low-income programs to precisely calibrate to the expected Phase V budgets did *not* result in targets that exceeded available savings or required significantly higher costs to achieve; significant efficiency savings were available at similar costs beyond those obtainable within the budget constraints. Additionally, this method prioritizes a comprehensive portfolio of measures as compared to a least-cost portfolio of measures. The final calibration step simply determined the precise MWh amount that the existing budget could achieve, which the team knew to be below the total achievable potential if budget constraints were removed.

For the low-income portion of the analysis an alternative methodology was used to derive savings targets in line with Act 129 budget constraints. Low-income measures vary significantly in acquisition costs and potential and the maximum achievable supply curve is not fully representative of a program acquisition cost due to high savings, high-cost measures. To facilitate an overall acquisition cost and savings target representative of a highly diverse measure mix while still prioritizing cost-efficiency of spending, spending was allocated to measure categories based on their acquisition costs. Measures with acquisition costs under a threshold value are set equal to 65 percent of their maximum achievable potential while measures over the acquisition cost threshold are introduced to the portfolio relative to the ratio of the threshold to their acquisition cost. The results of this method are high penetrations in low acquisition cost measures, with realistic penetrations relative to the Achievable Potential based on likely programmatic and implementation barriers, while still incorporating the full spectrum of available measures. This creates a balanced portfolio with a lower acquisition cost than the Achievable Potential, while still realizing potential in a diverse range of measures.

As they were derived from the Achievable Potential, the Program Potential scenario results showed lower savings and spending in 2026, with a ramp up to 2030. However, this does not imply that higher levels of savings and spending in the early years were not feasible and reasonable. The Program Potential results in any given year did not reflect the full savings that can be captured in that year. In addition to this, retrofit programs were one good example where program design choices could significantly impact savings patterns over time. Since retrofits are by their nature discretionary rather than market-driven, shifting retrofit program spending patterns over time lead to

³⁶ The linear scaling approach discussed here was only applied for non-low-income programs. The alternative adjustment approach used for the low-income residential sector is discussed below.

³⁷ See Duquesne Light Final Annual Report to the Pennsylvania PUC Phase IV of Act 129, PY15. Table D-9. Page 158. [Weblink](#); See FirstEnergy Final Annual Report to the Pennsylvania PUC Phase IV or Act 129. PY15. Table 139–Table 142. Pages 147-148. [Weblink](#); See PECO Final Annual Report to the Pennsylvania PUC Phase IV of Act 129, PY15. Table D-9. Page 114. [Weblink](#); See PPL Final Annual Report to the Pennsylvania PUC Phase IV of Act 129, PY15. Table C-9. Page C-6. [Weblink](#).

shifts in savings over time. This can be true in both budget-constrained programs and other program settings.

The SWE team therefore presented Act 129 Traditional EE Potential either evenly distributed across, or in aggregate for, Phase V. This is because the actual distribution of savings over the five years of the Phase were assumed to be driven by EDCs' specific program design choices, and their annual planning process in consultation with the Commission.

3.0 TRADITIONAL ENERGY EFFICIENCY RESULTS

This section provides an overview of the cost-effectiveness of the traditional EE scenarios, detailed results for the Program Potential scenario, and a summary of the Act 129 Traditional EE Potential, as defined in the *Important Definitions* section of this report. Additional summary results for the Economic and the Achievable Potential scenarios are contained in Appendix A. The study looked at savings opportunities from electric energy efficiency over a 10-year horizon, although the report provides data from the first five years of that time horizon, which correspond to the anticipated duration of Act 129 Phase V. Appendix A contains results for the full 10-year horizon for the Program Potential scenario as well. In addition, throughout this section, incremental annual first-year savings are shown, as this is the metric used for Act 129 target-setting.

The results for the Program Potential scenario assume an uncapped maximum budget with reduced incentives compared to the Achievable Potential scenario. The Act 129 Traditional EE Potential is obtained by applying budget constraints to the Program Potential scenario and reallocating measure funding in the low-income sector to retain a robust and cost-efficient portfolio, resulting in lower total savings and acquisition costs in the Act 129 Traditional EE Potential scenario.

3.1 ECONOMIC, ACHIEVABLE, AND PROGRAM POTENTIAL COST-EFFECTIVENESS RESULTS SUMMARY

Table 11 summarizes the key economic findings for the three primary traditional EE scenarios. The table clearly shows, across all scenarios and all EDCs, that traditional EE is a substantial and cost-effective resource. The Economic Potential scenario results, consistent with standard industry practice, do not include any non-measure program costs. That is, this scenario aims to quantify the potential from the cost and benefits of the efficiency measures themselves, without assuming any program intervention. Consequently, non-measure program costs are first incorporated in the Achievable Potential scenario. This is why costs do not fall in similar proportion to benefits when moving from Economic Potential to Achievable Potential. In addition, because the Program Potential scenario assumes incentives covering a smaller share of incremental measure costs, it was not surprising to find an increase in the benefit-cost ratio (BCR) compared to the Achievable Potential scenario as the latter captured significant savings, even for only marginally cost-effective measures, which were a smaller share in the former.

Overall, if Pennsylvania were to pursue all cost-effective, achievable potential per the Achievable Potential scenario, the SWE team estimated it would provide \$7.64 billion in present value benefits to the economy, at a present-value cost of \$4.47 billion. In other words, on average at full scale, for every dollar invested in efficiency, Pennsylvania would accrue \$1.71 in economic benefits.

Table 11: Traditional EE Potential Benefits and Costs by EDC and Scenario, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Economic Potential			Achievable Potential			Program Potential		
	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)	Costs (\$MM)	Benefits (\$MM)	TRC BCR (X:1)
PECO	\$1,914.3	\$4,465.9	2.33	\$1,200.7	\$1,907.0	1.59	\$793.5	\$1,355.6	1.71
PPL	\$2,392.5	\$6,014.4	2.51	\$1,397.1	\$2,476.1	1.77	\$902.9	\$1,694.1	1.88
Duquesne Light	\$564.8	\$1,531.3	2.71	\$335.4	\$625.3	1.86	\$229.6	\$452.6	1.97
FirstEnergy	\$2,697.4	\$6,483.6	2.40	\$1,532.7	\$2,626.9	1.71	\$954.4	\$1,762.9	1.85
Statewide	\$7,569.0	\$18,495.1	2.44	\$4,465.9	\$7,635.3	1.71	\$2,880.4	\$5,265.2	1.83

Note(s): ^a Totals may not equal sum of column or row due to rounding

3.2 PROGRAM POTENTIAL STATEWIDE AND PORTFOLIO-LEVEL RESULTS

Table 12 shows, for the Program Potential scenario, each EDC's portfolio-level savings estimates for each of the five years as well as the total, for the anticipated period of Phase V of Act 129 efficiency programs. Overall, the model estimates 5,138.8 GWh of savings for Phase V.

Table 12: Program Potential GWh Savings by EDC and Year

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	180.7	252.6	318.2	307.7	337.4	1,396.6
PPL	185.1	272.1	351.8	332.8	362.1	1,503.9
Duquesne Light	57.4	74.5	90.5	94.6	103.0	420.0
FirstEnergy	222.8	326.3	422.3	404.2	442.7	1,818.3
Statewide	646.0	925.5	1,182.8	1,139.3	1,245.2	5,138.8

Table 13 presents acquisition costs for non-low-income residential, low-income residential, small C&I, and large C&I sectors from the Program Potential scenario. As shown, acquisition costs are broadly similar across the small C&I (\$311/MWh), and large C&I (\$381/MWh) sectors, with low-income (\$959/MWh) clearly showing higher acquisition costs. The non-low-income residential acquisition cost (\$416/MWh) is somewhat higher than the C&I sectors. The statewide overall residential sector acquisition cost covering both non-low-income and low-income (\$552/MWh) is higher than the overall C&I acquisition cost (\$350/MWh).

Table 13: Program Potential Budgets, Energy Savings, and Acquisition Costs by EDC and Sector, 2026–2030 Total^{a,b}

EDC	Non-low-income residential			Low-income residential		
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)
PECO	\$198.4	496,206	\$399.9	\$155.1	160,413	\$967.0
PPL	\$278.4	635,221	\$438.3	\$263.6	232,759	\$1,132.4
Duquesne Light	\$44.8	111,454	\$402.2	\$27.6	34,972	\$790.0
FirstEnergy	\$307.4	751,919	\$408.8	\$195.6	241,511	\$809.8
Statewide	\$829.1	1,994,800	\$415.6	\$641.9	669,654	\$958.6
EDC	Large C&I			Small C&I		
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)
PECO	\$202.9	468,860	\$432.8	\$85.0	271,102	\$313.4
PPL	\$118.4	328,393	\$360.6	\$92.5	307,532	\$300.7
Duquesne Light	\$55.7	141,177	\$394.6	\$46.1	132,431	\$348.0
FirstEnergy	\$137.8	411,400	\$334.9	\$126.6	413,472	\$306.2
Statewide	\$514.9	1,349,830	\$381.4	\$350.2	1,124,537	\$311.4
EDC	Portfolio					
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)			
PECO	\$641.4	1,396,581	\$459.3			
PPL	\$752.9	1,503,904	\$500.6			
Duquesne Light	\$174.3	420,035	\$414.9			
FirstEnergy	\$767.4	1,818,302	\$422.0			
Statewide	\$2,336.0	5,138,822	\$454.6			

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Budgets and acquisition costs are in nominal dollars. MWh are the sum of first-year incremental annual savings from 2026 through 2030.

3.3 PROGRAM POTENTIAL RESIDENTIAL RESULTS

Table 14 through Table 18 show results for the overall residential sector. Table 14 shows incremental annual electric energy savings from efficiency for years 2026 to 2030 for each EDC and statewide. These numbers include both low-income savings and non-low-income savings and show strong savings levels for each EDC over time in the residential sector.

Table 14: Program Potential Residential GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	65.4	122.7	169.4	141.6	157.6	656.6
PPL	89.6	162.7	223.8	188.0	203.9	868.0
Duquesne Light	15.5	27.0	35.7	32.6	35.6	146.4
FirstEnergy	100.8	185.4	256.5	215.2	235.5	993.4
Statewide	271.3	497.8	685.3	577.4	632.7	2,664.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 15 shows the key economic values associated with Program Potential residential savings. It is worth noting that the residential sector TRC BCRs are consistently lower than the portfolio-level BCRs, indicating that these savings are more expensive from a lifecycle cost perspective than average. This is due to the significant role heat pumps and heat pump water heaters have in the measures mix, in addition to their higher cost. This is also in part due to the influence of the low-income sector, and in part due to the loss of lighting in residential sectors, though other sector-level differences are certainly present as well. Low-cost home energy report driven savings serve to offset some of these factors in keeping acquisition costs lower. The addition of the benefit of avoided arrears in the low-income sector has also allowed for more, higher cost potential to screen as cost-effective.

Table 15: Program Potential Residential Sector Costs, Benefits, and TRC BCRs, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Costs (\$MM)	Benefits (\$MM)	Net Benefits (\$MM)	Benefit-Cost Ratio (X:1)
PECO	\$388.4	\$519.4	\$131.0	1.34
PPL	\$598.4	\$931.7	\$333.3	1.56
Duquesne Light	\$83.0	\$115.6	\$32.6	1.39
FirstEnergy	\$569.7	\$809.2	\$239.5	1.42
Statewide	\$1,639.4	\$2,375.9	\$736.4	1.45

Note(s): ^a Totals may not equal sum of column or row due to rounding

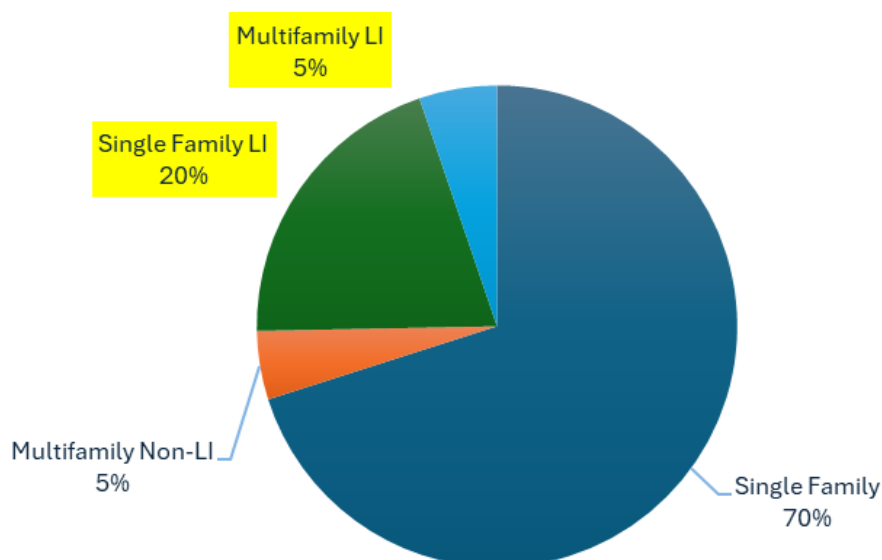
Table 16 shows residential savings broken out among the four residential building types modeled in this study: single-family non-low-income, multifamily non-low-income, single-family low-income, and multifamily low-income. Owing primarily to housing demographics, the SWE team found greater potential in single-family building types than in multifamily. Figure 4 shows the same data graphically and clearly demonstrates the importance of the single-family building type in the estimated portfolio of residential potential.

Table 16: Program Potential Residential GWh Savings by Building Type and EDC, 2026–2030 Total^a

Building Type	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Single Family Non-LI	473.8	590.4	98.4	709.6	1,872.2
Multifamily Non-LI	22.4	44.8	13.0	42.3	122.6
Single Family LI	133.7	181.8	21.7	193.8	531.0
Multifamily LI	26.8	51.0	13.3	47.7	138.7
Total	656.6	868.0	146.4	993.4	2,664.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 4: Program Potential Statewide Residential GWh Savings Distribution by Building Type, 2026–2030 Total^a



Note(s): ^a Yellow-highlighted data in the chart above correspond to the low-income building types.

Table 17 and Figure 5 show these same residential results broken out by electric energy end-use rather than building type. Among all end-uses, space heating is the largest in terms of EE potential in the residential sector driven by electric resistance heating to heat pump conversions, incremental improvements to air-source heat pumps systems, and air sealing. Beyond the space heating end-use, top-saving end-uses are water heating, driven primarily by heat pump water heaters, “total electric,” driven home energy reports, and cooling. In the last study, refrigeration comprised a much larger percentage of savings, but this potential is reduced due to increasing saturation of high-efficiency units and impending increases to federal standards. The shift in where potential savings can be found drives up acquisition costs. The chart excludes end-uses with zero percent savings for clarity.

Table 17: Program Potential Residential GWh Savings by End-Use and EDC, 2026–2030 Total^a

End-Use	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Appliances	15.1	10.1	5.3	15.3	45.8
Cooling	61.5	39.2	28.8	59.6	189.0
Exterior Lighting	0.0	0.0	0.0	0.0	0.0
Interior Lighting	0.1	0.1	0.0	0.1	0.4
Other	0.0	0.0	0.0	0.0	0.0
Plug Loads	12.3	7.9	4.0	12.1	36.3
Refrigeration	22.8	14.4	5.1	17.4	59.7
Space Heating	230.5	449.3	43.8	464.8	1,188.4
Water Heating	180.0	227.1	27.8	260.5	695.4
Total Electric	134.3	119.9	31.7	163.6	449.6
Total	656.6	868.0	146.4	993.4	2,664.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 5: Program Potential Statewide Residential GWh Savings Distribution by End-Use, 2026–2030 Total

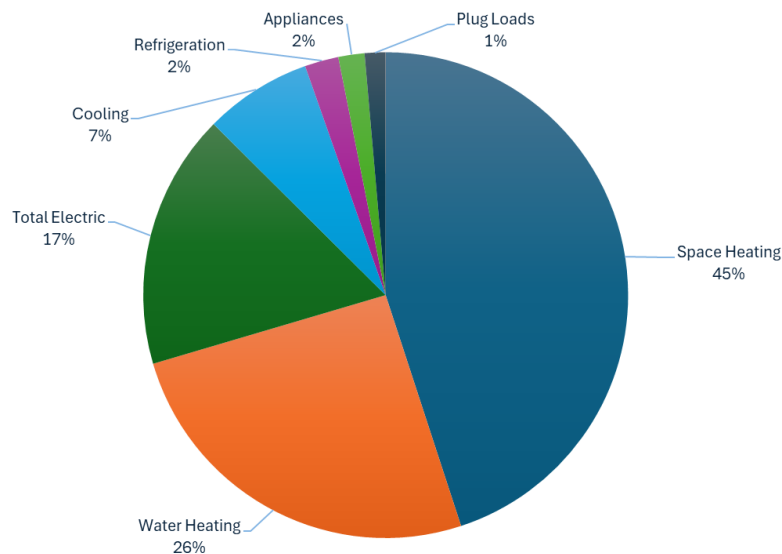


Table 18 shows the savings results for each EDC for the low-income sector. As expected, these savings are more costly to attain relative to non-low-income residential. Low-income measures represent 25 percent of residential portfolio savings or 13 percent of the total portfolio savings. It is important to note that the estimates are not constrained by assumed budget limits. When the assumed low-income budget carve-out is introduced in the Act 129 Traditional EE Potential scenario, LI potential, and the upward pressure high low-income acquisition costs place on the overall residential sector, is significantly reduced. As with the overall residential sector, the single-family

savings opportunities are larger than multifamily when examining the low-income sector in isolation, a finding which is consistent with historical low-income programming in EE.

Table 18: Program Potential Low-Income GWh Savings by EDC and LI Building Type^a

EDC	Single family low-income (GWh)	Multifamily low-income (GWh)	Low-income total (GWh)	% of Total Residential Savings
PECO	133.7	26.8	160.4	24.43%
PPL	181.8	51.0	232.8	26.82%
Duquesne Light	21.7	13.3	35.0	23.88%
FirstEnergy	193.8	47.7	241.5	24.31%
Statewide	531.0	138.7	669.7	25.13%

Note(s): ^a Totals may not equal sum of column or row due to rounding

3.4 PROGRAM POTENTIAL SMALL C&I RESULTS

The following tables present the Program Potential results for the small C&I sector, which are differentiated from the large C&I sector by utility rate class. Table 19 shows incremental annual electric energy savings from efficiency for years 2026 to 2030, for each EDC and statewide.

Table 19: Program Potential Small C&I GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	41.9	47.5	54.7	61.0	66.0	271.1
PPL	47.5	53.9	62.2	69.3	74.6	307.5
Duquesne Light	20.4	23.1	26.6	29.9	32.3	132.4
FirstEnergy	63.7	72.5	83.6	93.3	100.4	413.5
Statewide	173.6	197.0	227.1	253.5	273.3	1,124.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 20 shows key economic results for this sector, with robust BCRs ranging from 2.40:1 to 2.75:1 across EDCs, resulting in a 2.57:1 sector-level statewide BCR.

Table 20: Program Potential Small C&I Costs, Benefits, and TRC BCRs, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Costs (\$MM)	Benefits (\$MM)	Net Benefits (\$MM)	Benefit-Cost Ratio (X:1)
PECO	\$129.0	\$309.7	\$180.8	2.40
PPL	\$141.5	\$388.8	\$247.3	2.75
Duquesne Light	\$70.1	\$172.5	\$102.4	2.46
FirstEnergy	\$193.7	\$503.1	\$309.4	2.60
Statewide	\$534.2	\$1,374.1	\$839.9	2.57

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 21 and Figure 6 respectively show the sum and proportion of the small C&I sector's incremental annual savings between 2026 and 2030, broken out among building types. Small office, small retail, and small miscellaneous are the three building types with the highest EE potential, with small institutional / public service and small warehouse rounding out the top five. There is a steep decline in savings after the top five with none above 100 GWh.

Table 21: Program Potential Small C&I GWh Savings by Building Type and EDC, 2026–2030 Total^a

Building type	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Small office	80.0	40.4	32.4	56.8	209.6
Small retail	31.9	42.7	16.0	64.4	155.0
Small education - college / university	16.6	19.0	9.9	25.0	70.5
Small education - other	5.6	6.1	3.3	8.2	23.2
Small grocery	13.5	27.6	6.3	30.4	77.8
Small health - hospital	13.2	21.5	6.6	23.0	64.4
Small health - other	2.3	3.7	1.1	4.0	11.2
Small industrial manufacturing	10.8	20.8	5.2	29.8	66.6
Small institutional / public service	28.2	30.5	20.2	49.5	128.4
Small lodging	6.7	15.2	3.4	24.1	49.4
Small misc. / other	30.6	35.5	14.1	52.5	132.7
Small restaurant	11.0	12.4	6.4	20.5	50.3
Small warehouse	20.7	32.0	7.5	25.3	85.5
Statewide	271.1	307.5	132.4	413.5	1,124.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 6: Program Potential Statewide Small C&I GWh Savings Distribution by Building Type, 2026–2030 Total

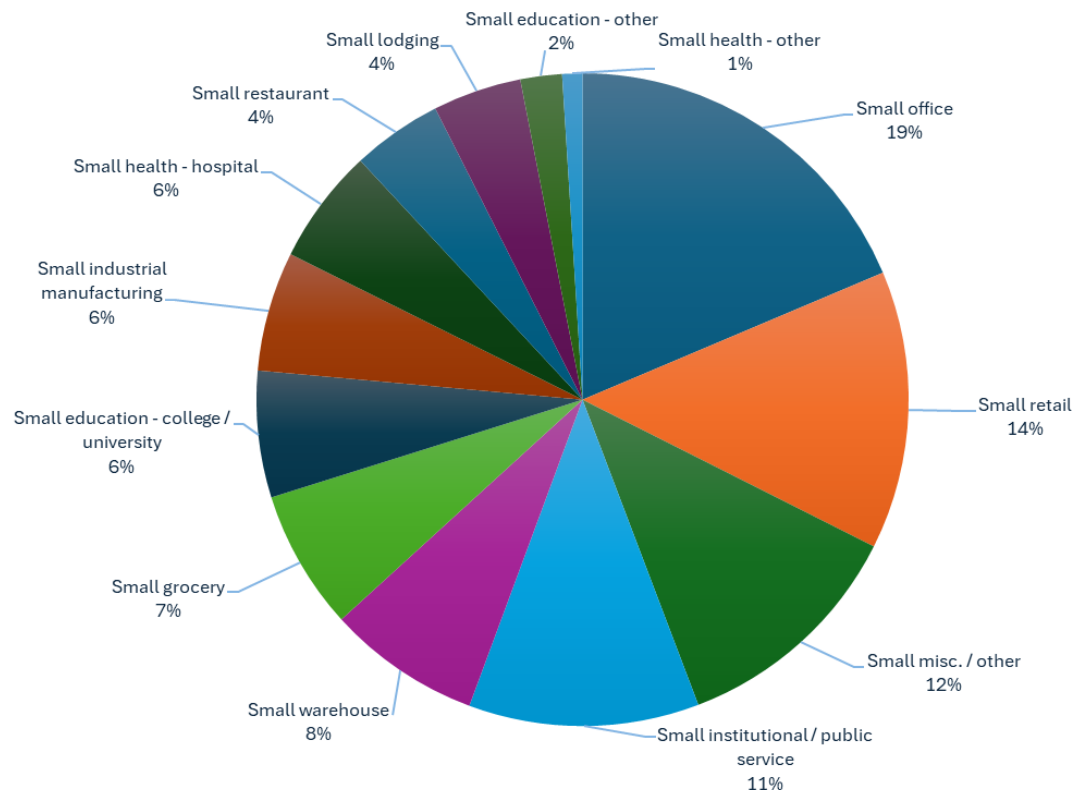


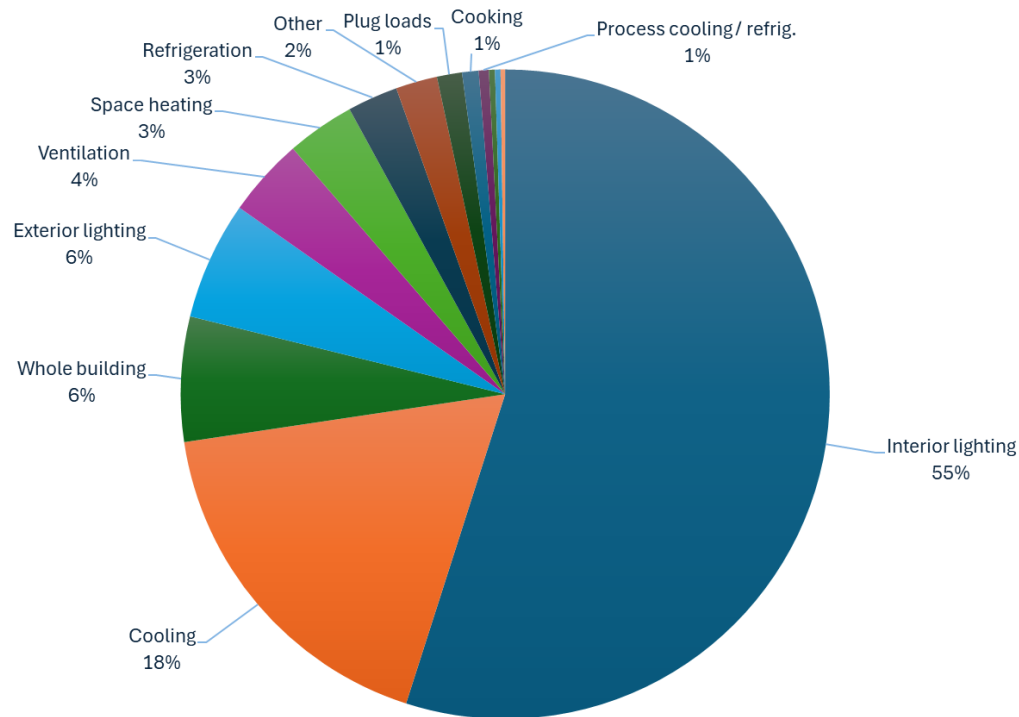
Table 22 and Figure 7 show how the small C&I savings break out by major end-use. Consistent with current EDC programs, interior lighting potential dominates the small C&I savings portfolio driven by LED fixture retrofits, LED linear replacements, and LED high-bay lighting opportunities. This is followed by cooling, driven by controls and unitary HVAC replacement opportunities, and whole building opportunities such as retro-commissioning, deep energy retrofits, and integrated building design in the new construction market. Note that the “whole building” end-use captures opportunities that cannot easily be disaggregated into individual end-uses. The chart excludes end-uses with zero percent savings for clarity.

Table 22: Program Potential Small C&I GWh Savings by End-Use and EDC, 2026–2030 Total^a

End-use	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Cooling	50.2	49.4	27.1	72.3	199.0
Exterior lighting	15.8	18.5	7.6	24.1	66.1
Interior lighting	149.4	171.7	70.6	226.1	617.8
Other	5.6	6.4	2.6	8.7	23.3
Plug loads	4.0	3.5	1.8	4.7	14.1
Refrigeration	5.9	9.0	2.8	10.5	28.3
Space heating	8.3	10.3	4.3	15.1	38.0
Water heating	0.7	0.8	0.4	1.2	3.1
Whole building	16.6	19.4	8.2	25.7	69.9
Cooking	1.9	2.5	1.1	3.9	9.3
Ventilation	10.8	12.4	5.0	15.9	44.1
Process cooling / refrig.	0.9	1.8	0.4	2.5	5.7
Process heating	0.4	0.8	0.2	1.1	2.6
Compressed air systems	0.5	1.1	0.3	1.5	3.4
Statewide	271.1	307.5	132.4	413.5	1,124.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 7: Program Potential Statewide Small C&I GWh Savings Distribution by End-Use, 2026–2030 Total



3.5 PROGRAM POTENTIAL LARGE C&I RESULTS

The following tables present results for the Program Potential for the large C&I sector. Table 23 shows incremental annual electric energy savings from efficiency for the years 2026 to 2030, for each EDC and statewide.

Table 23: Program Potential Large C&I GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	73.4	82.4	94.2	105.1	113.8	468.9
PPL	47.9	55.5	65.8	75.6	83.6	328.4
Duquesne Light	21.5	24.4	28.2	32.0	35.0	141.2
FirstEnergy	58.2	68.4	82.2	95.7	106.8	411.4
Statewide	201.1	230.7	270.5	308.4	339.2	1,349.8

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 24 captures the large C&I sector's economic results, with EDC-specific BCRs ranging from 1.91:1 to 2.36:1, and a statewide BCR for this sector of 2.14:1.

Table 24: Program Potential Large C&I Costs, Benefits, and TRC BCRs, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Costs (\$MM)	Benefits (\$MM)	Net Benefits (\$MM)	Benefit-Cost Ratio (X:1)
PECO	\$276.2	\$526.5	\$250.4	1.91
PPL	\$163.0	\$373.6	\$210.7	2.29
Duquesne Light	\$76.5	\$164.5	\$88.0	2.15
FirstEnergy	\$191.1	\$450.6	\$259.5	2.36
Statewide	\$706.7	\$1,515.2	\$808.5	2.14

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 25 and Figure 8 show how the large C&I sector's savings break out by building type. As the entirety of the industrial sector is modeled as a single building type, the large industrial manufacturing segment has the highest EE potential; followed by large offices, large institutional / public service, large health – hospital, and large education – college / university.

Table 25: Program Potential Large C&I GWh Savings by Building Type and EDC, 2026–2030 Total^a

Building Type	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Large office	95.1	23.0	19.3	22.4	159.7
Large retail	19.6	13.5	6.1	7.9	47.1
Large education - college / university	55.6	18.2	18.7	31.9	124.4
Large education - other	18.5	5.9	6.2	10.4	41.0
Large grocery	23.0	12.7	6.1	19.5	61.2
Large health - hospital	52.4	33.1	23.6	30.0	139.0
Large health - other	9.3	5.7	4.1	5.2	24.3
Large industrial manufacturing	48.7	134.9	32.4	215.2	431.3
Large institutional / public service	72.9	28.3	15.3	32.2	148.7
Large lodging	13.0	11.0	2.4	5.6	32.1
Large misc. / other	26.2	15.3	3.2	8.7	53.4
Large restaurant	0.7	0.9	0.1	18.6	20.3
Large warehouse	34.0	25.7	3.6	3.9	67.1
Statewide	468.9	328.4	141.2	411.4	1,349.8

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 8: Program Potential Statewide Large C&I GWh Savings Distribution by Building Type, 2026–2030 Total

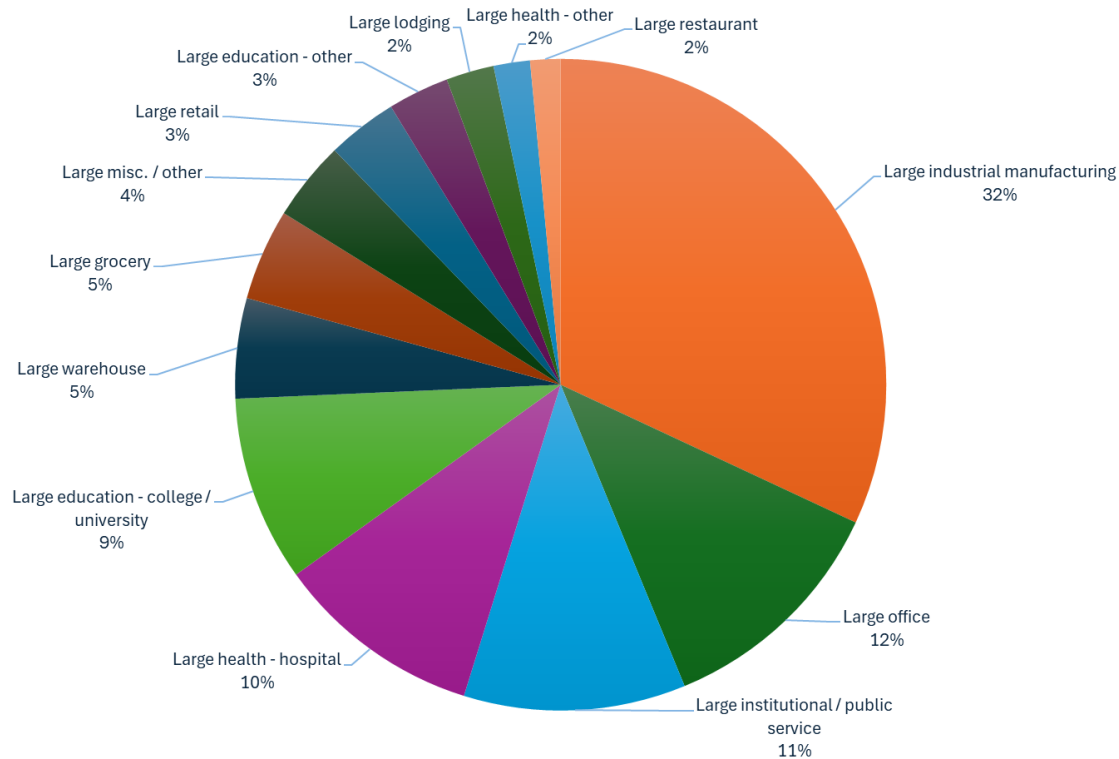


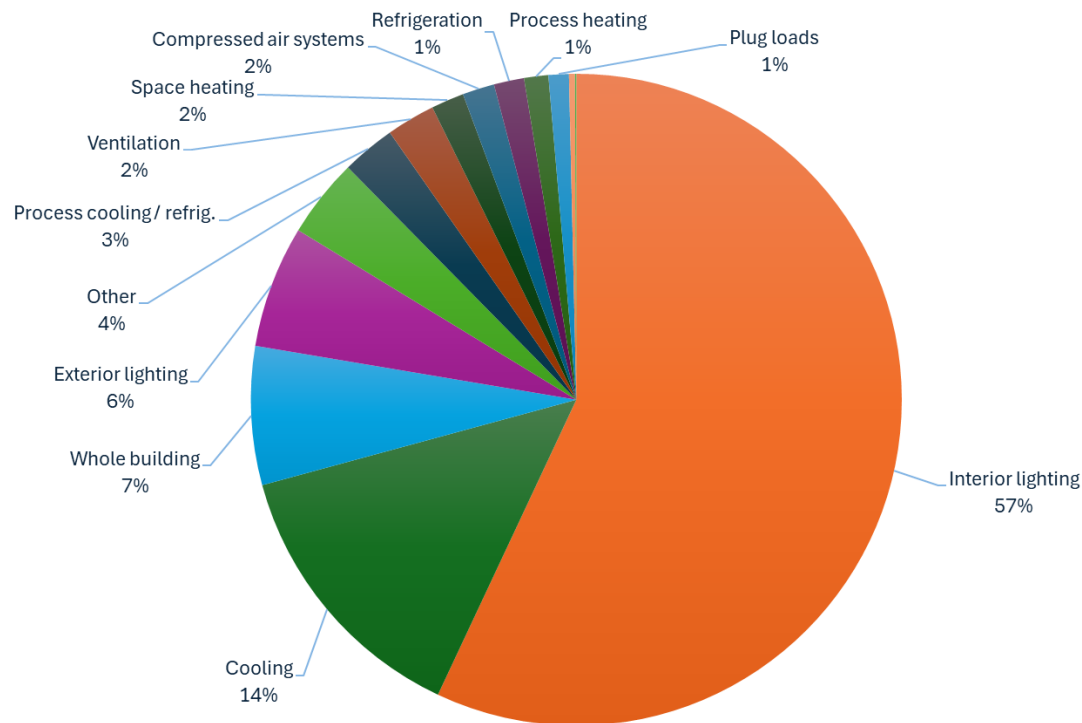
Table 26 and Figure 9 show the large C&I sector’s savings breakdown by major end-use category. As with the small C&I sector, interior lighting potential dominates the large C&I savings portfolio driven by LED fixture retrofits, LED linear replacements, and LED high-bay lighting opportunities. Cooling is the end-use with the second highest potential, driven by controls and unitary HVAC replacement opportunities. Whole building opportunities such as retro-commissioning, deep energy retrofits, and integrated building design in the new construction market represent the third largest end-use category. The chart excludes end-uses with zero percent savings for clarity.

Table 26: Program Potential Large C&I GWh Savings by End-Use and EDC, 2026–2030 Total^a

End-Use	PECO	PPL	Duquesne Light	FirstEnergy	Statewide
Cooling	76.9	40.3	22.0	46.8	186.1
Exterior lighting	29.6	19.7	8.7	23.7	81.8
Interior lighting	272.5	186.4	80.3	230.1	769.3
Other	11.3	14.8	4.8	22.0	52.9
Plug loads	6.6	2.5	1.7	2.8	13.6
Refrigeration	8.0	4.9	1.8	5.4	20.2
Space heating	9.8	5.2	2.4	4.6	22.0
Water heating	0.4	0.2	0.1	0.2	0.8
Whole building	28.7	23.0	9.9	31.2	92.7
Cooking	1.7	0.9	0.4	1.0	4.0
Ventilation	14.9	7.3	3.5	7.0	32.6
Process cooling / refrig.	4.1	11.3	2.7	17.9	36.0
Process heating	1.8	5.1	1.2	8.1	16.2
Compressed air systems	2.4	6.7	1.6	10.7	21.4
Statewide	468.9	328.4	141.2	411.4	1,349.8

Note(s): ^a Totals may not equal sum of column or row due to rounding

Figure 9: Program Potential Statewide Large C&I GWh Savings Distribution by End-Use, 2026–2030 Total



3.6 ACT 129 TRADITIONAL EE POTENTIAL RESULTS

As discussed in Section 2.0, the Act 129 Traditional EE Potential was derived by applying budget constraints to the Program Potential scenario and reallocating measure funding in the low-income sector to retain a robust and cost-efficient portfolio, resulting in lower total savings and reduced acquisition costs. The results of this process are presented below in Table 27 for energy savings and Table 28 for peak demand reductions.

Table 27: Act 129 Traditional EE Potential Budget, Energy Savings, and Acquisition Costs by EDC and Sector, 2026–2030 Total^{a,b}

EDC	Non-low-income residential			Low-income residential		
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)
PECO	\$151.1	377,819	\$399.9	\$57.1	76,518	\$746.2
PPL	\$151.6	345,873	\$438.3	\$41.1	67,497	\$608.7
Duquesne Light	\$25.9	64,363	\$402.2	\$13.1	19,458	\$671.0
FirstEnergy	\$181.8	443,998	\$409.5	\$52.1	89,320	\$583.8
Statewide	\$510.4	1,232,052	\$414.2	\$163.4	252,792	\$646.3
EDC	Large C&I			Small C&I		
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)
PECO	\$154.5	356,997	\$432.8	\$64.7	206,421	\$313.4
PPL	\$64.5	178,807	\$360.6	\$50.4	167,448	\$300.7
Duquesne Light	\$32.2	81,527	\$394.6	\$26.6	76,476	\$348.0
FirstEnergy	\$81.5	242,926	\$335.4	\$74.9	244,150	\$306.7
Statewide	\$332.7	860,258	\$386.7	\$216.5	694,496	\$311.8
EDC	Portfolio					
	Budget (\$MM)	Incremental savings (MWh)	Acquisition cost (\$/MWh)			
PECO	\$427.4	1,017,755	\$419.9			
PPL	\$307.5	759,625	\$404.8			
Duquesne Light	\$97.7	241,824	\$404.1			
FirstEnergy	\$390.3	1,020,394	\$382.5			
Statewide	\$1,222.9	3,039,599	\$402.3			

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Budgets and acquisition costs are in nominal dollars. MWh are the sum of first-year incremental annual savings from 2026 through 2030.

Table 28: Act 129 Traditional EE Potential Budget, Peak Demand Reduction, and Acquisition Costs by EDC and Sector, 2026–2030 Total^{a,b}

EDC	Non-low-income residential			Low-income residential		
	Budget (\$MM)	Incremental savings (MW)	Acquisition cost (\$/kW)	Budget (\$MM)	Incremental savings (MW)	Acquisition cost (\$/kW)
PECO	\$151.1	38	\$3,963	\$57.1	10	\$5,774
PPL	\$151.6	43	\$3,539	\$41.1	10	\$4,173
Duquesne Light	\$25.9	7	\$3,550	\$13.1	3	\$4,463
FirstEnergy	\$181.8	52	\$3,491	\$52.1	13	\$4,087
Statewide	\$510.4	140	\$3,637	\$163.4	35	\$4,613
EDC	Large C&I			Small C&I		
	Budget (\$MM)	Incremental savings (MW)	Acquisition cost (\$/kW)	Budget (\$MM)	Incremental savings (MW)	Acquisition cost (\$/kW)
PECO	\$154.5	52	\$2,961	\$64.7	33	\$1,943
PPL	\$64.5	22	\$2,914	\$50.4	26	\$1,924
Duquesne Light	\$32.2	11	\$3,036	\$26.6	12	\$2,174
FirstEnergy	\$81.5	29	\$2,797	\$74.9	38	\$1,993
Statewide	\$332.7	114	\$2,917	\$216.5	109	\$1,981
EDC	Portfolio					
	Budget (\$MM)	Incremental savings (MW)	Acquisition cost (\$/kW)			
PECO	\$427.4	133	\$3,202			
PPL	\$307.5	101	\$3,045			
Duquesne Light	\$97.7	33	\$2,956			
FirstEnergy	\$390.3	132	\$2,967			
Statewide	\$1,222.9	399	\$3,064			

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Budgets and acquisition costs are in nominal dollars. MW are the sum of first-year incremental annual savings from 2026 through 2030.

When distributed evenly over the Phase V period, the incremental annual energy savings and peak reductions for the Act 129 Traditional EE Potential are as presented in Table 29 and Table 30, respectively.

Table 29: Act 129 Traditional EE Potential GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	203.6	203.6	203.6	203.6	203.6	1,017.8
PPL	151.9	151.9	151.9	151.9	151.9	759.6
Duquesne Light	48.4	48.4	48.4	48.4	48.4	241.8
FirstEnergy	204.1	204.1	204.1	204.1	204.1	1,020.4
Statewide	607.9	607.9	607.9	607.9	607.9	3,039.6
% of 2009/2010 load forecast	0.41%	0.41%	0.41%	0.41%	0.41%	2.07%

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 30: Act 129 Traditional EE Potential MW Peak Demand Reduction by EDC and Year^{a,b}

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
PECO	27	27	27	27	27	133
PPL	20	20	20	20	20	101
Duquesne Light	7	7	7	7	7	33
FirstEnergy	26	26	26	26	26	132
Statewide	80	80	80	80	80	399
% of 2007/2008 load	0.30%	0.30%	0.30%	0.30%	0.30%	1.50%

Note(s): ^a Totals may not equal sum of column or row due to rounding

^b Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the DR MPS.

The SWE team estimated the Act 129 Traditional EE Potential statewide at 3,039.6 GWh for Phase V. This figure is the sum of incremental annual savings from 2026 to 2030 for all EDCs. These savings are associated with total 2026 to 2030 budget spending of \$1.22 billion. As modeled, these savings and spending levels would generate \$3.10 billion in present value net benefits and correspond to a benefit-cost ratio (BCR) of 1.82:1. These results indicate that such Phase V programs would be highly cost-effective based on the standard TRC Test as specified in the Commission's 2026 TRC Test Final Order.³⁸ These results are shown in Table 31, which also illustrates how these top-level results break out among the four Act 129 EDCs. EDC-specific BCRs are consistently favorable and range from 1.71 to 1.97.

³⁸ See the 2026 TRC Test Final Order, Docket No. M-2024-3048998. Entered November 7, 2024. [Weblink](#). All cost and benefits are presented in real 2026 dollars.

Table 31: Act 129 Traditional EE Potential Summary, 2026–2030 Total (Real 2026 Dollars)^a

EDC	Acquisition Costs (\$/MWh)	Budget (\$MM)	TRC Costs (\$MM)	TRC Benefits (\$MM)	Net TRC Benefits (\$MM)	TRC BCR (X:1)	Energy Savings (GWh)	Peak Demand Reduction (MW)
PECO	\$419.9	\$427.4	\$578.3	\$987.9	\$409.6	1.71	1,017.8	133
PPL	\$404.8	\$307.5	\$456.0	\$855.7	\$399.7	1.88	759.6	101
Duquesne Light	\$404.1	\$97.7	\$132.2	\$260.6	\$128.4	1.97	241.8	33
FirstEnergy	\$382.5	\$390.3	\$536.3	\$992.1	\$455.8	1.85	1,020.4	132
Statewide	\$402.3	\$1,222.9	\$1,702.8	\$3,096.3	\$1,393.5	1.82	3,039.6	399

Note(s): ^a Budgets and acquisition costs are in nominal dollars. Benefits, costs, and net benefits are in real (2026) dollars. GWh and peak MW are the sum of first-year incremental annual savings from 2026 through 2030. Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the DR MPS.

The Act 129 Traditional EE Potential reflects total portfolio savings the SWE team believed were appropriate, given the available budget. These generally reflected some increase in acquisition costs (\$/MWh) compared to historical EDC spending. That increase has been primarily driven by the continuing loss of residential lighting opportunities and diminished lighting opportunities projected in the commercial and industrial sectors that were historically some of the least expensive savings. It also indicated levels that the SWE team believed would allow the EDCs to develop balanced plans that address all markets equitably. These levels would then also ensure a comprehensive portfolio of measures with appropriate investments in some of the longer-lived, but more expensive, efficiency resources. The more granular Program Potential results showed a specific breakout of spending and savings between sectors. However, the SWE team does not suggest that actual EDC plans will necessarily reflect those specific breakouts. Beyond providing a comprehensive portfolio of measures, the Program Potential results did not account for policy objectives and appropriate planning decisions.

The U.S. has experienced high inflation since the Phase IV EEPDR MPS was published in early 2020, significantly influencing the cost of energy efficiency measures. According to the U.S. Bureau of Labor Statistics (BLS), the Consumer Price Index (CPI) increased by 8.5 percent from July 1, 2021–June 30, 2022, 3.2 percent from July 1, 2022–June 30, 2023, and 2.9 percent from July 1, 2023–June 30, 2024. These inflationary pressures, driven by pandemic-related disruptions, global supply chain challenges, and labor shortages, have pushed up material and labor costs, key drivers of energy efficiency program expenses.

Materials like copper, steel, and aluminum—critical to most efficiency measures—have seen price spikes exceeding 50 percent³⁹ in some cases, while skilled labor costs continue to rise amid workforce shortages. These increases directly elevate the acquisition cost of energy savings, potentially requiring program administrators to invest more for the same outcomes. For Pennsylvania, this raises concerns about program cost-effectiveness, continued access to energy

³⁹ See Commodity Markets, Annual Prices. [Weblink](#).

efficiency for lower-income households, and the state’s ability to achieve its energy savings potential goals.

Table 32 compares the Act 129 Traditional EE acquisition costs of each phase by comparing estimated nominal and inflation-adjusted Phase IV costs to comparable estimates from the Phase V EEPDR MPS showing the effects of inflation assuming the CPI-derived estimates of inflation and a fixed 2% for July 1, 2024 and beyond. While the acquisition costs on a nominal basis are 1.44x Phase IV, when the previous values are inflated, the current costs are only 1.20x.

Table 32: Phase IV & Phase V - Act 129 Traditional EE Potential Acquisition Costs^a

EDC	Phase IV - EE Program Potential Acquisition Cost (\$/MWh)	Phase IV - Inflated EE Program Potential Acquisition Cost (\$/MWh)	Phase V Act 129 EE Potential Acquisition Cost (\$/MWh)
PECO	\$319.7	\$383.3	\$419.9
PPL	\$251.9	\$301.9	\$404.8
Duquesne Light	\$289.7	\$347.3	\$404.1
FirstEnergy	\$260.8	\$312.6	\$382.5
Statewide	\$278.4	\$333.8	\$402.3

Note(s): ^a The Phase IV EEPDR MPS did not explicitly present the Act 129 Traditional EE Potential acquisition costs (i.e., the Act 129 Potential acquisition costs *without* the impacts of CHP). To provide an appropriate comparison, the Program Potential acquisition costs from the previous study are presented here as they are equivalent to the Act 129 Traditional EE Potential costs had they been reported separately.

4.0 SENSITIVITY ANALYSIS OF POSSIBLE IMPACTS OF EXTERNAL FUNDING

4.1.1 Overview of Available External Funding

External funding offers an opportunity to integrate Act 129 funding to achieve deeper savings and serve more participants, but its impact on the projected acquisition costs and overall achievement must factor into assessment of the sensitivity of the Act 129 Traditional EE Potential to this funding. This section examines three identified Federal funding opportunities from the Inflation Reduction Act (IRA): The Home Efficiency Rebate (HER) Program, the Home Electrification and Appliance Rebate (HEAR) Program, and the Reducing Industrial Sector Emissions in Pennsylvania (RISE PA). While presenting significant opportunities for reducing efficiency costs for Commonwealth residents, the SWE team excluded federal tax credits for traditional EE measures due to the parameters of the cost-effectiveness test, as the uptake, scope, and application of the tax credits are inherently uncertain.

The treatment of these external funding sources was reviewed with the DEP staff to ensure alignment with anticipated implementation strategies. Additionally, the SWE team reviewed the DEP applications for the IRA programs to ensure that modeled measure mixes and funding levels aligned with the application.

HER provides approximately \$113 million in funding for energy reduction projects, with requirements focused on achieving specific project-level percentage energy reductions. This funding is primarily targeted towards multifamily housing with the vast majority anticipated to flow to low-income households. DEP expects to reach approximately 10,000 households over four years. It is assumed, for the purposes of this sensitivity analysis, that \$5 million of Act 129 funding will be earmarked for American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Level 2 audits conducted in support of this program⁴⁰. This funding is deducted from the low-income and non-low-income budgets based on an approximate distribution based on income data. HEAR provides another \$92 million in funding allocated for appliance rebates, targeting low- and moderate-income (LMI) customers. This will fund point-of-sale rebates to help reduce the upfront costs of appliances. HEAR's role in this analysis is smaller than HER's due to the non-electric baseline assumed for the bulk of these appliances.

RISE PA has \$360 million in funding focused on industrial decarbonization. Electric efficiency projects can qualify for it, along with other qualifying actions such as renewable energy, biofuels, and gas efficiency. Due to the inherent complexity of this program and the uncertainty surrounding its implementation, the impacts of this program have been excluded from this analysis.

4.1.2 Assessment of Act 129 Eligible Portion of External Funding Opportunities

Only a portion of the external funding will be applicable to Act 129 programs. Differentiating the funding opportunities into applicable portions is critical in estimating the potential impact of the funding. The first step is to determine what percentage of total funding the Act 129 EDCs can utilize. For HER and HEAR, it is assumed that 75 percent of the funding will be used within Act 129 EDC territories. The next step is to determine allocated funding for electric savings measures. For HER and HEAR, the estimated breakdowns from the DEP applications result in \$43 million for HER and \$14 million for HEAR.

While most HER and HEAR funding will contribute to serving LMI populations, the definition of low-income in the IRA programs differs from that in the Act 129 programs. IRA programs define low-income as 0 percent to 80 percent of Area Median Income (AMI) and moderate income as 81 percent to 150 percent of AMI, while Act 129 uses 0 percent to 150 percent of Federal Poverty Level (FPL) for low-income eligibility. The difference between these definitions shows that the eligible market for LMI measures through the IRA programs is significantly larger than the eligible market for low-income measures in the Act 129 programs. As a result, a 50 percent cost share is assumed for a minority of measures that qualify under both low-income definitions, but a lower utility cost share is assumed for most measures.

⁴⁰ The \$5 million budget was designed to cover audits for a total of 10,000 units with a range of units per building. At approximately 10k per building, based on communications from DEP, this analysis assumes an average number of units per building of 20. This is likely slightly conservative, with DEP expecting higher units per building, but allows for flexibility in implementation and for funding for coordination between DEP and the EDCs.

4.1.3 Assessment of Impact on Potential Measure Acquisition Cost

Instead of modeling specific measures with differing acquisition costs, this analysis uses the eligible funding pool to lower the aggregate acquisition costs of valid measures. This approach recognizes the flexibility in program implementation and what projects they might undertake.

4.1.4 Assessment of Impact on Act 129 EE Potential Scenario

Once aggregate acquisition costs have been lowered, the total measure production was adjusted back up to impact the Act 129 Traditional EE Potential scenario cost projections for both market rate and low-income measures. Individual measure projections were compared to their Achievable Potential scenario production, and any measure that exceeded this value was adjusted.

4.1.5 Discussion of Sensitivities to Assumptions

This methodology provides an estimate of the impact external funding may have on the portfolio in general but does not assess how the funding might influence individual projects. Program guidance on how external funding may be integrated could significantly alter the outcome of this analysis.

This section provides the results of the sensitivity analysis of possible impacts of external funding on the Act 129 Traditional EE scenario as discussed above. Both HER and HEAR provide meaningful impact to non-low-income multi-family and low-income multi-family savings potential by providing significant additional funding for measures in these sectors. Table 33 and Table 34 below show the applicable funding from each program after adjusting for Act 129 eligible measures and EDC territories.

Table 33: Estimated Act 129 Eligible HEAR Funding^a

Measure	Estimated Total Budget (\$MM)	Appliance Applicability – Percent Electric Baseline	EDC Territory Modified	Total Act 129 Eligible Budget (\$MM)	Low-Income Budget (\$MM)	Market Rate Budget (\$MM)
Heat Pump Water Heaters	\$6.0	45%	75%	\$2.0	\$1.1	\$0.9
HVAC Heat Pump	\$35.2	31%	75%	\$8.2	\$4.5	\$3.7
Heat Pump Clothes Dryer	\$1.4	73%	75%	\$0.8	\$0.4	\$0.4
Electric Cooking Equipment	\$1.4	61%	75%	\$0.7	\$0.4	\$0.3
Envelope Improvements	\$9.8	31%	75%	\$2.3	\$1.3	\$1.0
Total	\$53.8	N/A	N/A	\$13.9	\$7.7	\$6.3

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 34: Estimated Act 129 Eligible HER Funding^a

Measure	Estimated Total Budget (\$MM)	Appliance Eligibility – Percent Electric Baseline	EDC Territory Modified	Total Act 129 Eligible Budget (\$MM)
Gas Upgrades (Gas Furnace/Boiler)	\$14.4	0%	75%	\$0.0
Gas Upgrades + Basic Weatherization	\$10.9	0%	75%	\$0.0
Gas Upgrades + Basic Weatherization + Central A/C	\$5.3	20%	75%	\$0.8
Gas Upgrades + Central A/C	\$11.4	42%	75%	\$3.6
Gas Upgrades + Enhanced Weatherization	\$2.0	0%	75%	\$0.0
Gas Upgrades + Enhanced Weatherization + Central A/C	\$0.5	18%	75%	\$0.1
Heat Pump Upgrades	\$21.9	100%	75%	\$16.5
Heat Pump + Basic Weatherization	\$5.0	100%	75%	\$3.8
Heat Pump + Enhanced Weatherization	\$0.4	100%	75%	\$0.3
Heat Pump + Heat Pump Water Heater	\$23.4	100%	75%	\$17.5
Whole Home Electrification	\$15.4	0%	75%	\$0.0
Whole Home Electrification + Basic Weatherization	\$1.9	0%	75%	\$0.0
Whole Home Electrification + Enhanced Weatherization	\$0.3	0%	75%	\$0.0
Total	\$112.8	N/A	N/A	\$42.5

Note(s): ^a Totals may not equal sum of column or row due to rounding

For the HEAR program, the applicable budgets are assumed to be applied towards the designated measures. The low-income portion of the budget is assumed to create additional program savings potential at the acquisition cost of those measures. For market rate measures, it was assumed that there would be a 50% cost share between the Act 129 programs and the federal sources of funding to adequately capture the impact of both funding sources. This results in no additional savings but does result in better customer economics for those participants. Table 35 shows the additional savings generated through the low-income programs.

Table 35: Estimated Act 129 Eligible HEAR Funding^a

Measure	Low-Income Budget (\$MM)	Acquisition Cost (\$/MWh)	Additional Savings (GWh)
Heat Pump Water Heaters	\$1.1	\$322.0	3.5
HVAC Heat Pump	\$4.5	\$1,039.0	4.3
Heat Pump Clothes Dryer	\$0.4	N/A	N/A
Electric Cooking Equipment	\$0.4	N/A	N/A
Envelope Improvements	\$1.3	\$834.0	1.5
Total	\$7.7	\$825.0	9.3

Note(s): ^a Totals may not equal sum of column or row due to rounding

HER funding is treated differently given that the incentives are not based on specific technologies, but instead focus on energy reductions. Because of this, the funding is assumed to be spread across all measures within the multifamily building type to reflect comprehensive projects. The total funding of \$42.5 million is broken into \$23.4 million for low-income, and \$19.1 million for non-low income based on Act 129 criteria. Given the EDCs' inability to provide full cost coverage for non-low income, the \$19.1 million is assumed to fill in the gap between assumed incentive and project cost. For the low-income housing, at the modeled Act 129 Traditional EE Potential acquisition cost for the low-income multifamily segment of \$0.62/kWh, the \$23.4 million in HER funding would generate an additional 37.7 GWh in savings. Table 36 summarizes the full range of impacts of HER and HEAR on aggregate electric savings achievement and incorporates the \$5 million budget for ASHRAE Level 2 audits.

Table 36: Estimated Total External Funding Impact

Adjustment Category	Additional Low-Income Savings (GWh)	Additional Non-Low-Income Savings (GWh)
HER	37.7	N/A
HEAR	9.3	N/A
Audit Funding ⁴¹	-4.3	-5.6
Total Change In Savings (GWh)	42.7	-5.6

⁴¹ This sensitivity assumes that funding for the required audits would be provided from Act 129 budgets. As this funding would otherwise go to energy savings measures, the cost of the audits results in an overall decrease in energy savings.

5.0 CHP METHODS AND RESULTS

5.1 INTRODUCTION AND METHODS

In agreement with TUS and Commission staff, the SWE team did not develop an updated CHP potential for this study in a similar manner to the previous phase. Due to complexities in developing CHP projects, the approach for Phase V was determined by using the acquisition cost across all projects completed in Phase IV to-date, combined with an estimated annual budget allocation for each EDC, to determine the Act 129 CHP Potential. The Achievable Potential results from the previous EEPDR MPS summarized below in Table 37 below vastly exceed the rate of actual CHP project development in the state during Phase IV, likely due to project technical complexity, high initial costs and timelines, and engineering expertise required for development. The estimated savings from typical CHP projects are “irregular” due to significant differences in application, but the savings can be substantial.

For program participation estimates, CHP projects would generally be eligible for custom rebates at higher \$/kWh levels. However, the majority of the projects would be limited to project level incentive caps (generally \$500,000 in Phase IV EDC programs) due to the high upfront costs, effectively making the acquisition costs very low on average.

During Phase IV, the EDCs rebated seven CHP projects from PY 13–PY16 to-date, resulting in approximately 138,673 MWh and 19 MW in total first-year savings, with a total of approximately \$4.54 million in rebates provided.

Table 37: Phase IV Estimated Achievable CHP Potential and Actual Achieved Savings^a

EDC	Phase IV Potential		Phase IV To Date (Actuals)	
	Total First-Year Potential (MWh), 2022–2025	Total First-Year Potential (MW), 2022–2025	Total First-Year Savings (MWh)	Total First-Year Savings (MW)
PECO	176,870	22	54,211	8
PPL	248,946	31	14,555	2
Duquesne Light	22,856	3	N/A	N/A
FirstEnergy	271,174	34	69,907	10
Statewide	719,846	91	138,673	19

Note(s): ^a Totals may not equal sum of column or row due to rounding

5.2 PHASE V RESULTS

To estimate the Phase V Act 129 CHP potential, it is assumed that an effective acquisition cost would be approximately \$0.032/kWh saved based on the seven CHP projects completed during the previous phase. Assuming this acquisition cost and a total estimated budget allocation of \$2,445,900 annually, assuming 1 percent of the total Act 129 budget established in discussions with TUS and Commission staff, the total five-year Act 129 CHP Potential incremental energy savings potential was estimated. Table 38 below summarizes the assumed Phase V CHP budget for each

EDC and the associated incremental annual first-year savings. Table 39 and Table 40 present the Act 129 CHP energy savings and peak demand reductions potential by EDC and year for CHP projects.

Table 38: Phase V Act 129 CHP Potential Budget Allocation and Savings^a

EDC	Assumed Phase V CHP Budget (\$MM)	Annual CHP Budget (\$MM)	Incremental Annual Savings (MWh)	Incremental Annual Peak Demand Savings (MW)
PECO	\$4.27	\$0.85	26,607	4
PPL	\$3.08	\$0.62	19,144	3
Duquesne Light	\$0.98	\$0.20	6,084	1
FirstEnergy	\$3.90	\$0.78	24,300	3
Statewide	\$12.23	\$2.45	76,136	11

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 39: Phase V Act 129 CHP Potential GWh Savings by EDC and Year^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	26.6	26.6	26.6	26.6	26.6	133.0
PPL	19.1	19.1	19.1	19.1	19.1	95.7
Duquesne Light	6.1	6.1	6.1	6.1	6.1	30.4
FirstEnergy	24.3	24.3	24.3	24.3	24.3	121.5
Statewide	76.1	76.1	76.1	76.1	76.1	380.7
% of 2009/2010 Load Forecast	0.05%	0.05%	0.05%	0.05%	0.05%	0.26%

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 40: Phase V Act 129 CHP Potential MW Peak Demand Reduction by EDC and Year^a

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
PECO	4	4	4	4	4	19
PPL	3	3	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	3	3	17
Statewide	11	11	11	11	11	53
% of 2007/2008 Load	0.04%	0.04%	0.04%	0.04%	0.04%	0.20%

Note(s): ^a Totals may not equal sum of column or row due to rounding

In summary, significant potential exists for CHP installations in Pennsylvania. Although the SWE team previously determined that gas turbines and microturbines are the most “economically preferred” technologies, it is important to note that this is driven by the quantifiable customer economics that were included within the scope of this study. As a result, the SWE team recommends that any CHP

program continue to support several technologies, since it is ultimately a mix of customer considerations that drive CHP technology selection.

5.3 PREVIOUS PHASE IV METHODS AND RESULTS

5.3.1 Previous Phase IV Analysis Methods

The previous CHP analysis in the Phase IV EEPDR MPS study focused on analyzing large natural gas customers, targeting large commercial, industrial, and medium-size customers based on their usage. The analysis matched these high-usage customers to EDCs based on their addresses and ZIP Codes. It included an in-depth assessment of technological, economic, achievable, and program potential. The technical potential analysis estimated the maximum possible CHP capacity by examining monthly gas consumption patterns, identifying facilities with consistent thermal loads, and optimizing system sizes using regression models informed by U.S. DOE CHP Fact Sheets.⁴² The analysis excluded existing installations to avoid duplication. Economic potential was evaluated using Pennsylvania's TRC Test, considering benefits like fuel savings and tax credits while accounting for equipment, installation, and maintenance costs.

The SWE team assessed technologies based on Benefit-Cost Ratios and excluded those with BCRs below 0.9 from further analysis. Achievable potential incorporated realistic adoption rates, using benchmarks and technology adoption trends from other states to model 10-year projections for different CHP technologies. Finally, program potential refined achievable potential by factoring in operational constraints such as construction challenges and resource availability, applying feasibility factors to adjust for real-world deployment limitations.

5.3.2 Previous Phase IV Results

The technical potential analysis calculated capacity and generation limits while capping contributions from peak load and avoiding overestimation of electricity export viability. Economic potential findings identified gas turbines and microturbines as the most cost-effective technologies, with IC engines and steam turbines remaining viable in specific scenarios, especially where resiliency was a priority. Economic potential exceeded previous studies due to a more detailed approach to constraints. The estimated achievable potential analysis demonstrated significant variability across EDCs, with PPL achieving the highest energy and capacity savings for the single 2025 year (over 83,000 MWh and 10 MW) and Duquesne Light the lowest (5,700 MWh and 0.7 MW).

Total estimated statewide incremental annual energy savings exceeded 240,000 MWh for 2025, driven by differences in technology maturity and adoption rates. Program potential results, adjusted for operational constraints, reflected over 150,000 MWh in incremental annual energy savings and nearly 21 MW in capacity savings. These results closely aligned with achievable potential trends, with PPL achieving the highest savings and Duquesne Light the lowest, underscoring the importance of feasibility adjustments to ensure realistic projections.

Table 41 below shows the comparison of the Phase IV Achievable Potential and the Phase IV savings to-date, annualized for a single year based on the period. The Achievable CHP Potential scenario from the previous EEPDR MPS was selected over the Act 129 CHP Potential to remove any potential

⁴² See DOE Better Buildings, CHP Fact Sheets. [Weblink](#).

budget constraints and illustrate that there is significant, achievable CHP potential in the state. The Phase IV Achievable CHP Potential estimate was annualized across 4 years as the period since the Phase IV potential study⁴³ forecasted from 2022–2025, while the Phase IV Savings to-Date are annualized over 3.5 years to reflect the elapsed portion of Phase IV.

Table 41: Phase IV Estimated Achievable Potential and Actual Achieved Savings^a

EDC	Phase IV Max Achievable Potential (Estimated) Annualized Over 4 Years		Phase IV Potential To Date (Actuals) Annualized Over 3.5 Years	
	MWh	MW	MWh	MW
PECO	44,218	6	15,489	2
PPL	62,237	8	4,159	0
Duquesne Light	5,714	1	N/A	N/A
FirstEnergy	67,794	9	19,973	3
Statewide	179,962	23	39,621	6

Note(s): ^a Totals may not equal sum of column or row due to rounding

6.0 SOLAR PV METHODS AND RESULTS

6.1 INTRODUCTION

This section focuses on the additional resource potential available from solar photovoltaic (PV) systems in the Act 129 service area for the Phase V duration. PV systems utilize solar panels, a packaged collection of PV cells, to convert sunlight into electricity. A system is constructed with multiple solar panels, an inverter that converts the direct current (DC) electricity generated by the panels to an alternating current (AC) waveform to meet household needs or back feed onto the grid, a racking system to hold the panels, and electrical system interconnections.

This analysis considered only PV resources for this potential assessment which are behind the meter and owned by the customer. These systems include roof and ground mounted arrays associated with residential and non-residential customers, and very large systems that exceed capacities of 1MW. These EDC specific PV models estimate the business as usual (BAU) and associated opportunities for additional Act 129 incentives for residential and non-residential customers. PV technologies have historically had a very limited role within EDC Act 129 budgets; however, in recent years, EDCs have increased their Act 129 investments with a few EDCs spending more than 10 percent of their annual budgets on PV.

6.2 METHODS

Energy generation and peak demand savings estimates provided by the models incorporate data from several different sources. The goal is to approximate the total number of residential and non-residential PV systems that the EDCs will install during Act 129 Phase V, which is planned to operate from 2026 to 2030. The estimate of annual systems installed is based on existing installed PV

⁴³ See Phase IV EEPDR MPS Report, Page 55. [Weblink](#).

systems and expected PV capacity for each EDC, their total number of EDC customers, and the Bass diffusion curve⁴⁴ to estimate customer adoption levels for PV. Once the number of systems is identified the installed capacity, annual energy generation, and peak demand savings can be determined using average system parameters and expected solar electric performance provided by NREL's PVWatts® modeling software.⁴⁵

The SWE team developed PV customer adoption rates using Bass diffusion modeling similar to energy efficiency measures. This model estimates the total number of systems expected to be installed in Act 129 Phase V. Key assumptions within the customer adoption curve development include:

- State of Pennsylvania Alternative Energy Portfolio Standards (AEPS) PV install data for Act 129 EDCs through 2024
- The number of existing systems installed and the trend of existing system installation from 2019 to 2023 provided by the U.S. Energy Information Administration's (EIA's) EDC specific Form EIA-861 dataset⁴⁶
- The number of residential and non-residential customer accounts
- Market adoption data collected from customers about their willingness to install a PV system with different incentive structures⁴⁷, and
- The rates of innovation and imitation coefficients based on the NREL dGen model for the state of Pennsylvania⁴⁸

The customer adoption scenarios for PV are described below:

- **Business As Usual (BAU):** Includes existing federal tax credits, renewable energy credits, and net-metering revenue.
- **Program Potential:** Act 129 incentives reduce customer costs based on statewide average Phase IV incentives and program costs for PV. Incentives for the Program Potential models are based on existing rebates of \$500 per residential system and non-residential incentives that range from \$0.03 to \$0.10 per kWh generated. As part of the Program Potential scenario, incentives were assumed for all EDCs, even if they are not currently offered to customers.

System costs were estimated using the 2026 Incremental Measure Cost Database and set at \$2.72 per Watt for residential and \$1.30 per Watt for non-residential PV. Program Potential incentives are relatively modest in comparison to the full system cost and provide a marginal reduction to the payback period, which is reflected in a small increase to the PV adoption rate. Non-residential PV systems were found to be cost effective from a TRC perspective for each EDC; whereas residential solar PV systems failed the TRC cost-effective test due to higher system costs. However, customers are installing residential solar systems and EDCs are commencing Act 129 incentives. Consequently, BAU and Program Potential estimates are included for both residential and non-residential sectors.

⁴⁴ The Bass Diffusion model describes the adoption of new products or technologies over time, following an S-shaped curve that accounts for innovators and imitators within a population.

⁴⁵ See PVWatts Calculator. [Weblink](#).

⁴⁶ See Annual Electric Power Industry Report, Form EIA-861. [Weblink](#).

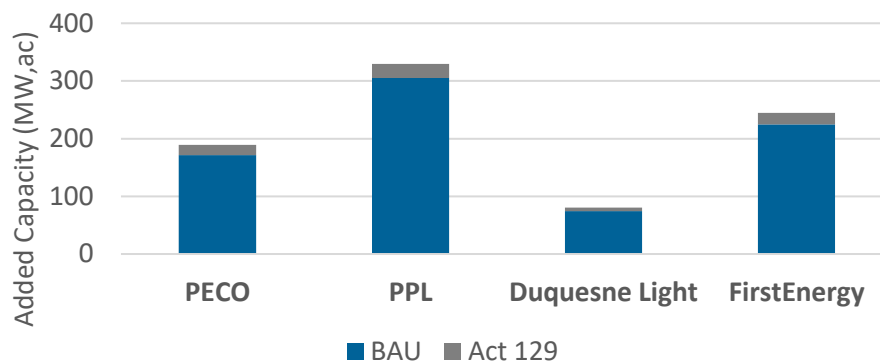
⁴⁷ Willingness to participate data collected from Midwest utilities in 2021.

⁴⁸ See NREL Distributed Generation Market Demand Model (dGen) Documentation, Page 62. Dated February 2016. [Weblink](#).

6.3 SOLAR PV POTENTIAL FINDINGS

Figure 10 summarizes the cumulative residential and non-residential PV capacity (MW,ac) added under the BAU and Program Potential scenarios across Phase V. Capacity in AC megawatts estimates the total amount of PV added during Phase V and is a different metric than peak demand savings, which is discussed in Section 6.3.2. This model projects 844 MW,ac of added PV capacity across the four Act 129 EDCs from 2026 to 2030.

Figure 10: Phase V Added PV Capacity



The presence of a 30 percent federal tax credit paired with revenue from net metering offers benefits to customers who install PV in lieu of Act 129 programs. As shown in Table 42, over 90 percent of the added capacity is from the BAU scenario.

Table 42: Phase V Total BAU and Act 129 PV Capacity Added^a

EDC	BAU (MW,ac)	Act 129 (MW,ac)	Total (MW,ac)
PECO	171	18	189
PPL	305	25	330
Duquesne Light	74	6	81
FirstEnergy	225	20	245
Statewide	775	69	844

Note(s): ^a Totals may not equal sum of column or row due to rounding

6.3.1 Residential and Non-Residential

Residential (Table 43) and non-residential (Table 44) systems both contribute to the PV potential with similar levels of added capacity, energy generation, and peak demand savings. System counts are significantly higher for residential due to smaller average systems sizes (6.9kW to 9.2kW) than non-residential (98.2kW to 146.9kW) based on blend of Pennsylvania AEPS and Form EIA-861 data.

Table 43: Residential Phase V Total PV Performance in Program Potential Scenario^a

EDC	Systems	Act 129 (MW,ac)	Energy Generated (MWh)	Peak Demand Savings (MW)
PECO	18,039	106	163,062	21
PPL	20,219	159	231,666	31
Duquesne Light	6,970	42	57,951	8
FirstEnergy	16,374	129	184,858	25
Statewide	61,601	436	637,537	85

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 44: Non-residential Phase V Total PV Performance in Program Potential Scenario^a

EDC	Systems	Act 129 (MW,ac)	Energy Generated (MWh)	Peak Demand Savings (MW)
PECO	818	83	128,784	16
PPL	1,552	171	248,280	33
Duquesne Light	306	39	53,673	8
FirstEnergy	1,363	116	165,370	23
Statewide	4,039	408	596,107	79

Note(s): ^a Totals may not equal sum of column or row due to rounding

6.3.2 Phase V Solar PV Results

The BAU and Program Potential PV models show potential for both energy and peak demand savings in Phase V. Generation of combined residential and non-residential PV could contribute 12 percent to 21 percent of each EDCs Phase V estimated traditional energy efficiency under the Achievable Potential scenario (Table 45). Contribution towards Phase V estimated achievable peak demand is similar at 13 percent to 21 percent of Phase V estimated traditional energy efficiency Achievable Potential peak demand (Table 46).

Table 45: Phase V Total PV Generation by EDC^a

EDC	Phase V PV Energy Generated (MWh)	Phase V Achievable Traditional EE Potential (MWh)	PV Generation Compared to Phase V Achievable Traditional EE Potential
PECO	291,846	2,091,966	13.95%
PPL	479,947	2,306,202	20.81%
Duquesne Light	111,624	608,771	18.34%
FirstEnergy	350,228	2,819,756	12.42%
Statewide	1,233,644	7,826,695	15.76%

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 46: Phase V Total PV MW Peak Demand Reduction by EDC^a

EDC	Phase V PV Demand Savings (MW)	Phase V Achievable EE Potential (MW)	PV Demand Savings Compared to Phase V Achievable EE Potential
PECO	37	267	13.76%
PPL	64	301	21.21%
Duquesne Light	16	81	19.40%
FirstEnergy	48	357	13.34%
Statewide	164	1,006	16.30%

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 47 summarizes the cost performance for residential and non-residential PV measures. With lower energy (\$/MWh) and peak demand (\$/MW) acquisition costs than other measures under consideration, PV provides potential for the Phase V programs. PV budgets show that EDCs can achieve more than 1 percent of program energy goals for each percentage of Phase V budget they spend on PV.

Table 47: Phase V Total PV Budget and Acquisition Cost^a

EDC	PV Budget (\$MM)	Phase V Budget (\$MM)	Acquisition Cost ⁴⁹ (\$/MWh)	Acquisition Cost (\$/kW)
PECO	\$46.9	\$427.4	\$160.8	\$1,279
PPL	\$74.1	\$307.5	\$154.3	\$1,159
Duquesne Light	\$18.2	\$97.7	\$162.9	\$1,163
FirstEnergy	\$54.2	\$390.3	\$154.7	\$1,138
Statewide	\$193.3	\$1,222.9	\$157.4	\$1,194

Note(s): ^a Totals may not equal sum of column or row due to rounding

6.3.3 PV Conclusions

The PV models summarized in this section show potential for PV in Phase V, split between BAU and Program Potential scenarios. In alignment with CHP, another Act 129 measure that can create new electricity for the grid, the SWE team proposes a budget allocation of 5 percent for PV systems in the Phase V market potential study. PV energy generation and peak demand savings under the 5 percent budget allocation are summarized in Table 48 and Table 49.

Table 48: Act 129 PV Potential GWh Savings by EDC and Year (5% Budget Allocation)^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
PECO	21.7	24.0	26.4	29.0	31.8	132.9
PPL	16.5	18.1	19.8	21.7	23.6	99.6
Duquesne Light	4.9	5.4	6.0	6.5	7.2	30.0
FirstEnergy	20.7	22.8	25.1	27.5	30.1	126.2
Statewide	63.8	70.3	77.3	84.7	92.7	388.7
% of 2009/2010 Load Forecast	0.04%	0.05%	0.05%	0.06%	0.06%	N/A

Note(s): ^a Totals may not equal sum of column or row due to rounding

⁴⁹ Statewide acquisition costs are \$161.8/MWh and \$1,216/kW for residential systems and \$154.2/MWh and \$1,169/kW for non-residential

Table 49: Act 129 PV Potential MW Peak Demand Reduction by EDC and Year (5% Budget Allocation)^a

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
PECO	3	3	3	4	4	17
PPL	2	2	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	4	4	17
Statewide	8	9	10	11	12	51
% of 2007/2008 Load	0.03%	0.03%	0.04%	0.04%	0.05%	N/A

Note(s): ^a Totals may not equal sum of column or row due to rounding

7.0 ACT 129 EE POTENTIAL AND CONCLUSION

The team has conducted this potential study in accordance with the 2026 TRC Test Final Order to determine EE savings potential and associated peak demand reductions for all four EDCs regulated under Act 129. The study acknowledges the balance among traditional EE, CHP, and solar PV, and modeled the Act 129 EE Potential for traditional EE, CHP, solar PV, and associated peak demand reductions. It also ensured that the analysis conformed to past Act 129 spending practices related to efficiency activity in the low-income sector. This study struck a careful balance between the methods and purpose of a potential study, and the policy context in which the results of this study will be applied. With these factors all addressed in the manner described in the body of the report, the SWE team estimated the Act 129 EE Potential total incremental annual GWh savings. These results can inform PA PUC targets for Phase V of Act 129 for each EDC and would allow for a comprehensive portfolio of EE measures inclusive of a reasonable share of CHP and solar PV.

As agreed upon by the parties, the SWE team blended in a 5 percent and 1 percent spending allocation for solar PV and CHP respectively, drawn proportionally from all EE sectors resulting in a 94 percent traditional EE allocation, to derive the overall Act 129 EE Potential as shown in Table 50 and Table 51 below. This Act 129 EE Potential constitutes the central results of this study. As presented in Table 52, the Act 129 EE Potential portfolio has an acquisition cost of \$337.2 per MWh saved. The value balances the historically mixed performance in Pennsylvania for acquiring CHP savings in Act 129 programs and the increasing prevalence of solar PV contributions to EDC Phase IV savings to-date.

Table 50: Act 129 EE Potential GWh Savings by EDC, Year, and Component^a

EDC	2026 (GWh)	2027 (GWh)	2028 (GWh)	2029 (GWh)	2030 (GWh)	Total (GWh)
Traditional EE Potential (94% Budget Allocation)						
PECO	191.3	191.3	191.3	191.3	191.3	956.7
PPL	142.8	142.8	142.8	142.8	142.8	714.0
Duquesne Light	45.5	45.5	45.5	45.5	45.5	227.3
FirstEnergy	191.8	191.8	191.8	191.8	191.8	959.2
Statewide	571.4	571.4	571.4	571.4	571.4	2,857.2
CHP (1% Budget Allocation)						
PECO	26.6	26.6	26.6	26.6	26.6	133.0
PPL	19.1	19.1	19.1	19.1	19.1	95.7
Duquesne Light	6.1	6.1	6.1	6.1	6.1	30.4
FirstEnergy	24.3	24.3	24.3	24.3	24.3	121.5
Statewide	76.1	76.1	76.1	76.1	76.1	380.7
Solar PV (5% Budget Allocation)						
PECO	21.7	24.0	26.4	29.0	31.8	132.9
PPL	16.5	18.1	19.8	21.7	23.6	99.6
Duquesne Light	4.9	5.4	6.0	6.5	7.2	30.0
FirstEnergy	20.7	22.8	25.1	27.5	30.1	126.2
Statewide	63.8	70.3	77.3	84.7	92.7	388.7
Act 129 EE Potential						
PECO	239.6	241.9	244.3	247.0	249.8	1,222.6
PPL	178.4	180.0	181.8	183.6	185.6	909.4
Duquesne Light	56.5	57.0	57.5	58.1	58.7	287.7
FirstEnergy	236.9	239.0	241.2	243.6	246.2	1,206.9
Statewide	711.4	717.9	724.8	732.3	740.2	3,626.6

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 51: Act 129 EE MW Potential Peak Demand Reduction by EDC, Year, and Component^a

EDC	2026 (MW)	2027 (MW)	2028 (MW)	2029 (MW)	2030 (MW)	Total (MW)
Traditional EE Potential (94% Budget Allocation)						
PECO	25	25	25	25	25	125
PPL	19	19	19	19	19	95
Duquesne Light	6	6	6	6	6	31
FirstEnergy	25	25	25	25	25	124
Statewide	75	75	75	75	75	375
CHP (1% Budget Allocation)						
PECO	4	4	4	4	4	19
PPL	3	3	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	3	3	17
Statewide	11	11	11	11	11	53
Solar PV (5% Budget Allocation)						
PECO	3	3	3	4	4	17
PPL	2	2	3	3	3	13
Duquesne Light	1	1	1	1	1	4
FirstEnergy	3	3	3	4	4	17
Statewide	8	9	10	11	12	51
Act 129 EE Potential						
PECO	32	32	32	32	33	161
PPL	24	24	24	25	25	122
Duquesne Light	8	8	8	8	8	40
FirstEnergy	31	31	32	32	32	158
Statewide	94	95	96	97	98	479

Note(s): ^a Totals may not equal sum of column or row due to rounding

Table 52: Act 129 EE Potential Energy Savings, Peak Demand Reductions, and Acquisition Costs by EDC^a

EDC	Acquisition Cost (\$/MWh)	Budget (\$MM)	Energy Savings (GWh)	Peak Demand Reduction (MW)
PECO	\$349.6	\$427.4	1,222.6	161
PPL	\$338.1	\$307.5	909.4	122
Duquesne Light	\$339.6	\$97.7	287.7	40
FirstEnergy	\$323.4	\$390.3	1,206.9	158
Statewide	\$337.2	\$1,222.9	3,626.6	479

Note(s): ^a Budgets and acquisition costs are in nominal dollars. MWh and peak MW are the sum of first-year incremental annual savings for 2026–2030. Peak demand impacts are reported as the average of summer and winter peak MW reductions intentionally for ease of comparison to the DR MPS.

The SWE team anticipates that key markets for traditional EE, CHP, and solar PV continue to evolve in Pennsylvania. The team notes that the actual savings, costs, and benefits of such efficiency programs in Pennsylvania will vary according to the degree of deviation between the best available forecasts used in this study and actual market conditions. These factors (savings, costs, and benefits) will also vary because of individual program design, program support, and utility customer participation during Phase V.

APPENDICES

Appendix A: Economic and Maximum Achievable Potential Modeling Results

Appendix B: Energy Forecasts

Appendix C: Energy Sales Disaggregation Data

Appendix D1: Measure Characterizations – Summary

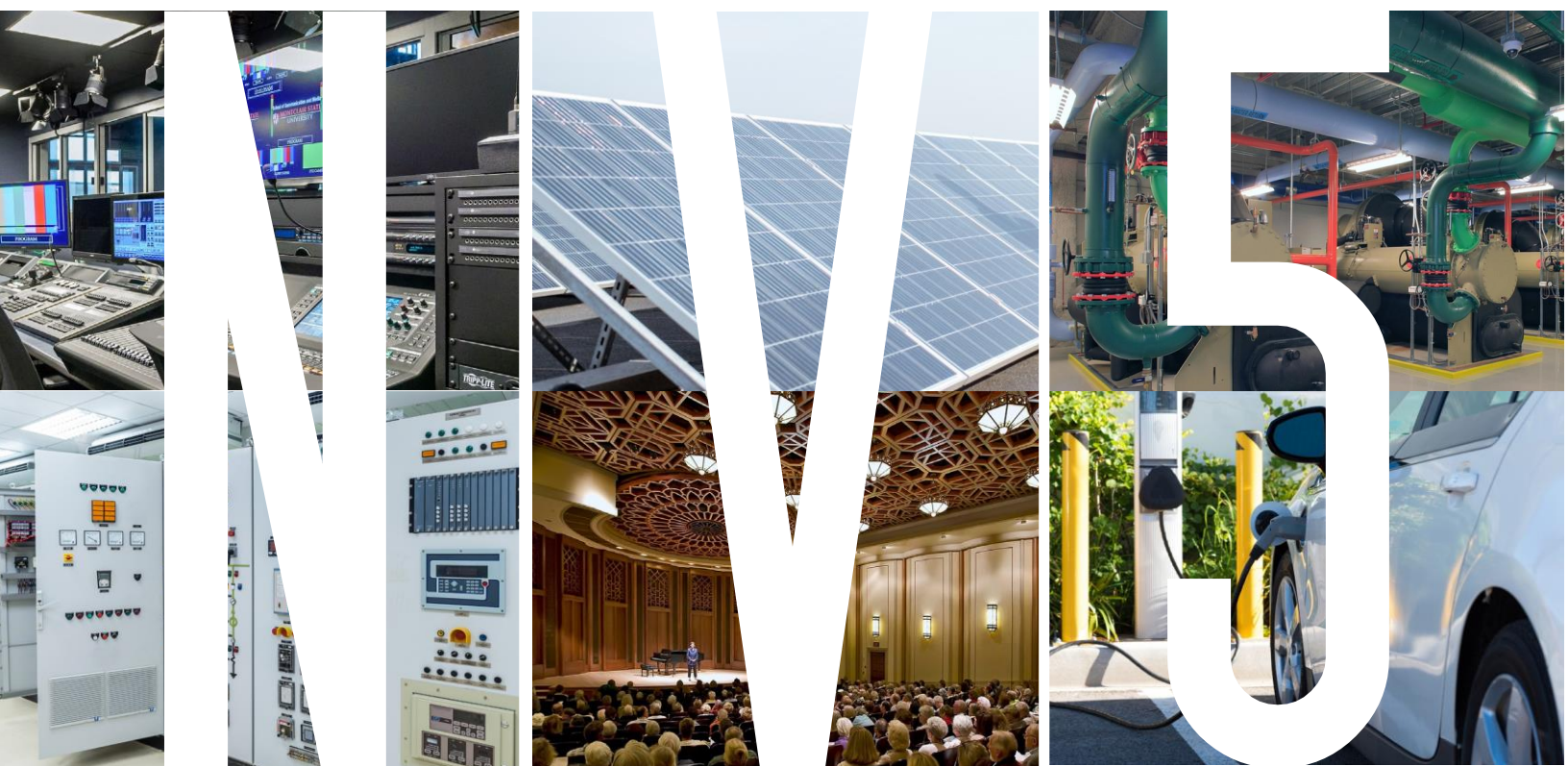
Appendix D2: Measure Characterizations – Sources

Appendix E1: Impact Factors – Applicability

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Appendix E3: Impact Factors – Retrofit Not Complete

Appendix F: Load Shapes



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Appendix A: Economic and Maximum Achievable Potential Modeling Results

Appendix A. Economic and Maximum Achievable Potential Modeling Results

Economic Results

All Sectors Incremental Annual Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	1,129	1,392	339	485	445	132	657	4,579
2027	1,073	1,303	328	456	419	128	623	4,330
2028	1,052	1,258	323	443	406	127	608	4,217
2029	911	1,072	302	380	340	115	530	3,650
2030	911	1,055	300	375	335	115	525	3,616
2031	819	964	265	343	307	105	484	3,287
2032	821	951	264	340	304	105	481	3,266
2033	835	946	267	338	303	106	481	3,276
2034	851	943	269	338	303	107	483	3,294
2035	868	940	271	309	304	109	485	3,286
Total	9,270	10,824	2,928	3,807	3,466	1,149	5,357	36,801

All Sectors Cumulative Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	1,129	1,392	339	485	445	132	657	4,579
2027	2,185	2,679	662	934	859	259	1,271	8,849
2028	3,206	3,903	979	1,365	1,254	382	1,864	12,953
2029	4,010	4,753	1,231	1,669	1,511	471	2,266	15,911
2030	4,784	5,565	1,473	1,959	1,757	556	2,651	18,745
2031	5,412	6,248	1,664	2,200	1,963	624	2,974	21,085
2032	6,035	6,916	1,853	2,437	2,165	691	3,291	23,388
2033	6,656	7,560	2,042	2,665	2,360	758	3,599	25,640
2034	7,241	8,162	2,216	2,880	2,543	821	3,891	27,754
2035	7,802	8,719	2,382	3,049	2,716	882	4,165	29,715

Maximum Achievable Results

All Sectors Incremental Annual Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	229	243	69	85	76	24	110	836
2027	363	403	102	141	126	38	183	1,356
2028	489	552	134	195	173	51	252	1,846
2029	479	528	144	189	161	53	247	1,801
2030	532	579	160	208	177	59	274	1,989
2031	470	523	137	189	161	53	250	1,783
2032	486	529	142	192	164	55	255	1,823
2033	506	533	147	194	166	57	259	1,862
2034	523	535	151	196	168	58	262	1,893
2035	537	535	154	179	169	59	264	1,897
Total	4,614	4,960	1,340	1,768	1,541	507	2,356	17,086

All Sectors Cumulative Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	229	243	69	85	76	24	110	836
2027	575	631	167	220	196	60	285	2,134
2028	1,044	1,164	296	407	364	109	527	3,911
2029	1,494	1,663	433	585	515	158	759	5,607
2030	1,988	2,200	582	777	679	212	1,013	7,451
2031	2,406	2,670	705	946	823	259	1,236	9,045
2032	2,830	3,135	830	1,114	967	306	1,459	10,641
2033	3,262	3,593	956	1,278	1,108	353	1,678	12,228
2034	3,695	4,038	1,082	1,440	1,245	399	1,893	13,792
2035	4,120	4,465	1,204	1,576	1,378	444	2,100	15,287

Appendix A. Economic and Maximum Achievable Potential Modeling Results

Program Achievable Results

All Sectors Incremental Annual Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	181	185	57	65	65	19	83	655
2027	253	272	75	95	95	26	121	937
2028	318	352	91	123	123	33	157	1,197
2029	308	333	95	118	118	34	152	1,158
2030	337	362	103	129	129	37	167	1,264
2031	270	305	78	109	109	30	141	1,042
2032	281	310	81	112	112	31	145	1,072
2033	297	322	84	116	116	33	151	1,119
2034	312	332	86	120	120	34	156	1,160
2035	325	338	88	112	112	35	160	1,170
Total	2,882	3,111	838	1,099	1,099	312	1,433	10,774

All Sectors Cumulative Savings by EDC, 2026-2035 (GWh)

Year	PECO	PPL	Duquesne Light	FE: Met-Ed	FE: Penelec	FE: Penn Power	FE: West Penn Power	Statewide
2026	181	185	57	65	65	19	83	655
2027	419	444	129	154	154	43	197	1,540
2028	720	780	215	271	271	75	346	2,678
2029	1,005	1,090	304	380	380	106	487	3,752
2030	1,312	1,421	399	497	497	139	639	4,904
2031	1,542	1,687	467	591	591	164	761	5,803
2032	1,777	1,954	535	686	686	190	884	6,712
2033	2,023	2,227	606	783	783	217	1,010	7,649
2034	2,275	2,502	676	881	881	244	1,137	8,596
2035	2,527	2,773	745	966	966	270	1,262	9,509

Appendix B: Energy Forecasts

Appendix B. Energy Forecasts

Table B1: PECO - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	15,988,918	16,379,547	16,830,992	17,352,211	17,930,616	18,547,289	19,196,293	19,912,607	20,656,218	21,408,151
Small C&I	7,208,145	7,269,967	7,336,264	7,409,086	7,486,926	7,567,684	7,650,564	7,755,288	7,867,609	7,979,700
Large C&I	14,124,402	14,245,541	14,375,451	14,518,148	14,670,675	14,828,920	14,991,325	15,196,532	15,416,626	15,636,268

Table B2: PPL - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	15,565,855	15,695,996	15,817,871	15,961,331	16,106,105	16,252,203	16,399,637	16,548,421	16,698,567	16,850,088
Small C&I	8,396,227	8,470,616	8,557,044	8,603,505	8,650,293	8,697,411	8,744,862	8,792,648	8,840,773	8,889,238
Large C&I	14,721,483	14,851,913	15,003,451	15,084,912	15,166,947	15,249,561	15,332,759	15,416,545	15,500,925	15,585,902

Table B3: Duquesne Light - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	4,321,788	4,373,699	4,434,505	4,487,230	4,526,434	4,561,450	4,591,749	4,616,121	4,659,018	4,702,317
Small C&I	3,413,857	3,425,865	3,436,233	3,476,340	3,496,962	3,524,404	3,570,804	3,611,584	3,635,213	3,659,028
Large C&I	5,112,822	5,130,805	5,146,332	5,206,399	5,237,285	5,278,384	5,347,875	5,408,951	5,444,339	5,480,005

Table B4: FE: Met-Ed - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	6,161,012	6,247,512	6,369,758	6,434,943	6,530,851	6,625,614	6,756,624	6,831,824	6,950,890	6,370,118
Small C&I	3,283,068	3,298,784	3,318,041	3,331,044	3,341,522	3,350,389	3,363,214	3,373,858	3,390,893	3,132,448
Large C&I	5,079,857	5,104,174	5,133,970	5,154,089	5,170,303	5,184,022	5,203,866	5,220,336	5,246,693	4,846,803

Table B5: FE: Penelec - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	4,688,724	4,780,626	4,889,229	4,986,734	5,094,893	5,204,708	5,329,087	5,442,205	5,573,310	5,714,882
Small C&I	2,744,511	2,747,283	2,740,516	2,722,794	2,700,702	2,665,323	2,636,499	2,613,390	2,607,008	2,598,421
Large C&I	5,516,692	5,522,265	5,508,662	5,473,038	5,428,632	5,357,517	5,299,579	5,253,128	5,240,299	5,223,040

Table B6: FE: Penn Power - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	1,826,856	1,866,405	1,914,564	1,955,593	2,004,235	2,053,524	2,111,970	2,159,475	2,216,161	2,279,426
Small C&I	1,347,888	1,366,996	1,386,257	1,400,749	1,412,034	1,421,787	1,433,450	1,443,640	1,455,465	1,468,578
Large C&I	1,640,579	1,663,837	1,687,280	1,704,919	1,718,654	1,730,525	1,744,721	1,757,124	1,771,516	1,787,477

Table B7: FE: West Penn Power - Baseline Electric Sales Forecast, at meter (MWh)

Sector	Year									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	7,596,967	7,684,673	7,810,341	7,905,663	8,027,819	8,149,337	8,302,264	8,413,877	8,563,907	8,736,269
Small C&I	3,936,317	3,995,375	4,051,786	4,098,753	4,133,361	4,159,510	4,187,890	4,217,045	4,249,206	4,283,196
Large C&I	8,562,275	8,690,738	8,813,443	8,915,605	8,990,885	9,047,763	9,109,495	9,172,913	9,242,871	9,316,805

Appendix C: Energy Sales Disaggregation Data

Appendix C. Energy Sales Disaggregation Data

Table C1: PEOD - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																			
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small College/University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/Manufacturing	Small Institutional/Public Service	Small Lodging	Small Motel/Resort/Other	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education/College/University	Large Education - Other	Large Grocery
Appliances	1,553,979	113,475	266,953	63,042	0	0	0	0	0	0	0	0	0	0	0	0	0	44,689	14,896	37,965
Cooking	1,458,193	101,589	256,863	56,498	0	0	12,948	4,316	21,702	3,051	540	215	16,079	2,820	26,675	3,466	126,747	20,504	10	0
External Lighting	4,428,188	326,861	727,248	169,486	155,924	43,150	28,923	24,253	20,933	320,857	18,109	40,651	189,455	83,311	44,529	144,880	37,988	424,455	255,211	418,045
Interior Lighting	57,527	4,095	9,834	2,275	5,880	1,960	4,256	1,890	1,039	9,443	1,938	5,559	5,365	1,785	10,374	9,210	20,394	6,765	7,566	23,995
Other	917,743	36,838	86,750	20,477	52,617	17,639	38,305	50,009	9,355	26,676	8,043	17,420	86,305	228,289	18,075	93,370	82,891	182,643	60,881	215,958
Refrigeration	713,096	50,765	137,426	28,203	78,144	26,051	26,511	74,009	13,413	53,357	23,726	32,411	154,893	346,631	31,130	137,780	49,843	269,744	89,028	309,655
Rug Loads	1,905,583	135,658	319,139	75,366	39,588	13,196	4,240	28,485	5,027	29,363	20,191	2,411	23,537	347,004	4,626	99,280	49,947	136,638	45,446	6,966
Space Heating	2,468,873	175,132	412,473	97,407	184,846	62,892	15,146	69,893	7,918	21,721	24,139	10,520	130,137	15,469	16,787	44,346	14,386	281,617	45,302	71,253
Ventilation	2,483,424	174,659	410,890	97,033	10,719	3,591	5,094	3,480	614	691	12,881	22,061	20,459	49,255	22,530	14,555	9,038	37,184	12,395	2,502
Water Heating	1,319,359	98,125	230,842	54,514	0	0	78,487	26,362	26,476	42,952	7,980	29,334	64,095	22,016	118,274	341,581	23,283	131,049	176,119	270,900
Waters	0	0	0	0	0	0	2,317	2,217	3,509	680	1,834	7,810	2,896	12,874	43,032	16,206	8,006	3,837	13,709	2,810
Drives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motors and VFDs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compressed Air Systems	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Cooling and Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Heating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C2: PPL - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																			
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small College/University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/Manufacturing	Small Institutional/Public Service	Small Lodging	Small Motel/Resort/Other	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education/College/University	Large Education - Other	Large Grocery
Appliances	998,278	115,262	172,394	64,035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooking	893,196	103,170	164,247	57,728	0	0	14,811	4,937	44,340	1,980	879	415	17,418	6,447	31,121	1,745	142,340	27,645	15	14,704
External Lighting	184,247	13,424	27,724	6,090	49,783	11,051	26,402	9,783	11,051	164,904	29,462	54,711	347,661	97,825	221,263	433,031	60,769	188,775	48,426	148,775
Interior Lighting	36,028	4,160	6,222	2,311	6,726	2,242	8,696	5,953	1,691	6,735	1,501	4,425	11,153	12,710	2,006	13,947	14,210	6,677	2,736	4,068
Other	446,598	61,565	77,134	28,647	89,412	29,804	52,133	129,667	21,824	203,056	32,201	7,419	192,141	174,019	34,993	72,520	77,052	86,789	25,950	24,388
Refrigeration	1,183,430	137,795	266,095	76,553	45,285	15,095	8,222	46,345	8,379	56,172	21,672	5,112	27,460	174,699	5,196	79,924	77,059	44,699	14,986	9,847
Space Heating	1,542,452	178,093	266,389	68,941	21,339	1,113	32,637	16,096	5,296	174,974	8,378	8,219	28,162	5,296	123,904	48,347	87,611	1,062	105,638	29,467
Ventilation	4,429,230	511,404	764,891	284,113	13,234	4,108	20,414	6,662	999	1,334	13,932	97,357	12,202	23,121	35,392	19,624	12,335	4,078	3,981	8,959
Water Heating	1,647,205	190,188	284,458	105,660	2,653	884	4,529	6,360	1,122	13,131	8,460	6,618	14,786	15,943	48,126	9,219	25,003	2,634	878	2,119
Waters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motors and VFDs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compressed Air Systems	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Cooling and Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Heating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C3: Duquesne Light - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																			
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small College/University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/Manufacturing	Small Institutional/Public Service	Small Lodging	Small Motel/Resort/Other	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education/College/University	Large Education - Other	Large Grocery
Appliances	454,975	86,397	70,081	47,998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooking	407,083	77,267	62,704	42,946	77,087	25,689	24,990	50,092	8,840	13,499	222,569	21,634	85,727	324,633	31,067	81,138	13,497	150,690	50,230	24,713
External Lighting	18,420	3,118	2,529	1,732	3,471	1,137	2,876	607	1,419	6,645	939	4,321	9,863	1,025	5,106	3,281	6,786	2,262	1,995	10,687
Interior Lighting	157,781	29,063	15,103	11,276	17,408	29,877	17,408	49,061	8,796	38,889	89,641	49,851	26,330	61,075	20,198	17,414	96,170	16,973	13,861	47,413
Other	203,541	38,651	31,352	21,473	46,138	15,973	11,729	37,104	6,548	25,549	20,615	1,638	7,444	134,817	17,890	26,471	17,792	90,215	30,072	11,599
Refrigeration	245,263	37,439	43,698	20,799	60,435	26,051	26,511	74,009	13,413	53,357	23,726	32,411	154,893	346,631	31,130	137,780	49,843	269,744	89,028	309,655
Space Heating	759,988	133,493	308,263	74,163	11,011	3,670	74,854	8,699	802	43,363	5,491	1,374	10,911	4,103	63,345	17,468	20,230	21,330	1,377	74,024
Ventilation	320,828	60,923	49,458	33,846	6,359	2,120	4,594	1,699	300	331	8,519	12,671	7,728	17,912	12,635	7,163	5,453	1,145	1,114	2,042
Water Heating	1,841,196	34,978	28,372	19,432	1,389	456	1,019	1,908	337	3,299	5,416	1,462	5,729	12,390	24,706	3,365	5,773	2,677	892	1,008
Waters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motors and VFDs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compressed Air Systems	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Cooling and Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Heating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C4: PE MacEd - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																													
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small Education - College/University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/Manufacturing	Small Institutional/Public Service	Small Lodging	Small Motel/Resort/Other	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education - College/University	Large Education - Other	Large Grocery	Large Health - Hospital	Large Health - Other	Large Industrial/Manufacturing	Large Institutional/Public Service	Large Lodging	Large Motel/Resort/Other	Large Office	Large Restaurant	Large Retail	Large Warehouse
Appliances	470,435	43,808	81,328	24,338	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooking	420,916	39,197	72,768	21,776	5,331	1,771	15,048	3,116	332	162	7,312	2,541	12,703	796	71,243	12,593	8	6,247	3,062	7,739	2,123	319	940	3,560	380	2,150	314	2,416	381	19,448
External Lighting	18,978	1,581	2,399	878	2,421	807	2,953	447	2,446	4,552	1,144	4,552	8,825	1,024	5,106	3,281	6,786	2,262	1,995	10,687	2,181	1,995	2,181	2,181	2,181	2,181	2,181	2,181	2,181	2,181
Interior Lighting	117,803	14,229	26,445	7,905	21,389	26,057	27,788	20,788	40,023	29,189	38,199	16,695	40,970	9,036	17,340	38,387	26,330	8,150	13,603	36,773	12,592	123,499	71,773	5,611	18,396	76,378	10,448	25,728	69,723	
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Other	210,488	19,598	36,984	10,888	32,184	10,688	32,184	10,688	32,184	33,663	14,900	1,216	10,439	2,659	29,124	15,493	13,392	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638	9,330	1,638
Refrigeration	762,456	92,372	97,227	29,066	16,800	4,433	21,311	12,251	2,142	20,186	9,056	2,173	11,018	19,848	2,600	33,646	23,070	13,099	6,366	14,761	3,487	128,580	4,513	312	2,258	31,428	8,994	30,849	44,340	
Space Heating	726,876	67,688	123,662	37,605	7,681	2,560	112,891	4,255	751	68,462	3,552	2,451	11,495	2,418	62,015	22,024	20,229	9,000	3,000	8,888	2,000	1,996	1,771	300	2,188	968	4,291	14,341	30,849	
Ventilation	1,558,660	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,036	4,981	10,546	12,654	8,940	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198	1,725	5,198
Water Heating	1,585,470	145,146	296,460	80,637	4,436	1,497	8,508	497	384	522	3,769	22,																		

Appendix C. Energy Sales Disaggregation Data

Table D6: PE: Penn Power - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																			
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small Education - College/ University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/ Manufacturing	Small Institutional/ Public Service	Small Lodging	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education - College/ University	Large Education - Other	Large Grocery	Large Health - Hospital
Appliances	197,424	17,239	29,833	9,577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooking	0	0	0	0	1,952	644	5,067	754	133	52	3,009	1,093	433	30,229	4,989	1	1,092	964	2,016	32
Cooling	176,642	15,424	26,692	8,569	19,478	6,493	12,665	26,284	4,462	6,885	60,458	16,606	39,279	103,939	12,906	40,107	5,464	11,016	3,672	5,049
External Lighting	7,125	622	1,077	346	877	292	992	1,451	256	724	1,783	790	1,960	3,168	426	2,524	1,326	496	695	600
Interior Lighting	64,126	5,599	9,690	3,111	7,894	2,631	8,525	13,061	2,305	6,512	16,043	6,753	17,619	28,559	3,634	22,719	11,965	4,485	3,658	5,576
Other	68,321	7,712	13,346	4,285	11,661	3,887	5,945	18,726	3,305	13,026	6,600	1,298	34,110	43,165	7,431	13,088	7,203	2,198	2,370	7,996
Plug Loads	236,038	20,608	37,644	11,449	6,906	1,969	938	7,019	1,139	7,266	3,804	936	4,875	43,333	1,103	14,424	7,204	3,340	1,113	374
Refrigeration	305,042	26,636	46,095	14,798	2,783	928	37,937	2,438	430	22,116	1,492	1,055	4,999	1,314	26,314	8,726	8,190	1,574	525	15,124
Space Heating	225,746	19,714	34,135	10,952	1,607	536	3,226	897	151	169	2,423	6,727	2,166	6,726	5,373	3,642	1,304	609	823	928
Ventilation	0	0	0	0	11,709	3,903	6,169	10,563	1,868	7,161	12,074	6,135	24,496	42,619	5,553	31,888	26,401	6,622	2,207	2,460
Water Heating	119,071	10,397	17,993	5,776	346	115	517	963	170	1,483	1,471	1,122	2,625	3,967	10,263	1,664	2,337	186	66	206
Drives	0	0	0	0	0	0	0	0	0	13,835	0	0	0	0	0	0	0	0	0	0
Motors and VFDs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compressed Air Systems	0	0	0	0	0	0	0	0	0	17,599	0	0	0	0	0	0	0	0	0	0
Process Cooling and Refrigeration	0	0	0	0	0	0	0	0	0	18,061	0	0	0	0	0	0	0	0	0	0
Process Heating	0	0	0	0	0	0	0	0	0	24,461	0	0	0	0	0	0	0	0	0	0

Table D7: PE: West Penn Power - Electric Sales Disaggregation by Building Type and End-Use, 2026, at meter (MWh)

End-Use	Building Type																			
	Single Family	Multifamily	Single Family LI	Multifamily LI	Small Education - College/ University	Small Education - Other	Small Grocery	Small Health - Hospital	Small Health - Other	Small Industrial/ Manufacturing	Small Institutional/ Public Service	Small Lodging	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education - College/ University	Large Education - Other	Large Grocery	Large Health - Hospital
Appliances	589,569	57,268	95,544	31,815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cooking	0	0	0	0	7,228	2,409	16,318	1,950	344	197	11,268	4,591	18,578	628	80,585	14,768	4	12,077	4,026	11,072
Cooling	527,527	61,240	81,881	28,466	72,891	24,297	40,870	65,386	11,539	25,828	224,714	69,736	132,082	150,827	34,404	118,720	15,205	121,782	40,594	27,730
External Lighting	21,278	2,067	3,303	1,148	3,283	1,094	3,703	662	274	3,151	6,056	1,136	4,597	1,136	7,472	3,096	1,428	1,893	687	1,536
Interior Lighting	181,506	18,601	29,725	10,334	29,543	9,848	28,799	33,778	5,961	24,429	59,830	19,389	59,518	41,369	10,221	67,260	33,266	48,359	18,453	19,540
Other	263,763	25,620	40,940	14,213	43,636	14,546	19,142	48,431	8,547	48,864	20,813	5,783	114,698	62,637	19,811	38,742	20,043	72,509	24,923	13,015
Plug Loads	704,847	68,463	109,404	38,035	22,101	7,367	3,026	18,151	3,203	26,890	14,137	1,925	16,392	62,881	2,941	42,697	20,045	36,506	12,309	2,053
Refrigeration	915,981	88,485	141,399	49,159	10,414	3,471	122,419	6,304	1,112	82,965	5,544	4,429	16,611	1,906	70,147	25,828	22,790	17,400	5,800	83,062
Space Heating	1,873,180	181,245	290,748	101,081	6,015	2,005	7,513	2,218	391	635	9,005	40,846	7,284	6,322	14,325	10,484	3,627	10,049	3,190	5,097
Ventilation	0	0	0	0	43,819	14,626	19,308	26,964	44,878	35,841	82,370	61,844	14,803	94,389	70,680	73,210	24,403	13,508	28,389	5,610
Water Heating	730,921	71,190	113,761	39,550	1,296	432	1,467	2,491	440	6,312	5,466	4,713	8,827	5,757	27,359	4,925	6,504	2,164	721	1,131
Drives	0	0	0	0	0	0	0	0	0	268,472	0	0	0	0	0	0	0	0	0	0
Motors and VFDs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compressed Air Systems	0	0	0	0	0	0	0	0	0	67,366	0	0	0	0	0	0	0	0	0	0
Process Cooling and Refrigeration	0	0	0	0	0	0	0	0	0	67,753	0	0	0	0	0	0	0	0	0	0
Process Heating	0	0	0	0	0	0	0	0	0	91,761	0	0	0	0	0	0	0	0	0	0

Appendix D1: Measure Characterizations - Summary

Appendix D1. Messera Characterization

EN 1831 - Measure Descriptions Summary																					
Measure	Owner	Market	Target Measure	Measure Name	Primary Fuel	Secondary Fuel	Primary Fuel Use	Secondary Fuel Use	Measure Description	Measure Description	Measure Description	Start Year	End Year	Life	Present Energy Use (kWh/m²/yr)	Net kWh/m²/yr (at 10% of max)	Net kWh/m²/yr (at 10% of max)	Revenue			
150	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer	E				The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use electric water heating and electric drying.	Existing or new non-ENERGY STAR clothes washer with electric water heating and electric drying.	ENERGY STAR Clothes Washer with electric water heating and electric drying.	2005	2005	14	12.4	0.01	103	47	40.00		
154	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G			The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use gas water heating and electric drying.	Existing or new non-ENERGY STAR clothes washer with gas water heating and electric drying.	ENERGY STAR Clothes Washer with gas water heating and electric drying.	2005	2005	14	12.4	0.01	104	47	40.00		
156	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G		Appliances	Water Heating	The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use gas water heating and gas drying.	Existing or new non-ENERGY STAR clothes washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2005	2005	14	12.4	0.01	105	47	40.00	
157	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G		Appliances	Appliances	The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use gas water heating and gas drying.	Existing or new non-ENERGY STAR clothes washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2005	2005	14	12.4	0.01	107	47	40.00	
159	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer	E				The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use electric water heating and electric drying.	Existing or new non-ENERGY STAR clothes washer with electric water heating and electric drying.	ENERGY STAR Clothes Washer with electric water heating and electric drying.	2005	2005	14	12.4	0.01	110	47	40.00		
161	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G			Appliances	The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use gas water heating and gas drying.	Existing or new non-ENERGY STAR clothes washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2005	2005	14	12.4	0.01	111	47	40.00	
162	Res	MD	NC, HENL, RBNL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G			Water Heating	The measure includes replacement of all existing clothes washer in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use gas water heating and gas drying.	Existing or new non-ENERGY STAR clothes washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2005	2005	14	12.4	0.01	112	47	40.00	
164	Res	MD	NC, HENL, RBNL	ENERGY STAR Dishwasher	E				The measure includes installation of a new ENERGY STAR dishwasher or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with electric water heating.	Baseline or Existing Non-ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2005	2005	10	22.01	0.07	186	47	9		
166	Res	MD	NC, HENL, RBNL	ENERGY STAR Dishwasher with Gas Secondary Fuel	E	G			Water Heating	The measure includes installation of a new ENERGY STAR dishwasher or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with gas water heating.	Baseline or Existing Non-ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2005	2005	10	22.01	0.07	187	47	9	
169	Res	MD	NC, HENL, RBNL	ENERGY STAR Dishwasher	E				Appliances	The measure includes installation of a new ENERGY STAR dishwasher or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with electric water heating.	Baseline or Existing Non-ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2005	2005	10	22.01	0.07	190	47	34	
170	Res	MD	NC, HENL, RBNL	ENERGY STAR Dishwasher	E				Appliances	The measure includes installation of a new ENERGY STAR dishwasher or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with electric water heating.	Baseline or Existing Non-ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2005	2005	10	22.01	0.07	191	47	34	
173	Res	MD	NC, HENL, RBNL	ENERGY STAR Dishwasher	E				Appliances	The measure includes installation of a new ENERGY STAR dishwasher or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with electric water heating.	Baseline or Existing Non-ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2005	2005	10	22.01	0.07	194	47	34	
151	Res	NET	NET	Insulation Garage	E				Coating	The measure includes installation of a new ENERGY STAR insulation or replacement of an old insulation with an ENERGY STAR unit. This measure applies to insulation with electric water heating.	Baseline or Existing Non-ENERGY STAR Insulation	ENERGY STAR Insulation	2005	2005	10	60.0	83.00	1	47	8	
1	Res	MD	NC, HENL, RBNL	Central Air Conditioner	E				Coating	The measure includes replacement of all existing central air conditioners in existing homes with high efficiency units, or installation of a new central air conditioner in a new home. This measure applies to central air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner	2005	2005	15	18.8	0.95	1	47	49	
1	Res	NET	NET	Central Air Conditioner	E				Coating	The measure includes replacement of all existing central air conditioners in existing homes with high efficiency units, or installation of a new central air conditioner in a new home. This measure applies to central air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner	2005	2005	15	18.8	0.95	1	47	49	
3	Res	NET	NET	Central Air Conditioner Turn Up	E				Coating	The measure includes replacement of all existing central air conditioners in existing homes with high efficiency units, or installation of a new central air conditioner in a new home. This measure applies to central air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner	2005	2005	15	18.8	0.95	1	47	49	
5	Res	MD	NC, HENL, RBNL	Air Source Heat Pump	E				Coating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	5	47	49	
5	Res	NET	NET	Air Source Heat Pump	E				Coating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	5	47	49	
6	Res	MD	NC, HENL, RBNL	Air Source Heat Pump	E				Coating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	6	47	49	
9	Res	NET	NET	Air Source Heat Pump Turn Up	E				Coating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	9	47	49	
10	Res	MD	NC, HENL, RBNL	Ductless Mini-Split Air Conditioner	E				Coating	The measure includes replacement of all existing ductless mini-split air conditioners in existing homes with high efficiency units, or installation of a new ductless mini-split air conditioner in a new home. This measure applies to ductless mini-split air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Air Conditioner	ENERGY STAR Ductless Mini-Split Air Conditioner	2005	2005	15	3.0	0.01	1	47	49	
10	Res	NET	NET	Ductless Mini-Split Air Conditioner	E				Coating	The measure includes replacement of all existing ductless mini-split air conditioners in existing homes with high efficiency units, or installation of a new ductless mini-split air conditioner in a new home. This measure applies to ductless mini-split air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Air Conditioner	ENERGY STAR Ductless Mini-Split Air Conditioner	2005	2005	15	3.0	0.01	1	47	49	
11	Res	MD	NC, HENL, RBNL	Ductless Mini-Split Heat Pump	E				Coating	The measure includes replacement of all existing ductless mini-split heat pumps in existing homes with high efficiency units, or installation of a new ductless mini-split heat pump in a new home. This measure applies to ductless mini-split heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Heat Pump	ENERGY STAR Ductless Mini-Split Heat Pump	2005	2005	15	34.0	0.01	11	47	49	
11	Res	NET	NET	Ductless Mini-Split Heat Pump	E				Coating	The measure includes replacement of all existing ductless mini-split heat pumps in existing homes with high efficiency units, or installation of a new ductless mini-split heat pump in a new home. This measure applies to ductless mini-split heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Heat Pump	ENERGY STAR Ductless Mini-Split Heat Pump	2005	2005	15	34.0	0.01	11	47	49	
11	Res	MD	NC, HENL, RBNL	Energy Star Space Air Conditioning	E				Coating	The measure includes replacement of all existing energy star space air conditioning units in existing homes with high efficiency units, or installation of a new energy star space air conditioning unit in a new home. This measure applies to energy star space air conditioning units that use electric water heating.	Existing or Existing Non-ENERGY STAR Energy Star Space Air Conditioning	ENERGY STAR Energy Star Space Air Conditioning	2005	2005	15	3.0	0.01	11	47	49	
12	Res	MD	NC, HENL, RBNL	Smart Thermostat or Gas Secondary Fuel	E	G			Coating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat or Gas Secondary Fuel	ENERGY STAR Smart Thermostat or Gas Secondary Fuel	2005	2005	9	4.8	0.07	14	47	49	
14	Res	MD	NC, HENL, RBNL	Smart Thermostat or Gas Secondary Fuel	E	G			Coating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat or Gas Secondary Fuel	ENERGY STAR Smart Thermostat or Gas Secondary Fuel	2005	2005	9	4.8	0.07	14	47	49	
15	Res	MD	NC, HENL, RBNL	Smart Thermostat	E				Coating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat	ENERGY STAR Smart Thermostat	2005	2005	9	4.8	0.07	14	47	49	
16	Res	MD	NC, HENL, RBNL	Smart Thermostat	E				Coating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat	ENERGY STAR Smart Thermostat	2005	2005	9	4.8	0.07	14	47	49	
17	Res	MD	NC, HENL, RBNL	Smart Thermostat	E				Coating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat	ENERGY STAR Smart Thermostat	2005	2005	9	4.8	0.07	14	47	49	
18	Res	NET	NET	Room Air Conditioner Replacement	E				Coating	The measure includes replacement of all existing room air conditioners in existing homes with high efficiency units, or installation of a new room air conditioner in a new home. This measure applies to room air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Room Air Conditioner Replacement	ENERGY STAR Room Air Conditioner Replacement	2005	2005	3	100.0	1.42	1	47	49	
18	Res	MD	NC, HENL, RBNL	Room Air Conditioner Replacement	E				Coating	The measure includes replacement of all existing room air conditioners in existing homes with high efficiency units, or installation of a new room air conditioner in a new home. This measure applies to room air conditioners that use electric water heating.	Existing or Existing Non-ENERGY STAR Room Air Conditioner Replacement	ENERGY STAR Room Air Conditioner Replacement	2005	2005	3	100.0	1.42	1	47	49	
19	Res	NET	NET	Window Heat	E				Coating	The measure includes replacement of all existing window heat units in existing homes with high efficiency units, or installation of a new window heat unit in a new home. This measure applies to window heat units that use electric water heating.	Existing or Existing Non-ENERGY STAR Window Heat	ENERGY STAR Window Heat	2005	2005	9	1.0	0.00	1	47	49	
20	Res	MD	NC, HENL, RBNL	Air Handler Filter Windows	E				Coating	The measure includes replacement of all existing air handler filter windows in existing homes with high efficiency units, or installation of a new air handler filter window in a new home. This measure applies to air handler filter windows that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Handler Filter Windows	ENERGY STAR Air Handler Filter Windows	2005	2005	9	1.0	0.00	1	47	49	
30	Res	NET	NET	GSHP Decommissioning	E				Coating	The measure includes replacement of all existing ground source heat pump (GSHP) systems in existing homes with high efficiency units, or installation of a new GSHP system in a new home. This measure applies to GSHP systems that use electric water heating.	Existing or Existing Non-ENERGY STAR GSHP Decommissioning	ENERGY STAR GSHP Decommissioning	2005	2005	15	17.0	0.22	1	47	49	
103	Res	NET	NET	Duct Sealing	E				Coating	The measure includes replacement of all existing duct sealing systems in existing homes with high efficiency units, or installation of a new duct sealing system in a new home. This measure applies to duct sealing systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Duct Sealing	ENERGY STAR Duct Sealing	2005	2005	15	10.0	0.00	103	47	7,487.50	
106	Res	NET	NET	Air Sealing	E				Coating	The measure includes replacement of all existing air sealing systems in existing homes with high efficiency units, or installation of a new air sealing system in a new home. This measure applies to air sealing systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Sealing	ENERGY STAR Air Sealing	2005	2005	15	15.0	0.00	106	47	75.00	
108	Res	NET	NET	Air Sealing	E				Coating	The measure includes replacement of all existing air sealing systems in existing homes with high efficiency units, or installation of a new air sealing system in a new home. This measure applies to air sealing systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Sealing	ENERGY STAR Air Sealing	2005	2005	15	15.0	0.00	108	47	75.00	
110	Res	NET	NET	Wall Insulation	E				Coating	The measure includes replacement of all existing wall insulation systems in existing homes with high efficiency units, or installation of a new wall insulation system in a new home. This measure applies to wall insulation systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Wall Insulation	ENERGY STAR Wall Insulation	2005	2005	15	32.0	0.00	110	47	86,450.00	
112	Res	NET	NET	Wall Insulation	E				Coating	The measure includes replacement of all existing wall insulation systems in existing homes with high efficiency units, or installation of a new wall insulation system in a new home. This measure applies to wall insulation systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Wall Insulation	ENERGY STAR Wall Insulation	2005	2005	15	32.0	0.00	112	47	86,450.00	
114	Res	NET	NET	Air Conditioning	E				Coating	The measure includes replacement of all existing air conditioning systems in existing homes with high efficiency units, or installation of a new air conditioning system in a new home. This measure applies to air conditioning systems that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Conditioning	ENERGY STAR Air Conditioning	2005	2005	15	63.0	0.00	114	47	86,450.00	
116	Res	NET	NET	ENERGY STAR Windows	E				Coating	The measure includes replacement of all existing ENERGY STAR windows in existing homes with high efficiency units, or installation of a new ENERGY STAR window in a new home. This measure applies to ENERGY STAR windows that use electric water heating.	Existing or Existing Non-ENERGY STAR ENERGY STAR Windows	ENERGY STAR ENERGY STAR Windows	2005	2005	15	12.0	0.00	116	47	86,451.40	
171	Res	NET	NET	ENERGY STAR Ceiling Fan & Lights	E				Interior Lighting	The measure includes replacement of all existing ENERGY STAR ceiling fans and lights in existing homes with high efficiency units, or installation of a new ENERGY STAR ceiling fan and light in a new home. This measure applies to ENERGY STAR ceiling fans and lights that use electric water heating.	Existing or Existing Non-ENERGY STAR ENERGY STAR Ceiling Fan & Lights	ENERGY STAR ENERGY STAR Ceiling Fan & Lights	2005	2005	15	61.0	0.07	1	47	7,417.88	
172	Res	NET	NET	ENERGY STAR Ceiling Fan	E				Interior Lighting	The measure includes replacement of all existing ENERGY STAR ceiling fans in existing homes with high efficiency units, or installation of a new ENERGY STAR ceiling fan in a new home. This measure applies to ENERGY STAR ceiling fans that use electric water heating.	Existing or Existing Non-ENERGY STAR ENERGY STAR Ceiling Fan	ENERGY STAR ENERGY STAR Ceiling Fan	2005	2005	10	9.0	0.07	1	47	8,417.00	
262	Res	NET	NET	Advanced Two-Phase Seals	E				Plug/Leak	The measure includes replacement of all existing advanced two-phase seals in existing homes with high efficiency units, or installation of a new advanced two-phase seal in a new home. This measure applies to advanced two-phase seals that use electric water heating.	Existing or Existing Non-ENERGY STAR Advanced Two-Phase Seals	ENERGY STAR Advanced Two-Phase Seals	2005	2005	5	30.0	0.35	1	47	49	
147	Res	MD	NC, HENL, RBNL	Energy Star Refrigerators and Freezers	E				Refrigeration	The measure includes replacement of all existing energy star refrigerators and freezers in existing homes with high efficiency units, or installation of a new energy star refrigerator or freezer in a new home. This measure applies to energy star refrigerators and freezers that use electric water heating.	Existing or Existing Non-ENERGY STAR Energy Star Refrigerators and Freezers	ENERGY STAR Energy Star Refrigerator or Freezer	2005	2005	14	9.1	0.89	1	47	47.8	4
147	Res	NET	NET	Energy Star Refrigerators and Freezers	E				Refrigeration	The measure includes replacement of all existing energy star refrigerators and freezers in existing homes with high efficiency units, or installation of a new energy star refrigerator or freezer in a new home. This measure applies to energy star refrigerators and freezers that use electric water heating.	Existing or Existing Non-ENERGY STAR Energy Star Refrigerators and Freezers	ENERGY STAR Energy Star Refrigerator or Freezer	2005	2005	14	9.1	0.89	1	47	47.8	4
148	Res	NET	NET	Secondary Refrigerator and Freezer Removal	E				Refrigeration	The measure includes removal of all existing secondary refrigerators and freezers in existing homes with high efficiency units, or installation of a new secondary refrigerator or freezer in a new home. This measure applies to secondary refrigerators and freezers that use electric water heating.	Existing or Existing Non-ENERGY STAR Secondary Refrigerator and Freezer Removal	ENERGY STAR Secondary Refrigerator and Freezer Removal	2005	2005	15	100.0	0.17	1	47	8	
21	Res	MD	NC, HENL, RBNL	Air Source Heat Pump	E				Space Heating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	5	47	49	
21	Res	NET	NET	Air Source Heat Pump	E				Space Heating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	5	47	49	
22	Res	MD	NC, HENL, RBNL	Air Source Heat Pump	E				Space Heating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump	2005	2005	15	23.1	0.00	6	47	49	
22	Res	NET	NET	Air Source Heat Pump Turn Up	E				Space Heating	The measure includes replacement of all existing air source heat pumps in existing homes with high efficiency units, or installation of a new air source heat pump in a new home. This measure applies to air source heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Air Source Heat Pump Turn Up	ENERGY STAR Air Source Heat Pump Turn Up	2005	2005	15	23.1	0.00	6	47	49	
26	Res	MD	NC, HENL, RBNL	Ductless Mini-Split Heat Pump	E				Space Heating	The measure includes replacement of all existing ductless mini-split heat pumps in existing homes with high efficiency units, or installation of a new ductless mini-split heat pump in a new home. This measure applies to ductless mini-split heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Heat Pump	ENERGY STAR Ductless Mini-Split Heat Pump	2005	2005	15	34.0	0.01	11	47	49	
26	Res	NET	NET	Ductless Mini-Split Heat Pump	E				Space Heating	The measure includes replacement of all existing ductless mini-split heat pumps in existing homes with high efficiency units, or installation of a new ductless mini-split heat pump in a new home. This measure applies to ductless mini-split heat pumps that use electric water heating.	Existing or Existing Non-ENERGY STAR Ductless Mini-Split Heat Pump	ENERGY STAR Ductless Mini-Split Heat Pump	2005	2005	15	34.0	0.01	11	47	49	
27	Res	MD	NC, HENL, RBNL	Energy Star Space Air Conditioning	E				Space Heating	The measure includes replacement of all existing energy star space air conditioning units in existing homes with high efficiency units, or installation of a new energy star space air conditioning unit in a new home. This measure applies to energy star space air conditioning units that use electric water heating.	Existing or Existing Non-ENERGY STAR Energy Star Space Air Conditioning	ENERGY STAR Energy Star Space Air Conditioning	2005	2005	15	3.0	0.01	11	47	49	
27	Res	NET	NET	Energy Star Space Air Conditioning	E				Space Heating	The measure includes replacement of all existing energy star space air conditioning units in existing homes with high efficiency units, or installation of a new energy star space air conditioning unit in a new home. This measure applies to energy star space air conditioning units that use electric water heating.	Existing or Existing Non-ENERGY STAR Energy Star Space Air Conditioning	ENERGY STAR Energy Star Space Air Conditioning	2005	2005	15	3.0	0.01	11	47	49	
28	Res	MD	NC, HENL, RBNL	Smart Thermostat	E				Space Heating	The measure includes replacement of all existing smart thermostats in existing homes with high efficiency units, or installation of a new smart thermostat in a new home. This measure applies to smart thermostats that use electric water heating.	Existing or Existing Non-ENERGY STAR Smart Thermostat	ENERGY STAR Smart Thermostat	2005	2005	9	4.8	0.07	14	47	49	

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301	CAI	MO	NC-REND	Integrated Building Design	E	Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be incorporated in the building process. Using ID, the connected and interrelated parts of a building are incorporated, so that the team to which an system (e.g. lighting has an effect on another (e.g. cooling) is considered for real results. The connected has been considered include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Individually designed building savings to energy savings in new construction	2006	2005	15	22.0%	0.08	301	11	21.22,23	24
302	CAI	MO	NC-REND	Integrated Building Design	E	Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be incorporated in the building process. Using ID, the connected and interrelated parts of a building are incorporated, so that the team to which an system (e.g. lighting has an effect on another (e.g. cooling) is considered for real results. The connected has been considered include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Individually designed building savings to energy savings in new construction	2006	2005	15	22.0%	0.12	302	11	21.22,23	24
303	CAI	RET	RET	Deep Energy Results	E	Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy savings than those of simpler energy retrofit such as upgrading lighting and HVAC equipment. In taking a whole-building approach, deep energy retrofits involve many systems at once by considering energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2006	2005	15	35.3%	0.69	303	11	19.20	20
304	CAI	RET	RET	Deep Energy Results	E	Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy savings than those of simpler energy retrofit such as upgrading lighting and HVAC equipment. In taking a whole-building approach, deep energy retrofits involve many systems at once by considering energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no results	Aggressive retrofit aiming for deep savings	2006	2005	15	35.3%	0.76	304	11	19.20	20
305	CAI	MO	NC-REND	Commissioning	E	Total Electric	Whole building commissioning of new buildings to ensure optimized design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2006	2005	8	13.0%	0.25	305	27	25	26
306	CAI	MO	NC-REND	Commissioning	E	Total Electric	Whole building commissioning of new buildings to ensure optimized design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2006	2005	8	13.0%	0.39	306	27	25	26
307	CAI	RET	RET	Recommissioning	E	Total Electric	Recommissioning and energy management activities, focusing on operational savings.	Current building operations	Recommissioning and energy management activities, focusing on operational savings	2006	2005	8	6.0%	0.22	307	27	26	25
308	CAI	RET	RET	Recommissioning	E	Total Electric	Recommissioning and energy management activities, focusing on operational savings.	Current building operations	Recommissioning and energy management activities, focusing on operational savings	2006	2005	8	6.0%	0.23	308	27	26	25
309	CAI	MO	NC-REND	Comprehensive Data Center	E	Total Electric	Comprehensive data center design or retrofit for energy efficiency.	Data Center built to standard building practices	Energy-efficient data center	2006	2005	15	34.0%	0.40	309	11	18.12	20,12
310	CAI	MO	NC-REND	Comprehensive Data Center	E	Total Electric	Comprehensive data center design or retrofit for energy efficiency.	Existing datacenter	Energy-efficient data center	2006	2005	15	30.0%	0.87	310	11	26	29
311	CAI	RET	RET	EMS - RET	E	Total Electric	Comprehensive data center design or retrofit for energy efficiency.	Existing datacenter	Energy-efficient data center	2006	2005	15	30.0%	0.87	311	11	26	29
312	CAI	MO	NC-REND	EMS - RET	E	Total Electric	A BMS/EMS is a microprocessor-based system which provides the facility to control any building service. It works by using intelligent emulators, controllers, or substation, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and light levels.	No Energy Management System (EMS)	Energy Management System	2006	2005	15	22.0%	0.65	312	11	17.15	18
313	CAI	MO	NC-REND	EMS - RET	E	Total Electric	A BMS/EMS is a microprocessor-based system which provides the facility to control any building service. It works by using intelligent emulators, controllers, or substation, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and light levels.	No Energy Management System (EMS)	Energy Management System	2006	2005	15	17.0%	0.66	313	11	17.15	17
314	CAI	RET	RET	EMS - RET	E	Total Electric	A BMS/EMS is a microprocessor-based system which provides the facility to control any building service. It works by using intelligent emulators, controllers, or substation, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and light levels.	No Energy Management System (EMS)	Energy Management System	2006	2005	15	22.0%	1.39	314	11	17.15	18
315	CAI	MO	NC-REND	EMS - RET	E	Total Electric	A BMS/EMS is a microprocessor-based system which provides the facility to control any building service. It works by using intelligent emulators, controllers, or substation, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and light levels.	No Energy Management System (EMS)	Energy Management System	2006	2005	15	17.0%	0.88	315	11	17.15	17
143	CAI	MO	NC-REND, RSP, RPL	High Efficiency Furnace	E	Ventilation	Replacement of existing boilers with high efficiency.	Baseline Efficiency per ASHRAE Standard 90.1-2005, Section 6.2	High Efficiency per ASHRAE Standard 90.1-2005, Section 6.2	2006	2005	13	4.7%	0.03	—	48	48.51	49
144	CAI	RET	RET	High Efficiency Furnace	E	Ventilation	Replacement of existing boilers with high efficiency.	Baseline Efficiency per ASHRAE Standard 90.1-2005, Section 6.2	High Efficiency per ASHRAE Standard 90.1-2005, Section 6.2	2006	2005	13	4.7%	0.03	—	48	48.51	49
145	CAI	RET	RET	VFD on Kitchen Exhaust Fan	E	Ventilation	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the actual demand for ventilation.	Weighted average of baseline control fan on kitchen exhaust fan	VFD on Kitchen Exhaust Fan	2006	2005	15	40.0%	0.04	—	48	48.51	49
146	CAI	MO	NC-REND, RSP, RPL	VFD on Kitchen Exhaust Fan	E	Ventilation	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the actual demand for ventilation.	Weighted average of baseline control fan on kitchen exhaust fan	VFD on Kitchen Exhaust Fan	2006	2005	15	40.0%	0.03	—	48	48.51	49
147	CAI	RET	RET	ECM Circulator Pump DSH	E	Ventilation	Electronically commutated (EC) circulators (they are high-efficiency brushless DC motors). They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase GFCI fractional horsepower motor. Accurate air handling applications for both heating and cooling.	Single speed induction motor circulator pumps in heating and hot water applications	Installed an ECM or BPM circulator pump	2006	2005	15	80.0%	0.23	—	3	47.51	49
148	CAI	MO	NC-REND, RSP, RPL	ECM Circulator Pump DSH	E	Ventilation	Electronically commutated (EC) circulators (they are high-efficiency brushless DC motors). They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase GFCI fractional horsepower motor. Accurate air handling applications for both heating and cooling.	Single speed induction motor circulator pumps in heating and hot water applications	Installed an ECM or BPM circulator pump	2006	2005	15	80.0%	0.05	—	3	47.51	49
149	CAI	RET	RET	ECM Circulator Pump MM	E	Ventilation	Electronically commutated (EC) circulators (they are high-efficiency brushless DC motors). They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase GFCI fractional horsepower motor. Accurate air handling applications for both heating and cooling.	Single speed induction motor circulator pumps	Electronically commutated motor (ECM)	2006	2005	15	47.1%	0.04	—	3	48.51	49
150	CAI	MO	NC-REND, RSP, RPL	ECM Circulator Pump MM	E	Ventilation	Electronically commutated (EC) circulators (they are high-efficiency brushless DC motors). They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase GFCI fractional horsepower motor. Accurate air handling applications for both heating and cooling.	Single speed induction motor circulator pumps	Electronically commutated motor (ECM)	2006	2005	15	47.1%	0.04	—	3	48.51	49
151	CAI	MO	NC-REND, RSP, RPL	EnergyStar Bathroom Exhaust Fan	E	Ventilation	High efficiency commercial clothes dryers with moisture sensors.	Standard efficiency (non-ENERGY STAR) Clothes Washer	High-Efficiency (ENERGY STAR) Clothes Washer	2006	2005	12	49.0%	0.02	—	48	48	30
152	CAI	RET	RET	EnergyStar Bathroom Exhaust Fan	E	Ventilation	High efficiency commercial clothes dryers with moisture sensors.	Standard efficiency (non-ENERGY STAR) Clothes Washer	High-Efficiency (ENERGY STAR) Clothes Washer	2006	2005	12	49.0%	0.02	—	48	48	30
153	CAI	MO	NC-REND, RSP, RPL	Kitchen DRY - MD	E	Ventilation	DOV in kitchen cooking fan exhaust hood use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements to reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchen	Demand Control Ventilation on Commercial Kitchen	2006	2005	15	58.4%	0.22	279	7	7	8
154	CAI	RET	RET	Kitchen DRY - MD	E	Ventilation	DOV in kitchen cooking fan exhaust hood use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements to reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchen	Demand Control Ventilation on Commercial Kitchen	2006	2005	15	57.4%	0.23	279	7	7	8
155	CAI	RET	RET	Kitchen DRY - MD	E	Ventilation	DOV in kitchen cooking fan exhaust hood use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements to reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchen	Demand Control Ventilation on Commercial Kitchen	2006	2005	15	58.2%	0.00	281	7	7	8
156	CAI	MO	NC-REND, RSP, RPL	Kitchen DRY - MD	E	Ventilation	DOV in kitchen cooking fan exhaust hood use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements to reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchen	Demand Control Ventilation on Commercial Kitchen	2006	2005	15	58.2%	0.00	281	7	7	8
157	CAI	MO	NC-REND, RSP, RPL	Heat Pump Water Heater	E	Water Heating	Replacement of boiler or water storage tank with heat pump water heater (1.20 gallons in commercial facilities with one efficient commercial heat pump water heater).	Storage-type electric resistance water heater (1.20 gallons)	Storage-type electric resistance water heater (1.20 gallons)	2006	2005	10	9.5%	4.48	—	47	47	49
158	CAI	RET	RET	Heat Pump Water Heater	E	Water Heating	Replacement of boiler or water storage tank with heat pump water heater (1.20 gallons in commercial facilities with one efficient commercial heat pump water heater).	Storage-type electric resistance water heater (1.20 gallons)	Storage-type electric resistance water heater (1.20 gallons)	2006	2005	10	9.5%	11.05	—	47	47	49
159	CAI	RET	RET	Flow Sensor	E	Water Heating	Replacement of boiler or water storage tank with heat pump water heater (1.20 gallons in commercial facilities with one efficient commercial heat pump water heater).	Storage-type electric resistance water heater (1.20 gallons)	Storage-type electric resistance water heater (1.20 gallons)	2006	2005	10	9.5%	11.05	—	47	47	49
160	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
161	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
162	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
163	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
164	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
165	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
166	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
167	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
168	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
169	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
170	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
171	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
172	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
173	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
174	CAI	RET	RET	Pipe Insulation on Electric Water Heater	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
175	CAI	MO	NC-REND, RSP, RPL	ENERGY STAR Clothes Washer	E	Ventilation	High efficiency commercial clothes dryers with moisture sensors.	Standard efficiency (non-ENERGY STAR) Clothes Washer	High-Efficiency (ENERGY STAR) Clothes Washer	2006	2005	12	49.0%	0.02	—	48	48	30
176	CAI	MO	NC-REND, RSP, RPL	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
177	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
178	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
179	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
180	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
181	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
182	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
183	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
184	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
185	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
186	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
187	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
188	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
189	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
190	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
191	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
192	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
193	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
194	CAI	RET	RET	Commercial ENERGY STAR Dishwasher	E	Water Heating	Insulation of pipes for commercial buildings with one efficient commercial heat pump water heater.	Low flow pre-rinse sprayer	Low flow pre-rinse sprayer	2006	2005	8	27.0%	0.06	—	47	47	49
195	CAI	RET																

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119	GA	RET	RET	Duct Sealing	E		Space Heating	Duct Sealing reduces the infiltration of outside air and infiltration of return air. Sealing of duct work can be accomplished through application of mastic sealant or a sealant tape to the distribution system of homes with either central air conditioning or a forced air furnace.	Ducted heating and cooling systems with high infiltration and efficiency	Sealed duct work	2008	2005	15	2%	1.08	119	7	7,465.11	40
200	GA	RET	RET	Industrial Process, Space Heating Improvements	E		Space Heating		Existing energy conservation systems	High efficiency industrial process heating systems	2008	2005	15	20%	0.38	—	48	32	32
280	GA	MD	NC,RND,RP,NL	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture will be introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	43%	0.00	276	7	7	8
280	GA	RET	RET	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture will be introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	43%	0.00	276	7	7	8
322	GA	MD	NC,RND	Cool Reel - MD	E		Space Heating	Wiring ceiling material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance and infrared emissivity	2008	2005	15	2%	3.70	321	11	11,135	14
322	GA	RET	RET	Cool Reel - MD	E		Space Heating	Wiring ceiling material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance and infrared emissivity	2008	2005	15	2%	3.62	321	11	11,135	14
326	GA	RET	RET	O-ENERGY STAR Windows	E		Space Heating	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure reduces energy consumption.	Existing non-Energy Star Windows	ENERGY STAR Windows	2008	2005	15	13%	0.66	326	47	46,471.41	40
351	GA	RET	RET	Industrial Processes, Electric Motor Controls	E		Total Electric	Installation of automatic controls on non-managed motors serving machines. Controls must include a primary safety device in order of lighting the motor circuit to ensure the machine is not started for when (ES) releases. Controls must be capable of powering the machine on at activation to highlight the installed device.	No ES	Occupancy sensors turn on lights when in use is around	2008	2005	13	3%	0.14	—	58	38.36	37
360	GA	RET	RET	Building Operator Certification	E		Total Electric		No Controls on the vending machines	Occupancy sensors turn on lights when in use is around	2008	2005	13	3%	0.04	—	48	35,48.60	60
301	GA	MD	NC,RND	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2005	15	22%	0.08	301	11	21,222.23	24
302	GA	MD	NC,RND	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2005	15	22%	0.12	302	11	21,222.23	24
303	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and solar control. Resources available to identify deep energy retrofit design opportunities are available from the Florida Materials Institute and Advanced Energy Retrofit Guide are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2005	15	30%	0.49	303	11	18,320	20
304	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and solar control. Resources available to identify deep energy retrofit design opportunities are available from the Florida Materials Institute and Advanced Energy Retrofit Guide are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2005	15	30%	0.78	304	11	18,320	20
305	GA	MD	NC,RND	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operating systems.	Uncommissioned new building	Commissioned new building	2008	2005	8	13%	0.25	305	27	25	26
306	GA	MD	NC,RND	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operating systems.	Uncommissioned new building	Commissioned new building	2008	2005	8	13%	0.38	306	27	25	26
307	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management within building operational systems.	Current building operations	RC to identify operational and low-carbon savings	2008	2005	8	8%	0.22	307	27	26	26
308	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management within building operational systems.	Current building operations	RC to identify operational and low-carbon savings	2008	2005	8	8%	0.23	308	27	26	26
309	GA	MD	NC,RND	Comprehensive Data Center	E		Total Electric	Comprehensive data center design aimed at energy efficiency.	Comprehensive data center design aimed at energy efficiency	Data Center built to standard building practices	2008	2005	11	38%	0.40	309	11	28.12	20,12
309	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design aimed at energy efficiency.	Comprehensive data center design aimed at energy efficiency	Existing facilities	2008	2005	15	30%	0.87	309	11	28	29
310	GA	MD	NC,RND	Comprehensive Data Center	E		Total Electric	Comprehensive data center design aimed at energy efficiency.	Data Center built to standard building practices	Data Center built with sustainable practices	2008	2005	11	38%	0.00	310	11	28.12	20,12
310	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design aimed at energy efficiency.	Existing facilities	Historic retrofit aimed at achieving significant energy savings	2008	2005	15	30%	0.00	310	11	28	29
311	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2005	15	22%	0.40	311	11	17.15	18
311	GA	MD	NC,RND	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2005	15	18%	0.58	311	11	17.15	17
312	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2005	15	22%	1.39	312	11	17.15	18
312	GA	MD	NC,RND	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2005	15	18%	0.88	312	11	17.15	17
143	GA	MD	NC,RND,RP,NL	High Efficiency Pumps	E		Verification	Replacement of industrial pumps with high efficiency.	Baseline Efficiency per ASHRAE 91.2-2008 Protocol, a 82	High Efficiency per ASHRAE 91.2-2008 Protocol, a 82	2008	2005	14.3	5%	0.03	—	48	48.04	48
144	GA	RET	RET	High Efficiency Fans	E		Verification	Replacement of industrial fans with high efficiency.	Baseline Efficiency per ASHRAE 91.2-2008 Protocol, a 82	High Efficiency per ASHRAE 91.2-2008 Protocol, a 82	2008	2005	14.3	5%	0.04	—	48	48.04	48
144	GA	RET	RET	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2005	15	40%	0.04	—	48	48.04	48
144	GA	MD	NC,RND,RP,NL	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2005	15	40%	0.03	—	48	48.04	48
145	GA	RET	RET	ECM Circulator Pump DMH	E		Verification	Electrically commutated (ECM) circulator pumps are high efficiency alternatives to DC motors. They are typically factory-installed and require no special wiring or controls. They are typically used for hot water heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Installed as ECM or BPM circulator pump	2008	2005	15	82%	0.33	—	3	47.51	48
145	GA	MD	NC,RND,RP,NL	ECM Circulator Pump DMH	E		Verification	Electrically commutated (ECM) circulator pumps are high efficiency alternatives to DC motors. They are typically factory-installed and require no special wiring or controls. They are typically used for hot water heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Installed as ECM or BPM circulator pump	2008	2005	15	82%	0.05	—	3	47.51	48
146	GA	RET	RET	ECM Circulator Pump MHV	E		Verification	Electrically commutated (ECM) circulator pumps are high efficiency alternatives to DC motors. They are typically factory-installed and require no special wiring or controls. They are typically used for hot water heating and cooling.	Single-speed induction motor circulator pumps	Electrically commutated motor (ECM)	2008	2005	15	47%	0.04	—	3	48.51	49
146	GA	MD	NC,RND,RP,NL	ECM Circulator Pump MHV	E		Verification	Electrically commutated (ECM) circulator pumps are high efficiency alternatives to DC motors. They are typically factory-installed and require no special wiring or controls. They are typically used for hot water heating and cooling.	Single-speed induction motor circulator pumps	Electrically commutated motor (ECM)	2008	2005	15	47%	0.04	—	3	48.51	49
181	GA	MD	NC,RND,RP,NL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2005	12	46%	0.02	—	48	48	30
181	GA	RET	NC,RND,RP,NL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2005	12	46%	0.02	—	48	48	30
279	GA	MD	NC,RND,RP,NL	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	58%	0.22	279	7	7	8
279	GA	RET	RET	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	57%	0.22	279	7	7	8
281	GA	MD	NC,RND,RP,NL	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture will be introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	58%	0.00	281	7	7	8
281	GA	RET	RET	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture will be introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2005	15	57%	0.00	281	7	7	8
137	GA	MD	NC,RND,RP,NL	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with a high efficiency water heater. A 1.25 gallon in commercial facilities with one efficient storage type heat pump water heaters.	Storage type electric resistance water heater (1.25 gallon)	Storage type heat pump water heater	2008	2005	16	9%	4.48	—	47	47	46
137	GA	RET	RET	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with a high efficiency water heater. A 1.25 gallon in commercial facilities with one efficient storage type heat pump water heaters.	Storage type electric resistance water heater (1.25 gallon)	Storage type heat pump water heater	2008	2005	16	9%	11.00	—	47	47	46
138	GA	RET	RET	Pre-Flow Dispensers	E		Water Heating	Reduction of energy consumption by pre-flow dispensers in commercial kitchen facilities.	Existing inefficient pre-flow dispenser	Low-flow pre-flow dispenser	2008	2005	8	28%	0.06	—	47	47	46
139	GA	RET	RET	Flow Indicators with Electric Water Heater	E		Water Heating	This measure includes installation of flow indicators on a commercial electric water heater. The measure includes replacement of a boiler with a high efficiency water heater. A 1.25 gallon in commercial facilities with one efficient storage type heat pump water heaters.	No flow indicator	1" of flow indicator on boiler	2008	2005	14	84%	3.75	—	47	47	46
175	GA	MD	NC,RND,RP,NL	ENERGY STAR Clothes Washer	E		Water Heating	Installation of a new non-ENERGY STAR clothes washer in a new home. This measure applies to clothes washers that use electric water heating elements.	Existing or new non-ENERGY STAR Clothes Washer with electric water heating and electric drying	ENERGY STAR Clothes Washer with electric water heating and electric drying	2008	2005	14	9%	0.00	174	47	47,50	40
275	GA	MD	NC,RND,RP,NL	Commercial ENERGY STAR Dishwasher	E		Water Heating	Installation of a new non-ENERGY STAR commercial dishwasher.	Standard efficiency commercial dishwasher	ENERGY STAR commercial dishwasher	2008	2005	16	24%	0.36	274	3	48	48
332	GA	RET	RET	Direct Laundry with Gas Secondary Fuel	E		Water Heating	Direct Laundry systems for home laundromats are facilities with on-site laundry.	Gas-fired systems without gas technology	Gas-fired systems with gas technology	2008	2005	16	22%	0.00	—	30	30	30
333	GA	RET	RET	Direct Laundry with Gas Secondary Fuel	E		Water Heating	This measure includes replacing an existing flueless burner with a low-flow burner.	Existing inefficient flueless burner	Low-flow flueless burner	2008	2005	12	20%	0.38	—	48	48	49

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119	GA	RET	RET	Dust Sealing	E		Space Heating	Dust Sealing reduces the infiltration of outside air and infiltration of return air. Sealing of duct work can be accomplished through application of mastic or a mastic tape to the distribution system of return air either under an conditioned or a ducted return system.	Ducted heating and cooling systems with high infiltration and return air.	Sealed duct work	2008	2015	15	2%	0.80	119	7	7,461.51	40	
200	GA	RET	RET	Industrial Process, Space Heating Improvements	E		Space Heating		Existing energy conservation measures	High efficiency industrial process heating systems		2008	2015	15	25%	0.38	—	48	32	32
280	GA	MD	NC,RENO,REPL	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less exhaust air is needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	279	7	7	8	
280	GA	RET	RET	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less exhaust air is needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	279	7	7	8	
322	GA	MD	NC,RENO	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance	2008	2015	15	2%	3.70	321	11	11,135	14	
322	GA	RET	RET	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance AND infrared reflective	2008	2015	15	2%	3.62	321	11	11,135	14	
326	GA	RET	RET	0 ENERGY STAR Windows	E		Space Heating	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure optimizes thermal performance.	Existing non-Energy Star Windows	ENERGY STAR Windows	2008	2015	10	12%	0.36	326	47	46,471.41	40	
351	GA	RET	RET	Industrial Processes, Exhaust Management	E		Total Electric	Installation of automatic exhaust control on non-manipulated waste venting machines. Controls must include a pressure relief valve in order of lighting from the area subject to waste venting machine is controlled for when (2) releases. Controls must be capable of powering the machine on if activation to highlight the released area.	No SEM	SEM installation	2008	2015	13	3%	0.14	—	58	38.39	37	
360	GA	RET	RET	Building Operator Certification	E		Total Electric		No Controls on the venting machines	Occupancy sensors turn on lights when in use or around		2008	2015	13	3%	0.04	—	48	35,48.60	60
301	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architect and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction		2008	2015	15	22%	0.08	301	11	21,222.23	24
302	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architect and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction		2008	2015	15	22%	0.12	302	11	21,222.23	24
303	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings		2008	2015	15	30%	0.49	303	11	19,120	20
304	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings		2008	2015	15	30%	0.79	304	11	19,120	20
305	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure optimal design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.25	305	27	25	26	
306	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure optimal design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.39	306	27	25	26	
307	GA	RET	RET	Recommissioning	E		Total Electric	Recommissioning and energy management activities, based upon operational savings	Current building operations	RCI to identify operational and low cost savings	2008	2015	8	6%	0.22	307	27	26	26	
308	GA	RET	RET	Recommissioning	E		Total Electric	Recommissioning and energy management activities, based upon operational savings	Current building operations	RCI to identify operational and low cost savings	2008	2015	8	6%	0.23	308	27	26	26	
309	GA	MD	NC,RENO	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to server efficiency.	Data Center built to standard building practices	Data Center built to standard server use	2008	2015	11	38%	0.40	309	11	28,12	20	
309	GA	RET	RET	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to server efficiency.	Existing operations	Energy savings	2008	2015	10	30%	0.87	309	11	28	20	
310	GA	MD	NC,RENO	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to server efficiency.	Data Center built to standard building practices	Data Center built with sustainable practices	2008	2015	10	36%	0.00	310	11	28,12	20	
310	GA	RET	RET	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to server efficiency.	Existing operations	Historic results aimed at achieving significant energy savings	2008	2015	10	30%	0.00	310	11	28	20	
311	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	10	22%	0.40	311	11	17,15	18	
311	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	10	18%	0.56	311	11	17,15	17	
312	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	22%	1.39	312	11	17,15	18	
312	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	18%	0.88	312	11	17,15	17	
143	GA	MD	NC,RENO,REPL	High Efficiency Pumps	E		Verification	Replacement of industrial pumps with high efficiency.	Baseline Efficiency per ASHRAE Standard 90.1-2008	High Efficiency per ASHRAE Standard 90.1-2008	2008	2015	14	5%	0.03	—	48	48.04	40	
144	GA	RET	RET	High Efficiency Pumps	E		Verification	Replacement of industrial pumps with high efficiency.	Baseline Efficiency per ASHRAE Standard 90.1-2008	High Efficiency per ASHRAE Standard 90.1-2008	2008	2015	14	5%	0.48	—	48	48.04	40	
144	GA	RET	RET	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.04	—	48	48.04	40	
144	GA	MD	NC,RENO,REPL	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.03	—	48	48.04	40	
145	GA	RET	RET	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the most common performance test for hot water circulation.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2015	10	82%	0.33	—	3	47.51	40	
145	GA	MD	NC,RENO,REPL	ECM Circulator Pump DWH	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the most common performance test for hot water circulation.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2015	10	82%	0.05	—	3	47.51	40	
146	GA	RET	RET	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the most common performance test for hot water circulation.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.03	—	3	48.51	40	
146	GA	MD	NC,RENO,REPL	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the most common performance test for hot water circulation.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.03	—	3	48.51	40	
181	GA	MD	NC,RENO,REPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	49%	0.02	—	48	48	30	
181	GA	RET	NC,RENO,REPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	49%	0.02	—	48	48	30	
279	GA	MD	NC,RENO,REPL	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking exhaust hoods uses VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.22	279	7	7	8	
279	GA	RET	RET	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking exhaust hoods uses VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.22	279	7	7	8	
281	GA	MD	NC,RENO,REPL	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less exhaust air is needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.00	281	7	7	8	
281	GA	RET	RET	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less exhaust air is needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.00	281	7	7	8	
137	GA	MD	NC,RENO,REPL	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient storage type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	10	9%	4.48	—	47	47	40	
137	GA	RET	RET	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient storage type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	10	9%	11.00	—	47	47	40	
138	GA	RET	RET	Pre-Flow Sensors	E		Water Heating	Results of working to prevent pre-mixing of water and gas in commercial kitchen exhaust systems.	Existing inefficient pre-mixing sensor	Low-flow pre-mixing sensor	2008	2015	8	28%	0.06	—	47	47	40	
139	GA	RET	RET	Flow Indicators with Electric Water Heater	E		Water Heating	This measure includes installing flow indicators on a combination of a gas water heater and water heater.	No flow indicator	1" of flow indicator on inlet	2008	2015	14	84%	3.75	—	47	47	40	
175	GA	MD	NC,RENO,REPL	ENERGY STAR Clothes Washer	E		Water Heating	Installation of a new non-ENERGY STAR clothes washer is a new home. This measure applies to clothes washers that use electric water heating elements.	Existing or new non-ENERGY STAR Clothes Washer with electric water heating and electric drying	ENERGY STAR Clothes Washer with electric water heating and electric drying	2008	2015	14	9%	0.00	174	47	47,50	40	
275	GA	MD	NC,RENO,REPL	Commercial ENERGY STAR Dishwasher	E		Water Heating	Installation of a new non-ENERGY STAR commercial dishwasher.	Standard efficiency commercial dishwasher	ENERGY STAR commercial dishwasher	2008	2015	10	24%	0.36	274	3	48	48	
332	GA	RET	RET	Direct Exhaust with Gas Secondary Fuel	E		Water Heating	Direct Exhaust systems for gas furnaces and boilers with on-site combustion.	Existing systems without gas technology	Gas-fired systems with gas technology	2008	2015	10	22%	0.00	—	30	30	30	
333	GA	RET	RET	Direct Exhaust with Gas Secondary Fuel	E		Water Heating	This measure includes replacing an existing furnace or boiler with a low-flow burner.	Existing, inefficient furnace or boiler	Low-flow furnace or boiler	2008	2015	12	20%	0.39	—	48	48	40	

[illegible]

119	GA	RET	RET	Duct Sealing	E		Space Heating	Duct Sealing reduces the infiltration of outside air and infiltration of return air. Sealing of duct work can be accomplished through installation of mastic or a mastic tape to the distribution system of return air either under an conditioned or a ducted return system.	Ducted heating and cooling systems with high infiltration and return air.	Sealed duct work	2008	2015	15	2%	1.36	119	7	7,463.11	40	
120	GA	RET	RET	Industrial Process, Space Heating Improvements	E		Space Heating		Existing energy conservation measures	High efficiency industrial process heating systems		2008	2015	15	20%	0.38	—	48	32	32
126	GA	MD	NC,RENO,NRPL	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hood to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture is introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	276	7	7	8	
128	GA	RET	RET	Kitchen DOV - MD	E		Space Heating	Installation of controls for commercial kitchen hood to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture is introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	276	7	7	8	
132	GA	MD	NC,RENO	Cool Reel - MD	E		Space Heating	Water cooling material or cooling to reflect the sun and reduce air conditioning loads	Conventional dark-colored roofing materials	Cool roof materials with high water reflectance	2008	2015	15	2%	3.70	321	11	11,135	14	
133	GA	RET	RET	Cool Reel - MD	E		Space Heating	Water cooling material or cooling to reflect the sun and reduce air conditioning loads	Conventional dark-colored roofing materials	Cool roof materials with high water reflectance AND ENERGY STAR	2008	2015	15	2%	3.62	321	11	11,135	14	
136	GA	RET	RET	O-ENERGY STAR Windows	E		Space Heating	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure reduces energy consumption.	Existing non-Energy Star Windows	ENERGY STAR Windows	2008	2015	15	12%	0.87	326	47	46,471.41	40	
151	GA	RET	RET	Industrial Processes, Exhaust Management	E		Total Electric	Installation of automatic exhaust control on non-managed exhaust venting machines. Controls must include a pressure relief valve in order of lighting the fire when exhaust is required to prevent the machine from being damaged by flames (LE) releases. Controls must be capable of powering the machine on if activation is required.	No SEM	SEM installation	2008	2015	13	3%	0.14	—	48	35,48.60	60	
160	GA	RET	RET	Building Operator Certification	E		Total Electric		No Controls on the venting machines	Occupancy sensors turn on lights when in use or around		2008	2015	13	3%	0.04	—	48	35,48.60	60
301	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction		2008	2015	15	22%	0.08	351	11	21,222.3	24
302	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Design, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction		2008	2015	15	22%	0.12	352	11	21,222.3	24
303	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Florida Materials Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings		2008	2015	15	35%	0.49	353	11	19,120	20
304	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Florida Materials Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings		2008	2015	15	35%	0.79	354	11	19,120	20
305	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.25	355	27	25	26	
306	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure design, installation and operation of systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.39	356	27	25	26	
307	GA	RET	RET	Recommissioning	E		Total Electric	Recommissioning and energy management activities, including operational savings	Current building operations	RCI to identify operational and low-carbon savings	2008	2015	8	4%	0.22	357	27	26	26	
308	GA	RET	RET	Recommissioning	E		Total Electric	Recommissioning and energy management activities, including operational savings	Current building operations	RCI to identify operational and low-carbon savings	2008	2015	8	4%	0.23	358	27	26	26	
309	GA	MD	NC,RENO	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is used to reduce efficiency	Data Center built to standard building practices	Data Center built to standard energy use	2008	2015	11	38%	0.40	359	11	28,12	20,12	
309	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is used to reduce efficiency	Existing operations	Energy savings	2008	2015	15	30%	0.87	360	11	28	29	
310	GA	MD	NC,RENO	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is used to reduce efficiency	Data Center built to standard building practices	Data Center built with sustainable practices	2008	2015	15	36%	0.00	361	11	28,12	20,12	
310	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is used to reduce efficiency	Existing operations	Historic results aimed at achieving significant energy savings	2008	2015	15	30%	0.00	362	11	28	29	
311	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	22%	0.40	311	11	17,15	18	
311	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	18%	0.56	311	11	17,15	17	
312	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	22%	1.39	312	11	17,15	18	
312	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	18%	0.88	312	11	17,15	17	
143	GA	MD	NC,RENO,NRPL	High Efficiency Pumps	E		Verification	Replacement of inefficient pumps with high efficiency.	Baseline Efficiency per Nl 2018 Protocol, a 82	High Efficiency per Nl 2018 Protocol, a 82	2008	2015	14,3	5%	0.03	—	48	48.61	48	
144	GA	RET	RET	High Efficiency Pumps	E		Verification	Replacement of inefficient pumps with high efficiency.	Baseline Efficiency per Nl 2018 Protocol, a 82	High Efficiency per Nl 2018 Protocol, a 82	2008	2015	14,3	5%	0.48	—	48	48.61	48	
144	GA	RET	RET	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust needed for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.04	—	48	48.61	48	
144	GA	MD	NC,RENO,NRPL	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust needed for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.03	—	48	48.61	48	
145	GA	RET	RET	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency alternatives to EC motors. They are typically factory-installed pumps that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) traditional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2015	15	82%	0.33	—	3	47.51	48	
145	GA	MD	NC,RENO,NRPL	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency alternatives to EC motors. They are typically factory-installed pumps that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) traditional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2015	15	82%	0.05	—	3	47.51	48	
146	GA	RET	RET	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency alternatives to EC motors. They are typically factory-installed pumps that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) traditional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.04	—	3	48.51	49	
146	GA	MD	NC,RENO,NRPL	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency alternatives to EC motors. They are typically factory-installed pumps that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) traditional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.04	—	3	48.51	49	
181	GA	MD	NC,RENO,NRPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High-efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	46%	0.02	—	48	48	30	
181	GA	RET	NC,RENO,NRPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High-efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	46%	0.02	—	48	48	30	
279	GA	MD	NC,RENO,NRPL	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.22	279	7	7	8	
279	GA	RET	RET	Kitchen DOV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.22	279	7	7	8	
281	GA	MD	NC,RENO,NRPL	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hood to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture is introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.00	281	7	7	8	
281	GA	RET	RET	Kitchen DOV - MD	E		Verification	Installation of controls for commercial kitchen hood to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, less energy savings are possible, and less moisture is introduced into the building envelope.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.00	281	7	7	8	
137	GA	MD	NC,RENO,NRPL	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient condensing water heaters is a 120 gallon in commercial facilities with more efficient storage type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	16	9%	4.48	—	47	47	46	
137	GA	RET	RET	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient condensing water heaters is a 120 gallon in commercial facilities with more efficient storage type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	16	9%	11.00	—	47	47	46	
138	GA	RET	RET	Pre-Flow Sensors	E		Water Heating	Results of working to pre-heat water prior to use, pre-flow sensors in commercial kitchen applications.	Existing, inefficient pre-heat sensor	Low-flow pre-heat sensor	2008	2015	8	28%	0.06	—	47	47	46	
139	GA	RET	RET	Flow Indicators with Electric Water Heater	E		Water Heating	This measure includes installing flow indicators on a combination of a gas water heater and water heaters.	No flow indicator	1" of flow indicator on hot water	2008	2015	14	84%	3.75	—	47	47	46	
175	GA	MD	NC,RENO,NRPL	ENERGY STAR Clothes Washer	E		Water Heating	Installation of a new non-ENERGY STAR clothes washer is a new measure. This measure applies to clothes washers that use electric water heating elements.	Existing or new non-ENERGY STAR Clothes Washer with electric water heating and electric drying	ENERGY STAR Clothes Washer with electric water heating and electric drying	2008	2015	14	9%	0.00	174	47	47,50	40	
275	GA	MD	NC,RENO,NRPL	Commercial ENERGY STAR Dishwasher	E		Water Heating	Installation of a new non-ENERGY STAR commercial dishwasher.	Standard efficiency commercial dishwasher	ENERGY STAR commercial dishwasher	2008	2015	16	24%	0.36	274	3	48	48	
332	GA	RET	RET	Direct Laundry with Gas Secondary Fuel	E		G	Water Heating	Direct Laundry systems for large facilities with hot water on site.	Gas-fired systems without gas technology	Gas-fired systems with gas technology	2008	2015	15	22%	0.00	—	30	30	30
333	GA	RET	RET	Direct Laundry with Gas Secondary Fuel	E		G	Water Heating	This measure includes replacing an existing flue gas burner with a low-flow burner.	Existing, inefficient flue gas burner	Low-flow flue gas burner	2008	2015	12	20%	0.38	—	48	48	49

Table D8: Eth Reaction - Masses Characteristics Summary

70 Pts - House Characteristics Summary																						
House	Sector	Market	Target Market	Measure Name	Priority Cat.	Responsible Party	Funding Title	Secondary Ind. Title	Measure Description	Benefit Description	Eligible Description	Start Year	End Year	Lifespan	Incentive %	No. Duct Per Unit or Area	Units with Duct	Life	Percent Budget	Incentive \$	No. Duct Per Unit or Area	Units with Duct
152	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer	E	G	Appliances		The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with electric water heating and gas drying.	ENERGY STAR Clothes Washer with electric water heating and gas drying.	2020	2035	14	12%	284	152	47	\$7,520	49		
154	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Water Heating	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and electric drying.	ENERGY STAR Clothes Washer with gas water heating and electric drying.	2020	2035	14	18%	204	154	47	\$7,520	49		
156	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Water Heating	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and electric drying.	ENERGY STAR Clothes Washer with gas water heating and electric drying.	2020	2035	14	12%	284	156	47	\$7,520	49		
157	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Appliances	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and electric drying.	ENERGY STAR Clothes Washer with gas water heating and electric drying.	2020	2035	14	18%	204	157	47	\$7,520	49		
159	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer	E	G	Appliances		The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with electric water heating and gas drying.	ENERGY STAR Clothes Washer with electric water heating and gas drying.	2020	2035	14	12%	112	159	47	\$7,520	49		
161	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Appliances	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with electric water heating and gas drying.	2020	2035	14	18%	104	161	47	\$7,520	49		
163	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Water Heating	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2020	2035	14	12%	112	-	47	\$7,520	49		
164	Res	MD	NL, REND, RPDL	ENERGY STAR Clothes Washer with Gas Secondary Fuel	E	G	Appliances	Appliances	The measure includes replacement of heater or washing clothes water in existing homes with ENERGY STAR clothes washers, or installation of an ENERGY STAR clothes washer in a new home. The measure applies to clothes washers installed after January 1, 2019.	Existing or new low-ENERGY STAR Clothes Washer with gas water heating and gas drying.	ENERGY STAR Clothes Washer with gas water heating and gas drying.	2020	2035	14	18%	104	164	47	\$7,520	49		
166	Res	MD	NL, REND, RPDL	ENERGY STAR Dishwasher	E	G	Appliances		This measure includes installation of a new ENERGY STAR dishwasher, or replacement of an old dishwasher with an ENERGY STAR unit. This measure applies to dishwashers with electric water heating.	Dishwasher or Existing New ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2020	2035	10	22%	507	166	47	\$1	9		
168	Res	MD	NL, REND, RPDL	ENERGY STAR Dishwasher with Gas Secondary Fuel	E	G	Appliances	Water Heating	This measure includes replacement of a non-ENERGY STAR dishwasher with an ENERGY STAR dishwasher, or installation of a new ENERGY STAR dishwasher in a new home. The measure applies to dishwashers installed after January 1, 2019.	Dishwasher or Existing New ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2020	2035	10	22%	607	-	47	\$1	9		
169	Res	MD	NL, REND, RPDL	ENERGY STAR Dishwasher	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR dishwasher with an ENERGY STAR dishwasher, or installation of a new ENERGY STAR dishwasher in a new home. The measure applies to dishwashers installed after January 1, 2019.	Dishwasher or Existing New ENERGY STAR Dishwasher	ENERGY STAR Dishwasher	2020	2035	10	22%	607	-	47	\$1	9		
170	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
171	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
172	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
173	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
174	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
175	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
176	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
177	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
178	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
179	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
180	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
181	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
182	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
183	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
184	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
185	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
186	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
187	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
188	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
189	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
190	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
191	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
192	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
193	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
194	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
195	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
196	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
197	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
198	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
199	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
200	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
201	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
202	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
203	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
204	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
205	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
206	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
207	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
208	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
209	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
210	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
211	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
212	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
213	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
214	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter	2020	2035	10	22%	607	-	47	\$1	9		
215	Res	MD	NL, REND, RPDL	ENERGY STAR Air Filter	E	G	Appliances		This measure includes replacement of a non-ENERGY STAR air filter with an ENERGY STAR air filter, or installation of a new ENERGY STAR air filter in a new home. The measure applies to air filters installed after January 1, 2019.	Existing or new low-ENERGY STAR Air Filter	New ENERGY STAR Air Filter											

[illegible]

[illegible]

119	GA	RET	RET	Dust Sealing	E		Space Heating	Dust Sealing reduces the infiltration of outside air and infiltration of return air. Sealing of duct work can be accomplished through application of mastic or seal tape to the distribution system of return air either under an conditioned or a ducted return system.	Ducted heating and cooling systems with high infiltration and return air.	Sealed duct work	2008	2035	15	2%	0.80	119	7	7,461.51	40
200	GA	RET	RET	Industrial Process, Space Heating Improvements	E		Space Heating		Existing energy conservation systems	High efficiency industrial process heating systems	2008	2035	15	20%	0.38	—	48	32	32
280	GA	MD	NC,RND,RP,NL	Kitchen ODV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	43%	0.00	278	7	7	8
280	GA	RET	RET	Kitchen ODV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	43%	0.00	278	7	7	8
322	GA	MD	NC,RND	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance AND infrared reflective	2008	2035	15	2%	3.70	321	11	11,135	14
322	GA	RET	RET	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark colored roofing materials	Cool roof materials with high water reflectance AND infrared reflective	2008	2035	15	2%	3.62	321	11	11,135	14
326	GA	RET	RET	0 ENERGY STAR Windows	E		Space Heating	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure reduces energy consumption.	Existing non-Energy Star Windows	ENERGY STAR Windows	2008	2035	15	12%	0.40	326	47	46,471.41	40
201	GA	RET	RET	Industrial Processes, Exhaust Management	E		Total Electric	Installation of automatic exhaust control on non-manipulated waste venting machines. Controls must include a pressure relief valve in order of lifting more the new control to ensure venting machine is controlled for when (ES) releases. Controls must be capable of powering the machine on if activation to highlight the needed action.	No ESER	Occupancy sensors turn on lights when in use is around	2008	2035	15	3%	0.14	—	58	38.39	37
280	GA	RET	RET	Building Operator Certification	E		Total Electric		No Controls on the venting machines	Occupancy sensors turn on lights when in use is around	2008	2035	13	3%	0.04	—	48	35,48.60	60
301	GA	MD	NC,RND	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders needs can be accounted for in the building process. Using ID, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2035	15	22%	0.08	301	11	21,222.23	24
302	GA	MD	NC,RND	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders needs can be accounted for in the building process. Using ID, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g. lighting) has an effect on another (e.g. cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2035	15	22%	0.12	302	11	21,222.23	24
303	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2035	15	30%	0.49	303	11	18,320	20
304	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2035	15	30%	0.78	304	11	18,320	20
305	GA	MD	NC,RND	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operating systems.	Uncommissioned new building	Commissioned new building	2008	2035	8	13%	0.25	305	27	25	26
306	GA	MD	NC,RND	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operating systems.	Uncommissioned new building	Commissioned new building	2008	2035	8	13%	0.39	306	27	25	26
307	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management activities, including operational savings	Current building operations	RC to identify operational and low cost savings	2008	2035	8	8%	0.22	307	27	26	26
308	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management activities, including operational savings	Current building operations	RC to identify operational and low cost savings	2008	2035	8	6%	0.23	308	27	26	26
308	GA	MD	NC,RND	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is critical to server efficiency.	Data Center built to standard building practices	Data Center built to standard server use	2008	2035	11	38%	0.40	308	11	28,12	20
309	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is critical to server efficiency.	Existing operations	Energy savings	2008	2035	15	30%	0.87	309	11	28	20
310	GA	MD	NC,RND	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is critical to server efficiency.	Data Center built to standard building practices	Data Center built with sustainable practices	2008	2035	15	36%	0.00	310	11	28,12	20
310	GA	RET	RET	Comprehensive Data Center	E		Total Electric	Comprehensive data center design is critical to server efficiency.	Existing operations	Historic retrofit aimed at achieving significant energy savings	2008	2035	15	30%	0.00	310	11	28	20
311	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent equipment controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2035	15	22%	0.40	311	11	17,15	18
311	GA	MD	NC,RND	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent equipment controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2035	15	18%	0.58	311	11	17,15	17
312	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent equipment controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2035	15	22%	1.39	312	11	17,15	18
312	GA	MD	NC,RND	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent equipment controllers, or actuators, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2035	15	18%	0.88	312	11	17,15	17
143	GA	MD	NC,RND,RP,NL	High Efficiency Pumps	E		Verification	Recommissioning of industrial systems with high efficiency.	Baseline Efficiency per N2 2018 Protocol v. 82	High Efficiency per N2 2018 Protocol v. 82	2008	2035	14.3	5%	0.03	—	48	48.04	40
144	GA	RET	RET	High Efficiency Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VSD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust volume from the kitchen exhaust fan.	Baseline Efficiency per N2 2018 Protocol v. 82	High Efficiency per N2 2018 Protocol v. 82	2008	2035	14.3	5%	0.04	—	48	48.04	40
144	GA	MD	NC,RND,RP,NL	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VSD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust volume from the kitchen exhaust fan.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2035	15	40%	0.04	—	48	48.04	40
145	GA	RET	RET	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2035	15	82%	0.33	—	3	47.51	40
145	GA	MD	NC,RND,RP,NL	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation.	Single-speed induction motor circulator pumps in space heating and hot water applications	Install an ECM or BPM circulator pump	2008	2035	15	82%	0.05	—	3	47.51	40
146	GA	RET	RET	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2035	15	47%	0.03	—	3	48.51	40
146	GA	MD	NC,RND,RP,NL	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation. They are typically factory tested to meet the energy efficiency standards for hot water circulation.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2035	15	47%	0.03	—	3	48.51	40
181	GA	MD	NC,RND,RP,NL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2035	12	46%	0.02	—	48	48	30
181	GA	RET	NC,RND,RP,NL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryers with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2035	12	46%	0.02	—	48	48	30
279	GA	MD	NC,RND,RP,NL	Kitchen ODV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VSD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	58%	0.22	279	7	7	8
279	GA	RET	RET	Kitchen ODV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VSD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	57%	0.22	279	7	7	8
281	GA	MD	NC,RND,RP,NL	Kitchen ODV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	58%	0.00	281	7	7	8
281	GA	RET	RET	Kitchen ODV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be needed which results in heated outside air.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2035	15	57%	0.00	281	7	7	8
137	GA	MD	NC,RND,RP,NL	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2035	16	9%	4.48	—	47	47	46
137	GA	RET	RET	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2035	16	9%	11.00	—	47	47	46
138	GA	RET	RET	Pilotless Gas Water Heaters	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2035	8	28%	0.00	—	47	47	46
139	GA	RET	RET	Flow Induction Electric Water Heater	E		Water Heating	This measure includes installation of a flow induction electric water heater.	No flow induction	1" of flow induction or better	2008	2035	14	84%	3.75	—	47	47	46
175	GA	MD	NC,RND,RP,NL	ENERGY STAR Clothes Washer	E		Water Heating	This measure includes replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	ENERGY STAR Clothes Washer with electric water heating and electric drying	2008	2035	14	9%	0.00	174	47	47,50	40
275	GA	MD	NC,RND,RP,NL	Commercial ENERGY STAR Dishwasher	E		Water Heating	Installation of an ENERGY STAR commercial dishwasher.	Standard efficiency commercial dishwasher	ENERGY STAR commercial dishwasher	2008	2035	16	24%	0.36	274	3	48	48
332	GA	RET	RET	Direct Exhaust with Gas Secondary Fuel	E		Water Heating	Direct Exhaust systems for space heating units are located with no-flow sensors.	Existing, inefficient direct exhaust	Direct Exhaust systems with no-flow sensors	2008	2035	12	20%	0.38	—	48	48	40
333	GA	RET	RET	Direct Exhaust with Gas Secondary Fuel	E		Water Heating	This measure includes replacing an existing direct exhaust with no-flow sensors.	Existing, inefficient direct exhaust	Direct Exhaust systems with no-flow sensors	2008	2035	12	20%	0.38	—	48	48	40

[illegible]

[illegible]

119	GA	RET	RET	Dust Sealing	E		Space Heating	Dust Sealing reduces the infiltration of outside air and infiltration of return air. Sealing of duct work can be accomplished through application of mastic or a water-based fire distribution system of hoses with either cement or construction at a ducted location.	Ducted heating and cooling systems with high infiltration and return	Sealed duct work	2008	2015	15	2%	0.80	119	7	7,461.51	40
200	GA	RET	RET	Industrial Process, Space Heating Improvements	E		Space Heating		Existing energy conservation systems	High efficiency industrial process heating systems	2008	2015	15	20%	0.38	—	48	32	32
280	GA	MD	NC,RENO,REPL	Kitchen ODV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be introduced into the kitchen exhaust system.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	278	7	7	8
280	GA	RET	RET	Kitchen ODV - MD	E		Space Heating	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be introduced into the kitchen exhaust system.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	43%	0.00	278	7	7	8
322	GA	MD	NC,RENO	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark-colored roofing materials	Cool roof materials with high water reflectance AND infrared reflective	2008	2015	15	2%	3.70	321	11	11,135	14
322	GA	RET	RET	Cool Roof - MD	E		Space Heating	White roofing material or coating to reflect the sun and reduce air conditioning loads	Conventional dark-colored roofing materials	Cool roof materials with high water reflectance AND infrared reflective	2008	2015	15	2%	3.60	321	11	11,135	14
326	GA	RET	RET	0 ENERGY STAR Windows	E		Space Heating	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure reduces energy consumption.	Existing non-Energy Star Windows	ENERGY STAR Windows	2008	2015	15	12%	0.40	326	47	46,471.41	40
351	GA	RET	RET	Industrial Processes, Electric Motor Controls	E		Total Electric	Installation of automatic demand control on non-energized motors running machinery. Controls must include a safety-related sensor in order of lighting the motor when it is not being used.	No DMS	Occupancy sensors turn off lights when no one is around	2008	2015	15	3%	0.14	—	58	38.36	37
360	GA	RET	RET	Building Operator Certification	E		Total Electric	Installation of, or replacement of existing windows, with ENERGY STAR windows. This measure reduces energy consumption.	No Controls on the building machines	Occupancy sensors turn off lights when no one is around	2008	2015	13	3%	0.04	—	48	35,48.60	60
301	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Using ID, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g., lighting) has an effect on another (e.g., cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2015	15	22%	0.08	301	11	21,222.23	24
302	GA	MD	NC,RENO	Integrated Building Design	E		Total Electric	Integrated Design is a collaborative method of designing buildings so that all the stakeholders' needs can be accounted for in the building process. Using ID, the architectural and engineering parts of a building are incorporated, so that the team for which one system (e.g., lighting) has an effect on another (e.g., cooling) is accounted for and made visible. This concept has been extended to include not just the design process, but the construction and operational phases of a new building including commissioning.	Code Compliant Building	Historically designed building leading to energy savings in new construction	2008	2015	15	22%	0.12	302	11	21,222.23	24
303	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2015	15	30%	0.49	303	11	18,320	20
304	GA	RET	RET	Deep Energy Retrofit	E		Total Electric	A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings than those of simpler energy retrofits such as upgrading lighting and HVAC equipment. In a whole-building approach, deep energy retrofits address many systems at once to conserve energy efficient measures such as energy-efficient equipment, air sealing, moisture management, controlled ventilation, insulation, and water control. Resources available to identify deep energy retrofit design opportunities are available from the Rocky Mountain Institute and Advanced Energy Retrofit Guides are available from the Department of Energy, Office of Energy Efficiency & Renewable Energy.	Existing building with no retrofit	Aggressive retrofit aiming for deep savings	2008	2015	15	30%	0.78	304	11	18,320	20
305	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operational systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.25	305	27	25	26
306	GA	MD	NC,RENO	Commissioning	E		Total Electric	Whole building commissioning of new buildings to ensure that design, construction and operational systems.	Uncommissioned new building	Commissioned new building	2008	2015	8	13%	0.38	306	27	25	26
307	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management within buildings to optimize operational savings	Current building operations	RC to identify operational and low-carbon savings	2008	2015	8	8%	0.22	307	27	26	26
308	GA	RET	RET	Non-Commissioning	E		Total Electric	Recommissioning and energy management within buildings to optimize operational savings	Current building operations	RC to identify operational and low-carbon savings	2008	2015	8	8%	0.23	308	27	26	26
309	GA	MD	NC,RENO	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to energy efficiency.	Commissioning data center design is critical to energy efficiency	Data Center built to optimized building practices	2008	2015	11	38%	0.40	309	11	28,12	20
309	GA	RET	RET	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to energy efficiency.	Commissioning data center design is critical to energy efficiency	Existing operations	2008	2015	15	30%	0.87	309	11	28	20
310	GA	MD	NC,RENO	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to energy efficiency.	Commissioning data center design is critical to energy efficiency	Data Center built to optimized building practices	2008	2015	15	38%	0.50	310	11	28,12	20
310	GA	RET	RET	Commissioning Data Center	E		Total Electric	Commissioning data center design is critical to energy efficiency.	Commissioning data center design is critical to energy efficiency	Existing operations	2008	2015	15	30%	0.60	310	11	28	20
311	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	22%	0.40	311	11	17,15	18
311	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	18%	0.58	311	11	17,15	17
312	GA	RET	RET	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	22%	1.39	312	11	17,15	18
312	GA	MD	NC,RENO	EMS -RET	E		Total Electric	A BMS/EMS is a computer-based system which provides the facility to control any building service. It works by using intelligent operations controllers, in coordination, to accurately control plant such as boilers, pumps, fans, lights and security systems in response to changing conditions such as time, temperature and occupancy.	No Energy Management System (EMS)	Energy Management System	2008	2015	15	18%	0.88	312	11	17,15	17
143	GA	MD	NC,RENO,REPL	High Efficiency Pumps	E		Verification	Replacement of inefficient pumps with high efficiency.	Baseline Efficiency per ASHRAE 91.2-2010 Protocol, a 82	High Efficiency per ASHRAE 91.2-2010 Protocol, a 82	2008	2015	14.3	5%	0.03	—	48	48.04	40
144	GA	RET	RET	High Efficiency Pumps	E		Verification	Replacement of inefficient pumps with high efficiency.	Baseline Efficiency per ASHRAE 91.2-2010 Protocol, a 82	High Efficiency per ASHRAE 91.2-2010 Protocol, a 82	2008	2015	14.3	5%	0.48	—	48	48.04	40
144	GA	RET	RET	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.04	—	48	48.04	40
144	GA	MD	NC,RENO,REPL	VFD on Kitchen Exhaust Fan	E		Verification	Kitchen exhaust fans are equipped with a VFD that varies the exhaust rate of kitchen ventilation based on the amount of exhaust required for the current operation.	Weighted average of baseline control type on Kitchen Exhaust Fan	VFD on Kitchen Exhaust Fan	2008	2015	15	40%	0.03	—	48	48.04	40
145	GA	RET	RET	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) fractional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Installed an ECM or BPM circulator pump	2008	2015	15	82%	0.33	—	3	47.51	40
145	GA	MD	NC,RENO,REPL	ECM Circulator Pump DHW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) fractional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps in space heating and hot water applications	Installed an ECM or BPM circulator pump	2008	2015	15	82%	0.05	—	3	47.51	40
146	GA	RET	RET	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) fractional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.03	—	3	48.51	40
146	GA	MD	NC,RENO,REPL	ECM Circulator Pump HW	E		Verification	Electronically commutated (EC) circulator pumps are high efficiency circulation EC motors. They are typically fractional horsepower motors that enjoy several benefits over the more common permanent split capacitor (PSC) or single phase (SP) fractional horsepower motor. Assured air handling applications for both heating and cooling.	Single-speed induction motor circulator pumps	Electronically commutated motor (ECM)	2008	2015	15	47%	0.03	—	3	48.51	40
181	GA	MD	NC,RENO,REPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryer with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	46%	0.52	—	48	48	30
181	GA	RET	NC,RENO,REPL	EnergyStar Bathroom Exhaust Fan	E		Verification	High efficiency commercial clothes dryer with moisture sensors	Standard efficiency Non-ENERGY STAR Clothes Washer	High efficiency (ENERGY STAR) Clothes Washer	2008	2015	12	46%	0.52	—	48	48	30
279	GA	MD	NC,RENO,REPL	Kitchen ODV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.22	279	7	7	8
279	GA	RET	RET	Kitchen ODV - MD	E		Verification	DOV in kitchen cooking fan exhaust hoods use VFD and sensors to monitor cooking activity and vary exhaust fan speed based on real time ventilation requirements and reduce building heating and cooling.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.33	279	7	7	8
281	GA	MD	NC,RENO,REPL	Kitchen ODV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be introduced into the kitchen exhaust system.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	58%	0.00	281	7	7	8
281	GA	RET	RET	Kitchen ODV - MD	E		Verification	Installation of controls for commercial kitchen hoods to vary the ventilation rate based upon cooking load, which varies throughout the day. By reducing the kitchen exhaust rate, fan energy savings are possible, and less moisture will be introduced into the kitchen exhaust system.	No Demand Control Ventilation on Commercial Kitchens	Demand Control Ventilation on Commercial Kitchens	2008	2015	15	57%	0.00	281	7	7	8
137	GA	MD	NC,RENO,REPL	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	16	9%	4.48	—	47	47	46
137	GA	RET	RET	Heat Pump Water Heater	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	16	9%	11.00	—	47	47	46
138	GA	RET	RET	Pilot-Flow Gas Water Heaters	E		Water Heating	Replacement of a boiler with energy efficient water heaters is a 120 gallon in commercial facilities with more efficient energy type heat pump water heaters.	Storage type electric resistance water heater (120 gallons)	Storage type heat pump water heater	2008	2015	16	9%	11.00	—	47	47	46
139	GA	RET	RET	Flow Induction Electric Water Heater	E		Water Heating	This measure includes installation of a new water heater with a flow sensor.	No flow sensor	1" of flow sensor induct	2008	2015	14	84%	3.75	—	47	47	46
175	GA	MD	NC,RENO,REPL	ENERGY STAR Clothes Washer	E		Water Heating	This measure includes replacement of inefficient clothes washer with a new one. This measure applies to clothes washers that use electric water heating elements.	Existing or new non-ENERGY STAR Clothes Washer with electric water heating and electric drying	ENERGY STAR Clothes Washer with electric water heating and electric drying	2008	2015	14	9%	0.00	174	47	47,50	40
275	GA	MD	NC,RENO,REPL	Commercial ENERGY STAR Dishwasher	E		Water Heating	Installation of a ENERGY STAR commercial dishwasher.	Standard efficiency commercial dishwasher	ENERGY STAR commercial dishwasher	2008	2015	16	24%	0.50	274	3	48	48
332	GA	RET	RET	Direct Radiant with Gas Secondary Fuel	E		Water Heating	Direct Radiant systems use low flow radiators and fan coils with low flow burner.	Existing radiators without gas technique	Gas radiators with gas technique	2008	2015	15	22%	0.28	—	30	30	30
333	GA	RET	RET	Direct Radiant with Gas Secondary Fuel	E		Water Heating	This measure includes replacing an existing radiant burner with a low flow burner.	Existing, inefficient radiant burner	Low flow radiant burner	2008	2015	12	20%	0.38	—	48	48	49



Appendix D2: Measure Characterizations - Sources

Appendix D2. Measure Characterization Sources

Source #	Source
1	Pennsylvania Public Utilities Commission. August 2019. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2021 Volume 1. http://www.puc.pa.gov/filing_resources/issues_laws_regulations/act_129_information/technical_reference_manual.aspx
2	Pennsylvania Public Utilities Commission. August 2019. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2021 Volume 2. http://www.puc.pa.gov/filing_resources/issues_laws_regulations/act_129_information/technical_reference_manual.aspx
3	Pennsylvania Public Utilities Commission. August 2019. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2021 Volume 3. http://www.puc.pa.gov/filing_resources/issues_laws_regulations/act_129_information/technical_reference_manual.aspx
4	Pennsylvania Statewide Evaluation (SWE) Team. December 2017. "Pennsylvania Incremental Measure Cost Database". Version 3.2.
5	Pennsylvania Statewide Evaluation (SWE) Team - NMR Group, Inc.. February 2019. "Pennsylvania Act 129 2018 Residential Baseline Study". http://www.puc.pa.gov/Electric/pdf/Act129/SWE-Phase3_Res_Baseline_Study_Rpt021219.pdf
6	Pennsylvania Statewide Evaluation (SWE) Team - Demand Side Analytics. February 2019. "Pennsylvania Act 129 2018 Non-Residential Baseline Study". http://www.puc.state.pa.us/Electric/pdf/Act129/SWE-Phase3_NonRes_Baseline_Study_Rpt021219.pdf
7	New Jersey Board of Public Utilities. June 22, 2018. "New Jersey's Clean Energy Program Protocols to Measure Resource Savings". Revisions to FY2016 Protocols. http://www.njcleanenergy.com/files/file/Board%20Orders/FY19/1g2%20-%20NJCEP%20Protocols%20to%20Measure%20Resource%20Savings%20FY19%20%20v3a.pdf
8	Minnesota Department of Commerce Division of Energy Resources. January 10, 2019. "State of Minnesota Technical Reference Manual for Energy Conservation Improvement Programs". Version 3.0. http://mn.gov/commerce-stat/pdfs/mn-trm-v3.0.pdf
9	Northeast Energy Efficiency Partnerships. May 2018. "Mid-Atlantic Technical Reference Manual". Version 9 Final. https://neep.org/sites/default/files/resources/Mid_Atlantic_TRM_V9_Final_clean_wUpdateSummary%20-%20CT%20FORMAT.pdf
10	Public Service Commission of Wisconsin. 2019. "Wisconsin Focus on Energy 2019 Technical Reference Manual". https://www.focusonenergy.com/sites/default/files/2019_TRM_Final_Update_0.pdf
11	New York State Joint Utilities. April 15, 2019. "New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Residential, Multi-Family, and Commercial/Industrial Measures". Version 7. http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/72c23deccf52920a85257f1100671bdd/\$FILE/TRM%20Version%207%20-%20April%202019.pdf
12	Engineering judgement.
13	J. Underberg (Oracle). April 3, 2019. "Personal Communication". Based on a summary of third-party evaluation reports detailing costs and savings.
14	U.S. Department of Energy (DOE). February 2011. "Guide to Cool Roofs". https://www.energy.gov/sites/prod/files/guide_to_cool_roofs.pdf
15	U.S. Energy Information Administration (EIA). 2016. "2012 Commercial Buildings Energy Consumption Survey". https://www.eia.gov/consumption/commercial/data/2012/
16	Acker, B., C. Duarte, and K. Wymelenberg. 2012. "Office Space Plug Loads and Energy Savings Interventions". Proceedings of the 2012 ACEEE Summer Study on Energy Efficiency in Buildings. https://aceee.org/files/proceedings/2012/start.htm
17	Messenger, W., University of San Diego. February 25, 2014. "Building Energy Management Systems". Presentation.
18	Ready,One. July 14, 2017. "Building Automation System Cost per Square Foot". https://ready.one/building-automation-per-square-foot/
19	National Grid, New Buildings Institute (NBI). May 6, 2016. "Deep Energy Retrofits". Presentation. https://newbuildings.org/webinar/deep-energy-retrofit-best-practices2/
20	Rocky Mountain Institute (RMI). 2019. "The Retrofit Depot: Case Studies". Accessed on April 1, 2019. https://rmi.org/our-work/buildings/deep-retrofit-tools-resources/deep-retrofit-case-studies/
21	Scofield, J., September 21, 2016. "Do green buildings really save energy? A look at the facts". GreenBiz. https://www.greenbiz.com/article/do-green-buildings-really-save-energy-look-facts
22	Poel, B., 2004. "Integrated Design with a Focus on Energy Aspects". Proceedings of the 2004 ACEEE Summer Study on Energy Efficiency in Buildings. https://aceee.org/files/proceedings/2004/data/papers/SS04_Panel9_Paper11.pdf
23	Kuziemko, J., January 8, 2015. "LEED buildings outperform market peers according to research". U.S. Green Building Council. https://www.usgbc.org/articles/leed-buildings-outperform-market-peers-according-research
24	ESource Technology Assessment Group. June 11, 2006. "Energy Design Resources Design Brief: Integrated Building Design". https://energydesignresources.com/media/1711/EDR_DesignBriefs_design.pdf?tracked=true
25	Mills, E. Lawrence Berkeley National Laboratory. July 21, 2009. "Building Commissioning A Golden Opportunity for Reducing Energy Costs and Greenhouse Gas Emissions". Prepared for California Energy Commission Public Interest Energy Research (PIER). http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit.pdf
26	Poeling, T. (BCxA), and E. Crowe (Lawrence Berkeley National Laboratory). October 2018. "The Value of Commissioning: Market and Building Data Surveys". Presented at the 2018 Building Commissioning Association Conference. https://www.bcx.org/wp-content/uploads/2018/10/BCxAConferenceFinalPresentations/October17-Day2/The-Value-of-Commissioning/12.BCxA-Conf-18_Poeling_Crowe_ValueCx-Final2.pdf
27	Roberts, J and B. Tso (SBW Consulting). 2010. "Do Savings from Retrocommissioning Last? Results from an Effective Useful Life Study". Proceedings of the 2010 ACEEE Summer Study on Energy Efficiency in Buildings. https://aceee.org/files/proceedings/2010/data/papers/1990.pdf
28	U.S. Department of Energy (DOE). December 2011. "Reducing Data Center Loads for a Large-Scale, Net Zero Office Building". https://www.nrel.gov/docs/fy12osti/52786.pdf
29	New York State Energy Research and Development Authority. 2019. "Case Studies and Feature Articles". Data Centers. https://www.nyserda.ny.gov/About/Publications/Case-Studies-and-Features
30	Illinois Energy Efficiency Stakeholder Advisory Group. January 2024. "Illinois Statewide Technical Reference Manual for Energy Efficiency Version 12.0". Accessed 1/1/2024. https://icc.illinois.gov/api/web-management/documents/downloads/public/il-trm-12/IL-TRM_Effective_010124_v12.0_Vol_2_C_and_I_09222023_FINAL_clean.pdf
31	Navigant Consulting, Inc.. September 2009. "Energy Savings Potential and R&D Opportunities for Commercial Refrigeration". https://www1.eere.energy.gov/buildings/publications/pdfs/corporate/commercial_refrig_report_10-09.pdf
32	U.S. Department of Energy (DOE) Industrial Assessment Center (IAC). Various. https://iac.university/statistics?center=any&state=NJ&yearThen=lt&year=2019&sicCode=&naicsCode=&submit=
33	Opinion Dynamics. 2020. "New York State Commercial Baseline Study". Vol. 1. https://www.nyserda.ny.gov/About/Publications/Building-Stock-and-Potential-Studies/Commercial-Statewide-Baseline-Study
34	ENERGY STAR . October 2016. "Savings Calculator for ENERGY STAR Certified Appliances". https://www.energystar.gov/sites/default/files/asset/document/appliance_calculator.xlsx
35	U.S. Department of Energy (DOE). December 2017. "Energy Savings Potential and RD&D Opportunities for Commercial Building HVAC Systems ". https://www.energy.gov/sites/prod/files/2017/12/f46/bto-DOE-Comm-HVAC-Report-12-21-17.pdf
36	ENERGY STAR . July 2016. "Savings Calculator for ENERGY STAR Qualified Office Equipment". https://www.energystar.gov/sites/default/files/asset/document/Office%20Equipment%20Calculator.xlsx
37	Southwest Energy Efficiency Partnership. March 2013. "Utility Strategic Energy Management Programs". http://www.swenergy.org/data/sites/1/media/documents/publications/documents/Utility_SEM_programs_03-2013.pdf

Appendix D2. Measure Characterization Sources

Source #	Source
38	Strategic Energy Group . Summer 2015. "Strategic Energy Management Maturity and Its Impact on Savings and Savings Persistence". https://aceee.org/files/proceedings/2015/data/papers/1-187.pdf
39	SBW Consulting, Inc. & The Cadmus Group. February 2017. "Bonneville Power Authority - Industrial Strategic Energy Management (SEM) Impact Evaluation Report". https://www.bpa.gov/EE/Utility/research-archive/Documents/Evaluation/170222_BPA_Industrial_SEM_Impact_Evaluation_Report.pdf
40	Northwest Power & Conservation Council Regional Technical Forum. June 3, 2019. "Regional Technical Forum Standard Information Workbook v 4.1". https://rtf.nwcouncil.org/standard-information-workbook
41	ENERGY STAR . 2019. "Residential Windows, Doors and Skylights". https://www.energystar.gov/products/building_products/residential_windows_doors_and_skylights
42	U.S. Energy Information Administration (EIA). 2015. "2015 Residential Energy Consumption Survey". https://www.eia.gov/consumption/residential/data/2015/
43	Seventhwave. October 20, 2016. "Minnesota Manufactured Homes Characterization and Performance Baseline Survey". Prepared for Minnesota Department of Commerce, Division of Energy Resources.. http://mn.gov/commerce-stat/pdfs/card-report-seventhwave_2016.pdf
44	Northeast Energy Efficiency Partnerships. January 2015. "LED Street Lighting Assessment and Strategies for the Northeast and Mid-Atlantic". https://neep.org/sites/default/files/resources/DOE_LED%20Street%20Lighting%20Assessment%20and%20Strategies%20for%20the%20Northeast%20and%20Mid-Atlantic_1-27-15.pdf
45	Pacific Northwest National Laboratory. October 2015. "Exterior LED Lighting Projects at Princeton University". Solid-State Lighting Program Building Technologies Office, Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy. https://www.energy.gov/sites/prod/files/2015/10/f27/2015_gateway_princeton-exterior.pdf
46	Pennsylvania Public Utilities Commission. September 2024. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2026 Volume 1. https://www.puc.pa.gov/pdocs/1848562.pdf
47	Pennsylvania Public Utilities Commission. September 2024. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2026 Volume 2. https://www.puc.pa.gov/pdocs/1848563.pdf
48	Pennsylvania Public Utilities Commission. September 2024. "State of Pennsylvania Act 129 Energy Efficiency and Conservation Program & Act 213 Alternative Energy Portfolio Standards Technical Reference Manual". 2026 Volume 3. https://www.puc.pa.gov/pdocs/1848580.pdf
49	Pennsylvania Statewide Evaluation (SWE) Team. August 2024. "Pennsylvania Incremental Measure Cost Database (Proposed)". https://www.puc.pa.gov/pdocs/1842600.xlsx
50	Pennsylvania Statewide Evaluation (SWE) Team - NMR Group, Inc.. March 2024. "Pennsylvania Act 129 2023 Residential Baseline Study". https://www.puc.pa.gov/media/2883/2023_pa_residential_baseline_study.pdf
51	Pennsylvania Statewide Evaluation (SWE) Team - Demand Side Analytics. February 2024. "Pennsylvania Act 129 2023 Non-Residential Baseline Study". https://www.puc.pa.gov/media/2884/2023_pa_non-residential_baseline_study.pdf
52	Department of Energy. September 2024. "Air sealing energy saver page". Do-It-Yourself Savings Project: Using Caulk to Seal Air Leaks Department of Energy
53	ENERGY STAR. September 2024. "List of ENERGY STAR Certified Commercial Ovens". Accessed 9/30/24. https://www.energystar.gov/productfinder/product/certified-commercial-ovens/results
54	ENERGY STAR. September 2024. "List of ENERGY STAR Certified Commercial Steam Cookers". Accessed 9/30/24. https://www.energystar.gov/productfinder/product/certified-commercial-steam-cookers/results
55	ENERGY STAR. October 2024. "List of ENERGY STAR Certified Commercial Fryers". Accessed 10/1/24. https://www.energystar.gov/productfinder/product/certified-commercial-fryers/results
56	ENERGY STAR. October 2024. "List of ENERGY STAR Certified Commercial Hot Food Holding Cabinets". Accessed 10/1/24. https://www.energystar.gov/productfinder/product/certified-commercial-hot-food-holding-cabinets/results
57	ENERGY STAR. October 2024. "List of ENERGY STAR Certified Commercial Griddles". Accessed 10/2/24. https://www.energystar.gov/productfinder/product/certified-commercial-griddles/results
58	DNV. March 2024. "Strategic Energy Management (SEM) 2021-2022 Impact Evaluation Draft". https://pda.energydataweb.com/api/view/3958/SEM%202021-2022%20Impact%20Evaluation%20Draft.pdf
59	European union Law. October 2024. "Commission Regulation (EU) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers". https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0548
60	MA 2025-2027 Plan. October 2024. "The Massachusetts 2025-2027 Energy Efficiency and Decarbonization Plan ". https://ma-eeac.org/wp-content/uploads/EEDPlan-2025-2027-Plan-ES-Report_Final5116444.pdf

Appendix E1: Impact Factors - Applicability

Appendix E.1. Impact Factors - Applicability

[illegible]

Appendix E.1. Impact Factors - Applicability

[illegible]

Appendix E2: Impact Factors - Feasibility

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Appendix E2. Input Factors - Feasibility

PM	Area	Measure Name	Primary Fuel End Use	Single Family	Multiunit	Single Family LI	Multiunit LI	Small Educational/Community	Small Educational/Other	Small Grocery	Small Health/Hospital	Small Health/Other	Small Industrial/Manufacturing	Small Institutional/Public Service	Small Lodging	Small Manufacturing/Other	Small Office	Small Restaurant	Small Retail	Small Warehouse	Low-Density College/Residential	Large Educational/Other	Large Grocery	Large Health/Residential	Large Health/Other	Large Industrial/Manufacturing	Large Institutional/Public Service	Large Lodging	Large Manufacturing/Other	Large Office	Large Restaurant	Large Retail	Large Warehouse
235	235	LED Main Bay, Q1, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
236	236	LED Main Bay, Q2, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
237	237	LED Main Bay, Q3, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
238	238	LED Main Bay, Q4, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
239	239	Exit Sign, Q1, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
240	240	Exit Sign, Q2, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
241	241	Exit Sign, Q3, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
242	242	Exit Sign, Q4, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
243	243	Exit Sign, Q5, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
244	244	Hand Cans Q1, Q2, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
245	245	Hand Cans Q3, Q4, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
246	246	Int. Log Chm, Q1, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
247	247	Int. Log Chm, Q2, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
248	248	Star On Sensor, Q1, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
249	249	Star On Sensor, Q2, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
250	250	Star On Sensor, Q3, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
251	251	Int. Log Chm, Q3, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
252	252	Int. Log Chm, Q4, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
253	253	Int. Log Chm, Q5, E - Int. (Electric Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
254	254	Int. Log Chm, Q6, E - Int.	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
261	261	Interior Horizontal Lighting, Q1, E - Int. (No Heat)	E - Interior Lighting	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
140	140	Personnel Elevators Motors, Q1, E - Motor	E - Motors and VFDs	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
142	142	VFD Improvements, Q1, E - Motor	E - Motors and VFDs	0%	0%	0%	0%	46%	46%	46%	47%	49%	0%	49%	2%	43%	43%	46%	45%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	46%	
259	259	Personnel Elevator Motors, Q2, E - Motor	E - Motors and VFDs	0%	0%	0%	0%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%		
274	274	Com ES Disconnector, Q1, E - Other (Building w/elec WH)	E - Other	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
276	276	Com ES Disconnector, Q2, E - Other (Building w/elec WH)	E - Other	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
338	338	Chiller Drive, Q1, E - Other	E - Other	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
263	263	Power Strip, Q1, E - Plug (Var 1)	E - Plug Loads	0%	0%	0%	0%	75%	75%	75%	75%	75%	0%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
264	264	Power Strip, Q2, E - Plug (Var 2)	E - Plug Loads	0%	0%	0%	0%	75%	75%	75%	75%	75%	0%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
265	265	ES Sensors, Q1, E - Plug (Sew Processors)	E - Plug Loads	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
266	266	ES Sensors, Q2, E - Plug (Sew Processors)	E - Plug Loads	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
267	267	ES Sensors, Q3, E - Plug (Milk Processors)	E - Plug Loads	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
268	268	ES Sensors, Q4, E - Plug (Milk Processors)	E - Plug Loads	0%	0%	0%	0%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	
329	329	Vending Machine Controls, Q1, E - Plug (Non Refrigerated)	E - Plug Loads	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
330	330	Vending Machine Controls, Q2, E - Plug (Refrigerated)	E - Plug Loads	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
383	383	Refrigerator Control Unit, Q1, E - Refrigeration	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
284	284	Planting Heat Pressure, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
285	285	Heat Source Heat Pressure, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
286	286	Strip Controls, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
287	287	Strip Night Controls, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
288	288	Auto Controls, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
289	289	Variable Speed Refrigeration, Q1, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
290	290	Refrigeration Pressure, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
291	291	Exap Fan Motor Replacement, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
292	292	Exap Fan Replacement, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
293	293	Reactor Pipe Installation, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
294	294	Open Open Display, Q1, Q2, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
295	295	Add Doors to Open Display, Q1, E - Heat	E - Refrigeration	0%	0%	0%	0%	100%	100%</																								

Appendix E3: Impact Factors – Retrofit Not Complete

Appendix E3. Impact Factors - Retrofit Not Complete

[illegible]

Appendix B2. Impact Factors - Results Not Complete

PM	Area	Measure Name	Primary Fuel End Use	Single Family	Multiunit	Single Family LI	Multiunit LI	Small Commercial/Office/University	Small Restaurant/Bar	Small Grocery	Small Hospital	Small Health Office	Small Industrial/Manufacturing	Small Institutional/Public Services	Small Lodging	Small Medium Office	Small Office	Small Restaurant	Small Retail	Small Warehouse	Large Education/College/University	Large Extended Stay	Large Grocery	Large Health Office	Large Health Office	Large Industrial/Manufacturing	Large Institutional/Public Services	Large Lodging	Large Medium Office	Large Office	Large Restaurant	Large Retail	Large Warehouse
234	234	LED Task Lamp, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
235	235	LED Wall Box, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
236	236	LED Wall Box, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
237	237	LED Wall Box, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
238	238	Exit Sign, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
239	239	Exit Sign, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
240	240	Exit Sign, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
241	241	Int. Downlight, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
242	242	Int. Downlight, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
243	243	Int. Downlight, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
244	244	Recessed Linear LED, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
245	245	Int. Log Chm, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
246	246	Int. Log Chm, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
247	247	Int. Log Chm, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
248	248	Star On Sensor, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
249	249	Star On Sensor, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
250	250	Star On Sensor, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	78%	78%	35%	81%	81%	81%	81%	92%	92%	47%	90%	88%	80%	90%	62%	78%	78%	35%	81%	81%	81%	81%	92%	47%	90%	
251	251	Star On Log Chm, GL, E, Int. (Electric Heat)	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
252	252	Star On Log Chm, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
254	254	Int. Log Chm, GL, E, Int.	E, Interior Lighting	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
255	255	Indoor Mechanical Lighting, GL, E, Int. (No Heat)	E, Interior Lighting	0%	0%	0%	0%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
140	140	Pharmaceuticals, GL, E, Mar	E, Medicines and Vitamins	0%	0%	0%	0%	18%	38%	80%	27%	27%	0%	74%	81%	82%	28%	87%	92%	66%	18%	18%	80%	27%	27%	0%	74%	81%	82%	28%	87%	92%	
142	142	LED Task Lamp, GL, E, Mar	E, Medicines and Vitamins	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
259	259	Universal Power Supply, GL, E, Oth	E, Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
274	274	Com Ed Downlight, GL, E, Oth (Building w/ elec Wt)	E, Other	0%	0%	0%	0%	88%	88%	88%	88%	88%	0%	88%	88%	0%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	
276	276	Com Ed Downlight, GL, E, Oth (Building w/ elec Wt)	E, Other	0%	0%	0%	0%	88%	88%	88%	88%	88%	0%	88%	88%	0%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	
328	328	Cooling Dryer, GL, E, Oth	E, Other	0%	0%	0%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
263	263	Power Strip, GL, E, Plug (No Heat)	E, Plug Loads	0%	0%	0%	0%	98%	98%	97%	99%	99%	0%	99%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	
264	264	Power Strip, GL, E, Plug (No Heat)	E, Plug Loads	0%	0%	0%	0%	98%	98%	97%	99%	99%	0%	99%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	98%	97%	
265	265	ES Servers, GL, E, Plug (No Heat)	E, Plug Loads	0%	0%	0%	0%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
266	266	ES Servers, GL, E, Plug (No Heat)	E, Plug Loads	0%	0%	0%	0%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
267	267	ES Servers, GL, E, Plug (No Heat)	E, Plug Loads	0%	0%	0%	0%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	81%	
268	268	Server Infrastructure, GL, E, Plug	E, Plug Loads	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
329	329	Vending Machine Controls, GL, E, Plug (No Refrigerant)	E, Plug Loads	0%	0%	0%	0%	92%	92%	92%	92%	92%	0%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	
330	330	Vending Machine Controls, GL, E, Plug (No Refrigerant)	E, Plug Loads	0%	0%	0%	0%	92%	92%	92%	92%	92%	0%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	
283	283	Refrigerator for Deli/Store, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	44%	44%	33%	96%	96%	100%	87%	50%	70%	88%	73%	100%	38%	44%	44%	33%	96%	96%	100%	87%	50%	70%	88%	73%	100%	
284	284	Refrigerator for Deli/Store, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	44%	44%	33%	96%	96%	100%	87%	50%	70%	88%	73%	100%	38%	44%	44%	33%	96%	96%	100%	87%	50%	70%	88%	73%	100%	
285	285	Auto Space Heater Control, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	100%	98%	100%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	100%	100%	
286	286	Auto Space Heater Control, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	100%	98%	100%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	100%	100%	
287	287	Cave Night Cooler, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	100%	100%	97%	0%	100%	0%	100%	100%	100%	100%	99%	97%	100%	100%	100%	100%	100%	97%	0%	100%	0%	100%	100%	99%	97%	
288	288	Auto Cooler, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	100%	100%	97%	0%	100%	0%	100%	100%	100%	100%	99%	97%	100%	100%	100%	100%	100%	97%	0%	100%	0%	100%	100%	99%	97%	
289	289	Refrigerator for Deli/Store, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	98%	100%	98%	98%	92%	100%	100%	87%	100%	100%	100%	100%	100%	100%	100%	
290	290	ES Refrigerator and Freezer, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	54%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	
291	291	ES Refrigerator and Freezer, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	54%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	
292	292	ES Refrigerator and Freezer, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	54%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	
293	293	ES Refrigerator and Freezer, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	54%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	
294	294	ES Refrigerator and Freezer, GL, E, Refr	E, Refrigeration	0%	0%	0%	0%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	54%	41%	41%	64%	25%	25%	27%	31%	40%	39%	24%	34%	30%	
295	295</																																

Appendix F: Load Shapes

135_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0009	0.0015	0.0009	0.00151
136_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0707	0.2216	0.0707	0.22158
137_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0
138_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0
139_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0
140_Single Family_Motors and VFDs	0	0	0	0	0	0	-	-	-	0
142_Single Family_Motors and VFDs	0	0	0	0	0	0	-	-	-	0
143_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
144_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
145_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
146_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
147_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	1.1861	0.8883	1.1861	0.88826
148_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	1.215	0.8742	1.215	0.87425
151_Single Family_Cooking	0.227	0.174	0.155	0.107	0.199	0.138	0.1455	0.2824	0.1455	0.28244
152_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
153_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0273	0.0276	0.0273	0.02758
154_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
155_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0273	0.0276	0.0273	0.02758
156_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
157_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
159_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
160_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0273	0.0276	0.0273	0.02758
161_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
162_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0273	0.0276	0.0273	0.02758
163_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
164_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0273	0.0276	0.0273	0.02758
166_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0457	0.071	0.0457	0.07102
167_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	0.0457	0.071	0.0457	0.07102
168_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.0457	0.071	0.0457	0.07102
169_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.405	-	0.405	0
170_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	-	-	-	0
171_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	0.101	0.121	0.101	0.121
172_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	0.101	0.121	0.101	0.121
173_Single Family_Appliances	0.253	0.176	0.144	0.1	0.198	0.129	0.6634	0.8544	0.6634	0.85439
174_Single Family_Appliances	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
175_Single Family_Water Heating	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
176_Single Family_Appliances	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
178_Single Family_Appliances	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
179_Single Family_Appliances	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
181_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
190_Single Family_Compressed Air Systems	0	0	0	0	0	0	-	-	-	0
191_Single Family_Cooling	0.491	0.372	0.021	0.027	0.048	0.042	-	-	-	0
192_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
193_Single Family_Drives	0	0	0	0	0	0	-	-	-	0
194_Single Family_Motors and VFDs	0	0	0	0	0	0	-	-	-	0
195_Single Family_Motors and VFDs	0	0	0	0	0	0	-	-	-	0
196_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
197_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
198_Single Family_Process Cooling and Refrigeration	0	0	0	0	0	0	-	-	-	0
199_Single Family_Process Heating	0	0	0	0	0	0	-	-	-	0
200_Single Family_Space Heating	0.008	0.018	0.282	0.369	0.13	0.193	-	-	-	0
201_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
219_Single Family_Exterior Lighting	0.172	0.19	0.139	0.166	0.161	0.172	-	-	-	0
220_Single Family_Exterior Lighting	0.172	0.19	0.139	0.166	0.161	0.172	-	-	-	0
221_Single Family_Exterior Lighting	0.172	0.19	0.139	0.166	0.161	0.172	-	-	-	0
222_Single Family_Exterior Lighting	0.172	0.19	0.139	0.166	0.161	0.172	-	-	-	0
229_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
230_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
231_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
232_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
233_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
234_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
235_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
236_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
237_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
238_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
239_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
240_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
241_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
242_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
243_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
244_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
245_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
246_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
247_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
248_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
249_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
250_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
253_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
254_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
259_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
260_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
261_Single Family_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	-	0
262_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	0.9951	1.2816	0.9951	1.28159
263_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
264_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
265_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
266_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
267_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
268_Single Family_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0
269_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
270_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
271_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
272_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
273_Single Family_Total Electric	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
274_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
275_Single Family_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0
276_Single Family_Other	0.193	0.17	0.161	0.178	0.149	0.148	-	-	-	0
278_Single Family_Cooking	0.227	0.174	0.155	0.107	0.199	0.138	-	-	-	0
279_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
280_Single Family_Space Heating	0.008	0.018	0.282	0.369	0.13	0.193	-	-	-	0
281_Single Family_Ventilation	0.212	0.208	0.121	0.125	0.172	0.162	-	-	-	0
283_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
284_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
285_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
286_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
287_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
288_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0
289_Single Family_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0

290_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
291_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
292_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
293_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
294_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
295_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
296_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
298_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
299_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
300_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
301_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
302_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
303_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
304_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
305_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
306_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
307_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
308_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
309_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
310_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
311_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
312_Single Family_Total Electric		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
315_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
316_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
317_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
318_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
319_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
320_Single Family_Cooking		0.227	0.174	0.155	0.107	0.199	0.138	-	-		0	0
321_Single Family_Cooling		0.491	0.372	0.021	0.027	0.048	0.042	-	-		0	0
322_Single Family_Space Heating		0.008	0.018	0.282	0.369	0.13	0.193	-	-		0	0
323_Single Family_Space Heating		0.008	0.018	0.282	0.369	0.13	0.193	-	-		0	0
324_Single Family_Cooling		0.491	0.372	0.021	0.027	0.048	0.042	-	-		0	0
325_Single Family_Cooling		0.491	0.372	0.021	0.027	0.048	0.042	-	-		0	0
326_Single Family_Space Heating		0.008	0.018	0.282	0.369	0.13	0.193	-	-		0	0
327_Single Family_Cooling		0.491	0.372	0.021	0.027	0.048	0.042	-	-		0	0
328_Single Family_Other		0.193	0.17	0.161	0.178	0.149	0.148	-	-		0	0
329_Single Family_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-		0	0
330_Single Family_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-		0	0
331_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
332_Single Family_Water Heating		0.198	0.161	0.156	0.134	0.198	0.153	-	-		0	0
333_Single Family_Water Heating		0.198	0.161	0.156	0.134	0.198	0.153	-	-		0	0
334_Single Family_Refrigeration		0.221	0.237	0.095	0.11	0.165	0.172	-	-		0	0
1_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
3_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
5_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
6_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
9_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
10_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
11_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
13_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
14_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
15_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
16_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
17_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
18_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
19_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
20_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-		0.3729	0
21_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
22_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
25_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
26_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
27_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
28_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
29_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
30_Multifamily_Water Heating		0.479	0.38	0.017	0.02	0.059	0.045	0.0693	-		0.0693	0
31_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
32_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
33_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
34_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	0.381		0	0.38101
35_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
36_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
37_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
38_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
39_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
40_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
41_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
42_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
44_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
45_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
46_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
47_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
48_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
49_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
50_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
51_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
52_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
53_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
54_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
55_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
56_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
57_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
58_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
60_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
61_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
62_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
63_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
64_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
65_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
67_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
70_Multifamily_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-		0	0
71_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
72_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
73_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
74_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
75_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
77_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
78_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
79_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0
80_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-		0	0

81_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
82_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
83_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
84_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
86_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
87_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
88_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
89_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
102_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
103_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
104_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
105_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
107_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
108_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
109_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
110_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
111_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
112_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
113_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
114_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
115_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	0	0.38101
116_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	0.3729	0
117_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
118_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
119_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
120_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
123_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234
124_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234
125_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234
126_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234
128_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.9163	1.5374	0.9163	1.53738
129_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234
130_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.9163	1.5374	0.9163	1.53738
132_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0039	0.0066	0.0039	0.00661
133_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0129	0.0217	0.0129	0.02165
134_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0009	0.0015	0.0009	0.00151
135_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0009	0.0015	0.0009	0.00151
136_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0707	0.2216	0.0707	0.22158
137_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
138_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
139_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
140_Multifamily_Motors and VFDs	0	0	0	0	0	0	-	-	0	0
142_Multifamily_Motors and VFDs	0	0	0	0	0	0	-	-	0	0
143_Multifamily_Ventilation	0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
144_Multifamily_Ventilation	0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
145_Multifamily_Ventilation	0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
146_Multifamily_Ventilation	0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
147_Multifamily_Refrigeration	0.221	0.238	0.095	0.11	0.165	0.172	1.1861	0.8883	1.1861	0.88826
148_Multifamily_Refrigeration	0.221	0.238	0.095	0.11	0.165	0.172	1.215	0.8742	1.215	0.87425
151_Multifamily_Cooking	0.228	0.173	0.155	0.106	0.202	0.136	0.1455	0.2824	0.1455	0.28244
152_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
153_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
154_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
155_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
156_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
157_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
159_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
160_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
161_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
162_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
163_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
164_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
166_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0457	0.071	0.0457	0.07102
167_Multifamily_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0457	0.071	0.0457	0.07102
168_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.0457	0.071	0.0457	0.07102
169_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.405	-	0.405	0
170_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	-	-	0	0
171_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	0.101	0.121	0.101	0.121
172_Multifamily_Other	0.161	0.147	0.18	0.214	0.143	0.154	0.101	0.121	0.101	0.121
173_Multifamily_Appliances	0.251	0.178	0.142	0.1	0.199	0.13	0.6634	0.8544	0.6634	0.85439
174_Multifamily_Appliances	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
175_Multifamily_Water Heating	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
176_Multifamily_Appliances	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
178_Multifamily_Appliances	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
179_Multifamily_Appliances	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
181_Multifamily_Ventilation	0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
190_Multifamily_Compressed Air Systems	0	0	0	0	0	0	-	-	0	0
191_Multifamily_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
192_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
193_Multifamily_Drives	0	0	0	0	0	0	-	-	0	0
194_Multifamily_Motors and VFDs	0	0	0	0	0	0	-	-	0	0
195_Multifamily_Motors and VFDs	0	0	0	0	0	0	-	-	0	0
196_Multifamily_Other	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
197_Multifamily_Other	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
198_Multifamily_Process Cooling and Refrigeration	0	0	0	0	0	0	-	-	0	0
199_Multifamily_Process Heating	0	0	0	0	0	0	-	-	0	0
200_Multifamily_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
201_Multifamily_Total Electric	0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
219_Multifamily_Exterior Lighting	0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
220_Multifamily_Exterior Lighting	0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
221_Multifamily_Exterior Lighting	0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
222_Multifamily_Exterior Lighting	0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
229_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
230_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
231_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
232_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
233_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
234_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
235_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
236_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
237_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
238_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
239_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
240_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
241_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
242_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
243_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
244_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
245_Multifamily_Interior Lighting	0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0

246_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
247_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
248_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
249_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
250_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
253_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
254_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
259_Multifamily_Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
260_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
261_Multifamily_Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
262_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	0.9951	1.2816	0.9951	1.28159
263_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
264_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
265_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
266_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
267_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
268_Multifamily_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
269_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
270_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
271_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
272_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
273_Multifamily_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
274_Multifamily_Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
275_Multifamily_Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
276_Multifamily_Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
278_Multifamily_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
279_Multifamily_Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
280_Multifamily_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
281_Multifamily_Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
283_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
284_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
285_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
286_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
287_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
288_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
289_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
290_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
291_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
292_Multifamily_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0

[illegible]

330_Single Family LI_Plug Loads	0.188	0.204	0.133	0.143	0.165	0.168	-	-	-	0	0
331_Single Family LI_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0	0
332_Single Family LI_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0	0
333_Single Family LI_Water Heating	0.198	0.161	0.156	0.134	0.198	0.153	-	-	-	0	0
334_Single Family LI_Refrigeration	0.221	0.237	0.095	0.11	0.165	0.172	-	-	-	0	0
1_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
3_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
5_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
6_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
9_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
10_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
11_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
13_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
14_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
15_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
16_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
17_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
18_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
19_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
20_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
21_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
22_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
25_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
26_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
27_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
28_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
29_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
30_Multifamily LI_Water Heating	0.479	0.38	0.017	0.02	0.059	0.045	0.0693	-	-	0.0693	0
31_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
32_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
33_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
34_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
35_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
36_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
37_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
38_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
39_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
40_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
41_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
42_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
44_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
45_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
46_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
47_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
48_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
49_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
50_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
51_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
52_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
53_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
54_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
55_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
56_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
57_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
58_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
60_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
61_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
62_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
63_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
64_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
65_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
67_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
70_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
71_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
72_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
73_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
74_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
75_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
77_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
78_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
79_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
80_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
81_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
82_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
83_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
84_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
86_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
87_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
88_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
89_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
102_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
103_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
104_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
105_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
107_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
108_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
109_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
110_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
111_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
112_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
113_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
114_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
115_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0.38101
116_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	0.3729	-	-	0.3729	0
117_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	0.381	-	0	0
118_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
119_Multifamily LI_Space Heating	0.005	0.015	0.287	0.388	0.118	0.186	-	-	-	0	0
120_Multifamily LI_Cooling	0.479	0.38	0.017	0.02	0.059	0.045	-	-	-	0	0
123_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234	
124_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234	
125_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234	
126_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234	
128_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.9163	1.5374	0.9163	1.53738	
129_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0714	0.2223	0.0714	0.22234	
130_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.9163	1.5374	0.9163	1.53738	
132_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0039	0.0066	0.0039	0.00661	
133_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0129	0.0217	0.0129	0.02165	
134_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0009	0.0015	0.0009	0.00151	
135_Multifamily LI_Water Heating	0.196	0.162	0.155	0.136	0.196	0.155	0.0009	0.0015	0.0009	0.00151	

136. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0707	0.2216	0.0707	0.22158
137. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
138. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
139. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
140. Multifamily U. Motors and VFDs		0	0	0	0	0	0	-	-	0	0
142. Multifamily U. Motors and VFDs		0	0	0	0	0	0	-	-	0	0
143. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
144. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
145. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
146. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
147. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	1.1861	0.8883	1.1861	0.88826
148. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	1.215	0.8742	1.215	0.87425
151. Multifamily U. Cooking		0.228	0.173	0.155	0.106	0.202	0.136	0.1455	0.2824	0.1455	0.28244
152. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
153. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
154. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
155. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
156. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
157. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
159. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
160. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
161. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
162. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0273	0.0276	0.0273	0.02758
163. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
164. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0273	0.0276	0.0273	0.02758
166. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0457	0.071	0.0457	0.07102
167. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	0.0457	0.071	0.0457	0.07102
168. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.0457	0.071	0.0457	0.07102
169. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.405	-	0.405	0
170. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	-	-	0	0
171. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	0.101	0.121	0.101	0.121
172. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	0.101	0.121	0.101	0.121
173. Multifamily U. Appliances		0.251	0.178	0.142	0.1	0.199	0.13	0.6634	0.8544	0.6634	0.85439
174. Multifamily U. Appliances		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
175. Multifamily U. Water Heating		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
176. Multifamily U. Appliances		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
178. Multifamily U. Appliances		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
179. Multifamily U. Appliances		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
181. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
190. Multifamily U. Compressed Air Systems		0	0	0	0	0	0	-	-	0	0
191. Multifamily U. Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
192. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
193. Multifamily U. Drives		0	0	0	0	0	0	-	-	0	0
194. Multifamily U. Motors and VFDs		0	0	0	0	0	0	-	-	0	0
195. Multifamily U. Motors and VFDs		0	0	0	0	0	0	-	-	0	0
196. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
197. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
198. Multifamily U. Process Cooling and Refrigeration		0	0	0	0	0	0	-	-	0	0
199. Multifamily U. Process Heating		0	0	0	0	0	0	-	-	0	0
200. Multifamily U. Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
201. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
219. Multifamily U. Exterior Lighting		0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
220. Multifamily U. Exterior Lighting		0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
221. Multifamily U. Exterior Lighting		0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
222. Multifamily U. Exterior Lighting		0.17	0.189	0.14	0.167	0.16	0.173	-	-	0	0
229. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
230. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
231. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
232. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
233. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
234. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
235. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
236. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
237. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
238. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
239. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
240. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
241. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
242. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
243. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
244. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
245. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
246. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
247. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
248. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
249. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
250. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
253. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
254. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
259. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
260. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
261. Multifamily U. Interior Lighting		0.208	0.162	0.155	0.127	0.192	0.156	-	-	0	0
262. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	0.9951	1.2816	0.9951	1.28159
263. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
264. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
265. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
266. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
267. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
268. Multifamily U. Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
269. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
270. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
271. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
272. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
273. Multifamily U. Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
274. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
275. Multifamily U. Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0
276. Multifamily U. Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
278. Multifamily U. Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
279. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
280. Multifamily U. Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
281. Multifamily U. Ventilation		0.221	0.198	0.127	0.119	0.181	0.154	-	-	0	0
283. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
284. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
285. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
286. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
287. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
288. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
289. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
290. Multifamily U. Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0

291_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
292_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
293_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
294_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
295_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
296_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
298_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
299_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
300_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
301_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
302_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
303_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
304_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
305_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
306_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
307_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
308_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
309_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
310_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
311_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
312_Multifamily LI_Total Electric		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
315_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
316_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
317_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
318_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
319_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
320_Multifamily LI_Cooking		0.228	0.173	0.155	0.106	0.202	0.136	-	-	0	0
321_Multifamily LI_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
322_Multifamily LI_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
323_Multifamily LI_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
324_Multifamily LI_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
325_Multifamily LI_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
326_Multifamily LI_Space Heating		0.005	0.015	0.287	0.388	0.118	0.186	-	-	0	0
327_Multifamily LI_Cooling		0.479	0.38	0.017	0.02	0.059	0.045	-	-	0	0
328_Multifamily LI_Other		0.161	0.147	0.18	0.214	0.143	0.154	-	-	0	0
329_Multifamily LI_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
330_Multifamily LI_Plug Loads		0.188	0.204	0.133	0.143	0.165	0.168	-	-	0	0
331_Multifamily LI_Refrigeration		0.221	0.238	0.095	0.11	0.165	0.172	-	-	0	0
332_Multifamily LI_Water Heating		0.196	0.162	0.155	0.136	0.196	0.155	-	-	0	0

[illegible]

247_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
248_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
249_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
250_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
253_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
254_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
259_Small Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	0.725	0.725	0.725	0.725
260_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
261_Small Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
262_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
263_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0
264_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0
265_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
266_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
267_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
268_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	1
269_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
270_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
271_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
272_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
273_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
274_Small Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314
275_Small Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	1.224	0.7831	1.224	0.78314
276_Small Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314
278_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	0.6975	0.4463	0.6975	0.44629
279_Small Education - College/University_ Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.3279	0.2376	0.3279	0.23757
280_Small Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	0.2376	0	0.23757
281_Small Education - College/University_ Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.3279	0.2376	0.3279	0.23757
283_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0169	0.0133	0.0169	0.01334
284_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.0133	0	0.01334
285_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002
286_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
287_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	0	0
288_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
289_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.24	0	0.24002
290_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
291_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
292_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.8234	0.8234	0.8234	0.82344
293_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002
294_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
295_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
296_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
298_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0001	0.0001	0.0001	0.00012
299_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
300_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
301_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
302_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
303_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
304_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
305_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
306_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
307_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
308_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
309_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
310_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
311_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
312_Small Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
315_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
316_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
317_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
318_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
319_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
320_Small Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
321_Small Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
322_Small Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
323_Small Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
324_Small Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
325_Small Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
326_Small Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
327_Small Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
328_Small Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
329_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
330_Small Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
331_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	0	0
332_Small Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-	0	0
333_Small Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-	0	0
334_Small Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	0	0
1_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
3_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
5_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
6_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
9_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
10_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
11_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
13_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
14_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
15_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
16_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
17_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
18_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
19_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
20_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
21_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
22_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
25_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
26_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
27_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
28_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
29_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
30_Small Education - Other_Water Heating	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
31_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
32_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
33_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
34_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
35_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	0.1709	-	0.1709	0
36_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	0.1709	-	0.1709	0
37_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	0.1709	-	0.1709	0
38_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	0.1709	-	0.1709	0
39_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	0.1709	-	0.1709	0

[illegible]

179_Small Education - Other_Appliances	0.235	0.124	0.172	0.142	0.19	0.136	0.2226	0.238	0.2226	0.23798
181_Small Education - Other_Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.3737	0.5066	0.3737	0.50656
190_Small Education - Other_Compressed Air Systems	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
191_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
192_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	-	-	0	0
193_Small Education - Other_Drives	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
194_Small Education - Other_Motors and VFDs	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
195_Small Education - Other_Motors and VFDs	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
196_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
197_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
198_Small Education - Other_Process Cooling and Refrigeration	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
199_Small Education - Other_Process Heating	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
200_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
201_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
219_Small Education - Other_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41
220_Small Education - Other_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41
221_Small Education - Other_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41
222_Small Education - Other_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41
229_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
230_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
231_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
232_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
233_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
234_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
235_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
236_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
237_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
238_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
239_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
240_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
241_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
242_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
243_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
244_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
245_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
246_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
247_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
248_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
249_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
250_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
253_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
254_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
259_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	0.725	0.725	0.725	0.725
260_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
261_Small Education - Other_Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41
262_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
263_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0
264_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0
265_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
266_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
267_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0
268_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	1	1	1
269_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
270_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
271_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
272_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
273_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
274_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314
275_Small Education - Other_Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	1.224	0.7831	1.224	0.78314
276_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314
278_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	0.6975	0.4463	0.6975	0.44629
279_Small Education - Other_Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.416	0.2991	0.416	0.29914
280_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	0.2991	0	0.29914
281_Small Education - Other_Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.416	0.2991	0.416	0.29914
283_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0169	0.0133	0.0169	0.01334
284_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.0133	0	0.01334
285_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002
286_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
287_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	0	0
288_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
289_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.24	0	0.24002
290_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
291_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
292_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.8234	0.8234	0.8234	0.82344
293_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002
294_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
295_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
296_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
298_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0001	0.0001	0.0001	0.00012
299_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
300_Small Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
301_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
302_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
303_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
304_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
305_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
306_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
307_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
308_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
309_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
310_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
311_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
312_Small Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
315_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
316_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
317_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
318_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
319_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
320_Small Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
321_Small Education - Other_Cooking	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
322_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
323_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
324_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
325_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
326_Small Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	0	0
327_Small Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	0	0
328_Small Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	0	0
329_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0
330_Small Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	0	0

331_Small Education - Other_Refrigeration		0.23	0.222	0.111	0.119	0.16	0.158	-	-		0	0
332_Small Education - Other_Water Heating		0.268	0.049	0.265	0.033	0.347	0.038	-	-		0	0
333_Small Education - Other_Water Heating		0.268	0.049	0.265	0.033	0.347	0.038	-	-		0	0
334_Small Education - Other_Refrigeration		0.23	0.222	0.111	0.119	0.16	0.158	-	-		0	0
1_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
3_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
5_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
6_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
9_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
10_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
11_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
13_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
14_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
15_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
16_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
17_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
18_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
19_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
20_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
21_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
22_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
25_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
26_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
27_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
28_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
29_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
30_Small Grocery_Water Heating		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
31_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
32_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
33_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
34_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
35_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
36_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
37_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
38_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
39_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
40_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
41_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
42_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
44_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
45_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
46_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
47_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
48_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
49_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
50_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
51_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
52_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
53_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0	0
54_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0	0
55_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0	0
56_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0	0
57_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0	0
58_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0	0
60_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
61_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
62_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
63_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
64_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
65_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
67_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
70_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
71_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
72_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
73_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
74_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
75_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
77_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
78_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098	0
79_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
80_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098	0
81_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
82_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.036	0	0.03605	0
83_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.8681	0	0.8681	0
84_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.036	0	0.03605	0
86_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098	0
87_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
88_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098	0
89_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
102_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
103_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
104_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
105_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
107_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
108_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
109_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
110_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
111_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
112_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
113_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
114_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
115_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0	0
116_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0	0
117_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
118_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
119_Small Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602	0
120_Small Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0	0
123_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
124_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
125_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
126_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
128_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
129_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
130_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
132_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
133_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
134_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
135_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0
136_Small Grocery_Water Heating		0	0	0	0	0	0	-	-	0	0	0

137_Small Grocery_Water Heating	0	0	0	0	0	0	0.5325	0.2966	0.5325	0.29661
138_Small Grocery_Water Heating	0	0	0	0	0	0	0.084	0.0458	0.084	0.04584
139_Small Grocery_Water Heating	0	0	0	0	0	0	0.5325	0.2966	0.5325	0.29661
140_Small Grocery_Motors and VFDs	0.239	0.18	0.134	0.112	0.194	0.141	1.1644	0.7183	1.1644	0.71827
142_Small Grocery_Motors and VFDs	0.239	0.18	0.134	0.112	0.194	0.141	1.1644	0.7183	1.1644	0.71827
143_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	1.0262	0.7799	1.0262	0.77986
144_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	0.6926	0.579	0.6926	0.57897
145_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	0.1099	0.1099	0.1099	0.10989
146_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	-	0.0835	0	0.08351
147_Small Grocery_Refrigeration	0	0	0	0	0	0	-	-	0	0
148_Small Grocery_Refrigeration	0	0	0	0	0	0	-	-	0	0
151_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
152_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
153_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	0	0
154_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
155_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	0	0
156_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
157_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
159_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
160_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	0	0
161_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
162_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	0	0
163_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
164_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
166_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
167_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	0	0
168_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
169_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
170_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
171_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	-	-	0	0
172_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
173_Small Grocery_Appliances	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
174_Small Grocery_Appliances	0.24	0.167	0.14	0.141	0.167	0.146	0.2226	0.238	0.2226	0.23798
175_Small Grocery_Water Heating	0.24	0.167	0.14	0.141	0.167	0.146	0.2226	0.238	0.2226	0.23798
176_Small Grocery_Appliances	0.24	0.167	0.14	0.141	0.167	0.146	0.2226	0.238	0.2226	0.23798
178_Small Grocery_Appliances	0.24	0.167	0.14	0.141	0.167	0.146	0.2226	0.238	0.2226	0.23798
179_Small Grocery_Appliances	0.24	0.167	0.14	0.141	0.167	0.146	0.2226	0.238	0.2226	0.23798
181_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	0.3737	0.5066	0.3737	0.50656
190_Small Grocery_Compressed Air Systems	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
191_Small Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
192_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	-	-	0	0
193_Small Grocery_Drives	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
194_Small Grocery_Motors and VFDs	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
195_Small Grocery_Motors and VFDs	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
196_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
197_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
198_Small Grocery_Process Cooling and Refrigeration	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
199_Small Grocery_Process Heating	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
200_Small Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0
201_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
219_Small Grocery_Exterior Lighting	0.092	0.26	0.088	0.208	0.102	0.25	0.93	0.84	0.93	0.84
220_Small Grocery_Exterior Lighting	0.092	0.26	0.088	0.208	0.102	0.25	0.93	0.84	0.93	0.84
221_Small Grocery_Exterior Lighting	0.092	0.26	0.088	0.208	0.102	0.25	0.93	0.84	0.93	0.84
222_Small Grocery_Exterior Lighting	0.092	0.26	0.088	0.208	0.102	0.25	0.93	0.84	0.93	0.84
229_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
230_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
231_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
232_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
233_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
234_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
235_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
236_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
237_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
238_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
239_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
240_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
241_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
242_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
243_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
244_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
245_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
246_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
247_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
248_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
249_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
250_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
253_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
254_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
259_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	0.725	0.725	0.725	0.725
260_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
261_Small Grocery_Interior Lighting	0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
262_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
263_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	0.3071	-	0.3071	0
264_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	0.3071	-	0.3071	0
265_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
266_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
267_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
268_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	1
269_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
270_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
271_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
272_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
273_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
274_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	1.224	0.7831	1.224	0.78314
275_Small Grocery_Water Heating	0	0	0	0	0	0	1.224	0.7831	1.224	0.78314
276_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	1.224	0.7831	1.224	0.78314
278_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	0.6975	0.4463	0.6975	0.44629
279_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	0.3113	0.236	0.3113	0.23602
280_Small Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
281_Small Grocery_Ventilation	0.241	0.184	0.138	0.11	0.189	0.138	0.3113	0.236	0.3113	0.23602
283_Small Grocery_Refrigeration	0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334
284_Small Grocery_Refrigeration	0	0	0	0	0	0	-	0.0133	0	0.01334
285_Small Grocery_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
286_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
287_Small Grocery_Refrigeration	0	0	0	0	0	0	-	-	0	0
288_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
289_Small Grocery_Refrigeration	0	0	0	0	0	0	-	0.24	0	0.24002
290_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
291_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1

292_Small Grocery_Refrigeration	0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344
293_Small Grocery_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
294_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
295_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
296_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
298_Small Grocery_Refrigeration	0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012
299_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
300_Small Grocery_Refrigeration	0	0	0	0	0	0	1	1	1	1
301_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
302_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
303_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
304_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
305_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
306_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
307_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
308_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
309_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
310_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
311_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
312_Small Grocery_Total Electric	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
315_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
316_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
317_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
318_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
319_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
320_Small Grocery_Cooking	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
321_Small Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	-	0
322_Small Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-	-	0
323_Small Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-	-	0
324_Small Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	-	0
325_Small Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	-	0
326_Small Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-	-	0
327_Small Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	-	0
328_Small Grocery_Other	0.24	0.167	0.14	0.141	0.167	0.146	-	-	-	0
329_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
330_Small Grocery_Plug Loads	0.239	0.18	0.134	0.112	0.194	0.141	-	-	-	0
331_Small Grocery_Refrigeration	0	0	0	0	0	0	-	-	-	0
332_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	-	0
333_Small Grocery_Water Heating	0	0	0	0	0	0	-	-	-	0
334_Small Grocery_Refrigeration	0	0	0	0	0	0	-	-	-	0
1_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
3_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
5_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
6_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
9_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
10_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
11_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
13_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
14_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
15_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
16_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
17_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
18_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
19_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
20_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
21_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
22_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
25_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
26_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
27_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
28_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
29_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
30_Small Health - Hospital_Space Heating	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
31_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
32_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
33_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
34_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	-	0
35_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
36_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
37_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
38_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
39_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
40_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
41_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
42_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
44_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
45_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
46_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
47_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
48_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
49_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
50_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
51_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
52_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	-	0
53_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	1	-	1	0
54_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	1	-	1	0
55_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	1	-	1	0
56_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-	0.5161	0
57_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-	0.5161	0
58_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-	0.5161	0
60_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
61_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
62_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
63_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
64_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
65_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
67_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
70_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
71_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
72_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
73_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
74_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
75_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
77_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
78_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0038	0	0.00378
79_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
80_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0038	0	0.00378
81_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
82_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0284	0	0.02846

83_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.731	0	0.73099
84_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0284	0	0.02844
86_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
87_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
88_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
89_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
102_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
103_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
104_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
105_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
107_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
108_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
109_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
110_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
111_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
112_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
113_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
114_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
115_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
116_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
117_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
118_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	0.2974	-	0.2974	0
119_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
120_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	0.2974	-	0.2974	0
123_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
124_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
125_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
126_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
128_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
129_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
130_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
132_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
133_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
134_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
135_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
136_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
137_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-	0.4183	0.2409	0.4183	0.24086
138_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-	0.084	0.0458	0.084	0.04584
139_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-	0.4183	0.2409	0.4183	0.24086
140_Small Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-	1.0014	0.849	1.0014	0.84896
142_Small Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-	1.0014	0.849	1.0014	0.84896
143_Small Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	-	1.0014	0.849	1.0014	0.84896
144_Small Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	-	0.6926	0.579	0.6926	0.57897
145_Small Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	-	0.0402	0.0402	0.0402	0.04024
146_Small Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	-		0.0341	0	0.03412
147_Small Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-		-	0	0
148_Small Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-		-	0	0
151_Small Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
152_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
153_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
154_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
155_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
156_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
157_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
159_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
160_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
161_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
162_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
163_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
164_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
166_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
167_Small Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-		-	0	0
168_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
169_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
170_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
171_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-		-	0	0
172_Small Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-		-	0	0
173_Small Health - Hospital_Appliances	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
174_Small Health - Hospital_Appliances	0.258	0.2	0.122	0.12	0.162	0.138	-	0.2226	0.238	0.2226	0.23798
175_Small Health - Hospital_Water Heating	0.258	0.2	0.122	0.12	0.162	0.138	-	0.2226	0.238	0.2226	0.23798
176_Small Health - Hospital_Appliances	0.258	0.2	0.122	0.12	0.162	0.138	-	0.2226	0.238	0.2226	0.23798
178_Small Health - Hospital_Appliances	0.258	0.2	0.122	0.12	0.162	0.138	-	0.2226	0.238	0.2226	0.23798
179_Small Health - Hospital_Appliances	0.258	0.2	0.122	0.12	0.162	0.138	-	0.2226	0.238	0.2226	0.23798
181_Small Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	-	0.3737	0.5066	0.3737	0.50656
190_Small Health - Hospital_Compressed Air Systems	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
191_Small Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-		-	0	0
192_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-		-	0	0
193_Small Health - Hospital_Drives	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
194_Small Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
195_Small Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
196_Small Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-		-	0	0
197_Small Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-		-	0	0
198_Small Health - Hospital_Process Cooling and Refrigeration	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
199_Small Health - Hospital_Process Heating	0.233	0.186	0.136	0.111	0.191	0.144	-		-	0	0
200_Small Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-		-	0	0
201_Small Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-		-	0	0
219_Small Health - Hospital_Interior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	-	0.52	0.42	0.52	0.42
220_Small Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	-	0.52	0.42	0.52	0.42
221_Small Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	-	0.52	0.42	0.52	0.42
222_Small Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	-	0.52	0.42	0.52	0.42
229_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
230_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
231_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
232_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
233_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
234_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
235_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
236_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
237_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
238_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
239_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
240_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
241_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
242_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
243_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
244_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
245_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
246_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42
247_Small Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	-	0.52	0.42	0.52	0.42

248_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
249_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
250_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
253_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
254_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
259_Small Health - Hospital_Other		0.258	0.2	0.122	0.12	0.162	0.138	0.725	0.725	0.725	0.725
260_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
261_Small Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
262_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0.52	0
263_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	0.3071	-	0.3071	0
264_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	0.3071	-	0.3071	0
265_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
266_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
267_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
268_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	1	1	1	1
269_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
270_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
271_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
272_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
273_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
274_Small Health - Hospital_Other		0.258	0.2	0.122	0.12	0.162	0.138	1.224	0.7831	1.224	0.78314
275_Small Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	1.224	0.7831	1.224	0.78314
276_Small Health - Hospital_Other		0.258	0.2	0.122	0.12	0.162	0.138	1.224	0.7831	1.224	0.78314
278_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	0.6975	0.4463	0.6975	0.44629
279_Small Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	0.0995	0.0973	0.0995	0.09726
280_Small Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
281_Small Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	0.0995	0.0973	0.0995	0.09726
283_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	0.0169	0.0133	0.0169	0.01334
284_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	0.0133	0	0.01334
285_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	0.3031	0.24	0.3031	0.24002
286_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
287_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-	0	0
288_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
289_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	0.24	0	0.24002
290_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
291_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
292_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	0.8234	0.8234	0.8234	0.82344
293_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	0.3031	0.24	0.3031	0.24002
294_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
295_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
296_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
298_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	0.0001	0.0001	0.0001	0.00012
299_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
300_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
301_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
302_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
303_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
304_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
305_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
306_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
307_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
308_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
309_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
310_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
311_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
312_Small Health - Hospital_Total Electric		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
315_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
316_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
317_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
318_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
319_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
320_Small Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
321_Small Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
322_Small Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
323_Small Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
324_Small Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
325_Small Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
326_Small Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
327_Small Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
328_Small Health - Hospital_Other		0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
329_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
330_Small Health - Hospital_Plug Loads		0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
331_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-	0	0
332_Small Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	0	0
333_Small Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	0	0
334_Small Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-	0	0
1_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
3_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
5_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
6_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
9_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
10_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
11_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
13_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
14_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
15_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
16_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
17_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
18_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
19_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
20_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
21_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
22_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
25_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
26_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
27_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
28_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
29_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
30_Small Health - Other_Water Heating		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
31_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
32_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
33_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
34_Small Health - Other_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
35_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0
36_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0
37_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0
38_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0
39_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0
40_Small Health - Other_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2315	-	0.2315	0

[illegible]

332_Small Health - Other_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
333_Small Health - Other_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
334_Small Health - Other_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-		0	0
1_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
3_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
5_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
6_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
9_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
10_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
11_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
13_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
14_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
15_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
16_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
17_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
18_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
19_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
20_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
21_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
22_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
25_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
26_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
27_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
28_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
29_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
30_Small Industrial Manufacturing_Water Heating		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
31_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
32_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
33_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
34_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
35_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
36_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
37_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
38_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
39_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
40_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
41_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
42_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
44_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
45_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
46_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
47_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
48_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
49_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
50_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
51_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
52_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
53_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0	0
54_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0	0
55_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0	0
56_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1.0729	-	1.0729	0	0
57_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1.0729	-	1.0729	0	0
58_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	1.0729	-	1.0729	0	0
60_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
61_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
62_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
63_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
64_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
65_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
67_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
70_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
71_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
72_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
73_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
74_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
75_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
77_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
78_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0014	0	0.00142	0
79_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
80_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0014	0	0.00142	0
81_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
82_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0098	0	0.00982	0
83_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.9371	0	0.93711	0
84_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0098	0	0.00982	0
86_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0014	0	0.00142	0
87_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
88_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.0014	0	0.00142	0
89_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
102_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
103_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
104_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
105_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
107_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
108_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
109_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
110_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
111_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
112_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
113_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
114_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
115_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	-		0	0
116_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	-	-		0	0
117_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
118_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
119_Small Industrial Manufacturing_Space Heating		0.005	0.01	0.246	0.365	0.16	0.214	-	0.136	0	0.13599	0
120_Small Industrial Manufacturing_Cooling		0.576	0.29	0.018	0.01	0.07	0.036	0.3863	-	0.3863	0	0
123_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
124_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
125_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
126_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
128_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
129_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
130_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
132_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
133_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
134_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
135_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
136_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	-	-		0	0
137_Small Industrial Manufacturing_Water Heating		0.25	0.127	0.187	0.085	0.247	0.104	0.5383	0.2939	0.5383	0.2939	0

293_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.3031	0.24	0.3031	0.24002
294_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
295_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
296_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
298_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.0001	0.0001	0.0001	0.00012
299_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
300_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
301_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
302_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
303_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
304_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
305_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
306_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
307_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
308_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
309_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
310_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
311_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
312_Small Industrial Manufacturing_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
315_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
316_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
317_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
318_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
319_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
320_Small Industrial Manufacturing_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
321_Small Industrial Manufacturing_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
322_Small Industrial Manufacturing_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
323_Small Industrial Manufacturing_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
324_Small Industrial Manufacturing_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
325_Small Industrial Manufacturing_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
326_Small Industrial Manufacturing_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
327_Small Industrial Manufacturing_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
328_Small Industrial Manufacturing_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
329_Small Industrial Manufacturing_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
330_Small Industrial Manufacturing_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
331_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
332_Small Industrial Manufacturing_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
333_Small Industrial Manufacturing_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
334_Small Industrial Manufacturing_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
1_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
3_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
5_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
6_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
9_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
10_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
11_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
13_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
14_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
15_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
16_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
17_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
18_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
19_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
20_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
21_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
22_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
25_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
26_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
27_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
28_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
29_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
30_Small Institutional/Public Service_Water Heating	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
31_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
32_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
33_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
34_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
35_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
36_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
37_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
38_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
39_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
40_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
41_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
42_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
44_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
45_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
46_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
47_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
48_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
49_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
50_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
51_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
52_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
53_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
54_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
55_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
56_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.5402	-	0.5402	0
57_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.5402	-	0.5402	0
58_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.5402	-	0.5402	0
60_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
61_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
62_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
63_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
64_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
65_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
67_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
70_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.2621	-	0.2621	0
71_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
72_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
73_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
74_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
75_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
77_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
78_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0375	0	0.03746
79_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
80_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0375	0	0.03746
81_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
82_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0879	0	0.08794
83_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.7584	0	0.75841

[illegible]

249_Small Institutional/Public Service_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.23	0.19	0.23	0.19
250_Small Institutional/Public Service_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.23	0.19	0.23	0.19
253_Small Institutional/Public Service_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.23	0.19	0.23	0.19
254_Small Institutional/Public Service_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.23	0.19	0.23	0.19
259_Small Institutional/Public Service_Other	0.252	0.163	0.143	0.129	0.179	0.133	0.725	0.725	0.725	0.725
260_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
261_Small Institutional/Public Service_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.23	0.19	0.23	0.19
262_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
263_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	0.3071	-	0.3071	0
264_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	0.3071	-	0.3071	0
265_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
266_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
267_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
268_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	1	1	1
269_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
270_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
271_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
272_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
273_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
274_Small Institutional/Public Service_Other	0.252	0.163	0.143	0.129	0.179	0.133	1.224	0.7831	1.224	0.78314
275_Small Institutional/Public Service_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	1.224	0.7831	1.224	0.78314
276_Small Institutional/Public Service_Other	0.252	0.163	0.143	0.129	0.179	0.133	1.224	0.7831	1.224	0.78314
278_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	0.6975	0.4469	0.6975	0.44629
279_Small Institutional/Public Service_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.3335	0.323	0.3335	0.32302
280_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.323	0	0.32302
281_Small Institutional/Public Service_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.3335	0.323	0.3335	0.32302
283_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.0169	0.0133	0.0169	0.01334
284_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	0.0133	0	0.01334
285_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.3031	0.24	0.3031	0.24002
286_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
287_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	1	-	0
288_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
289_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	0.24	0	0.24002
290_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
291_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
292_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.8234	0.8234	0.8234	0.82344
293_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.3031	0.24	0.3031	0.24002
294_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
295_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
296_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
298_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.0001	0.0001	0.0001	0.00012
299_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
300_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
301_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
302_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
303_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
304_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
305_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
306_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
307_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
308_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
309_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
310_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
311_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
312_Small Institutional/Public Service_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
315_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
316_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
317_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
318_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
319_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
320_Small Institutional/Public Service_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
321_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
322_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
323_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
324_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
325_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
326_Small Institutional/Public Service_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
327_Small Institutional/Public Service_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
328_Small Institutional/Public Service_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
329_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
330_Small Institutional/Public Service_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
331_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
332_Small Institutional/Public Service_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
333_Small Institutional/Public Service_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
334_Small Institutional/Public Service_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
1_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
3_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
5_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
6_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
9_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
10_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
11_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
13_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
14_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
15_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
16_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
17_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
18_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
19_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
20_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
21_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
22_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
25_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
26_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
27_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
28_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
29_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
30_Small Lodging_Water Heating	0.386	0.308	0.053	0.051	0.108	0.094	-	-	0	0
31_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
32_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
33_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
34_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0	0
35_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
36_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
37_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
38_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
39_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
40_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0
41_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-	0.4242	0

42_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
44_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
45_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
46_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
47_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
48_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
49_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
50_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
51_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
52_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
53_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	1	-		1	0
54_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	1	-		1	0
55_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	1	-		1	0
56_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4224	-		0.4224	0
57_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4224	-		0.4224	0
58_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4224	-		0.4224	0
60_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
61_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
62_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
63_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
64_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
65_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
67_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
70_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
71_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
72_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
73_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
74_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
75_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
77_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
78_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.097	0	0.09705
79_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
80_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.097	0	0.09705
81_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
82_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.1089	0	0.10887
83_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		1.0178	0	1.01779
84_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.1089	0	0.10887
86_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.097	0	0.09705
87_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
88_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.097	0	0.09705
89_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		0.9073	0	0.90725
102_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-		-	0	0
103_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
104_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
105_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
107_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
108_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
109_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
110_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
111_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
112_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
113_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
114_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
115_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-		0	0
116_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-		0	0
117_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0.9073	0	0.90725
118_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
119_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	0.9073	0	0.90725
120_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	0.4242	-		0.4242	0
123_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
124_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
125_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
126_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
128_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
129_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
130_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
132_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
133_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
134_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
135_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
136_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
137_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-		0	0
138_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	0.2517	0.3382	0.2517	0.33821	
139_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	0.2517	0.3382	0.2517	0.33821	
140_Small Lodging_Motors and VFDs	0.196	0.223	0.111	0.135	0.159	0.175	1.5119	0.9506	1.5119	0.95058	
142_Small Lodging_Motors and VFDs	0.196	0.223	0.111	0.135	0.159	0.175	1.5119	0.9506	1.5119	0.95058	
143_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	1.5135	0.9629	1.5135	0.96287	
144_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	0.6926	0.579	0.6926	0.57897	
145_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	0.4075	0.4075	0.4075	0.4075	
146_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	-	0.2592	0	0.25924	
147_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	-	0	0	
148_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	-	0	0	
151_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
152_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
153_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0	
154_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
155_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0	
156_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
157_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
159_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
160_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0	
161_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
162_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0	
163_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
164_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
166_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
167_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0	
168_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
169_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
170_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
171_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	-	-	0	0	
172_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	-	-	0	0	
173_Small Lodging_Appliances	0.196	0.223	0.111	0.135	0.159	0.175	-	-	0	0	
174_Small Lodging_Appliances	0.22	0.224	0.111	0.14	0.145	0.16	0.2226	0.238	0.2226	0.23798	
175_Small Lodging_Water Heating	0.22	0.224	0.111	0.14	0.145	0.16	0.2226	0.238	0.2226	0.23798	
176_Small Lodging_Appliances	0.22	0.224	0.111	0.14	0.145	0.16	0.2226	0.238	0.2226	0.23798	
178_Small Lodging_Appliances	0.22	0.224	0.111	0.14	0.145	0.16	0.2226	0.238	0.2226	0.23798	
179_Small Lodging_Appliances	0.22	0.224	0.111	0.14	0.145	0.16	0.2226	0.238	0.2226	0.23798	
181_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	0.3737	0.5066	0.3737	0.50655	

190_Small Lodging_Compressed Air Systems	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
191_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	-	0	0
192_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	-	-	-	0	0
193_Small Lodging_Drives	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
194_Small Lodging_Motors and VFDs	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
195_Small Lodging_Motors and VFDs	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
196_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
197_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
198_Small Lodging_Process Cooling and Refrigeration	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
199_Small Lodging_Process Heating	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
200_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	-	0	0
201_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
219_Small Lodging_Exterior Lighting	0.092	0.261	0.088	0.208	0.102	0.25	0.45	0.49	0.45	0.49	
220_Small Lodging_Exterior Lighting	0.092	0.261	0.088	0.208	0.102	0.25	0.45	0.49	0.45	0.49	
221_Small Lodging_Exterior Lighting	0.092	0.261	0.088	0.208	0.102	0.25	0.45	0.49	0.45	0.49	
222_Small Lodging_Exterior Lighting	0.092	0.261	0.088	0.208	0.102	0.25	0.45	0.49	0.45	0.49	
229_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
230_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
231_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
232_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
233_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
234_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
235_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
236_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
237_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
238_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
239_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
240_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
241_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
242_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
243_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
244_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
245_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
246_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
247_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
248_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
249_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
250_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
253_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
254_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
259_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	0.725	0.725	0.725	0.725	
260_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
261_Small Lodging_Interior Lighting	0.217	0.202	0.124	0.123	0.17	0.164	0.45	0.49	0.45	0.49	
262_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
263_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	0.3071	-	0.3071	0	0
264_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	0.3071	-	0.3071	0	0
265_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	1	-	1	0	0
266_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	1	-	1	0	0
267_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	1	-	1	0	0
268_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	1	1	1	1	1
269_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
270_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
271_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
272_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
273_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
274_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	1.224	0.7831	1.224	0.78314	
275_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	1.224	0.7831	1.224	0.78314	
276_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	1.224	0.7831	1.224	0.78314	
278_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	0.6975	0.4463	0.6975	0.44629	
279_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	0.5458	0.9073	0.5458	0.90725	
280_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	0.9073	0	0.90725	
281_Small Lodging_Ventilation	0.279	0.238	0.102	0.116	0.138	0.127	0.5458	0.9073	0.5458	0.90725	
283_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	0.0169	0.0133	0.0169	0.01334	
284_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	0.0133	0	0.01334	
285_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	0.3031	0.24	0.3031	0.24002	
286_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
287_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	-	-	0	0
288_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
289_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	0.24	0	0.24002	
290_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
291_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
292_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	0.8234	0.8234	0.8234	0.82344	
293_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	0.3031	0.24	0.3031	0.24002	
294_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
295_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
296_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
298_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	0.0001	0.0001	0.0001	0.00012	
299_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
300_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	1	1	1	1	
301_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
302_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
303_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
304_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
305_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
306_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
307_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
308_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
309_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
310_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
311_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
312_Small Lodging_Total Electric	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
315_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
316_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
317_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
318_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
319_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
320_Small Lodging_Cooking	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
321_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	-	0	0
322_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	-	0	0
323_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	-	0	0
324_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	-	0	0
325_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	-	0	0
326_Small Lodging_Space Heating	0.002	0.004	0.264	0.389	0.151	0.19	-	-	-	0	0
327_Small Lodging_Cooling	0.386	0.308	0.053	0.051	0.108	0.094	-	-	-	0	0
328_Small Lodging_Other	0.22	0.224	0.111	0.14	0.145	0.16	-	-	-	0	0
329_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
330_Small Lodging_Plug Loads	0.196	0.223	0.111	0.135	0.159	0.175	-	-	-	0	0
331_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	-	-	0	0
332_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	-	0	0

333_Small Lodging_Water Heating	0.188	0.197	0.126	0.145	0.17	0.173	-	-	0	0
334_Small Lodging_Refrigeration	0.215	0.227	0.108	0.127	0.156	0.167	-	-	0	0
1_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
3_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
5_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
6_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
9_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
10_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
11_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
13_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
14_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
15_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
16_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
17_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
18_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
19_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
20_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
21_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
22_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
25_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
26_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
27_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
28_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
29_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
30_Small Miscellaneous/Other_Water Heating	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
31_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
32_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
33_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
34_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
35_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
36_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
37_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
38_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
39_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
40_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
41_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
42_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
44_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
45_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
46_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
47_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
48_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
49_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
50_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
51_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
52_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
53_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
54_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
55_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	1	-	1	0
56_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.4224	-	0.4224	0
57_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.4224	-	0.4224	0
58_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.4224	-	0.4224	0
60_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
61_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
62_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
63_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
64_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
65_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
67_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
70_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
71_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
72_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
73_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
74_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
75_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
77_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
78_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0107	0	0.01068
79_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
80_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0107	0	0.01068
81_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
82_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.1089	0	0.10887
83_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	1.0178	0	1.01779
84_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.1089	0	0.10887
86_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0107	0	0.01068
87_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
88_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0107	0	0.01068
89_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
102_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
103_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
104_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
105_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
107_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
108_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
109_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
110_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
111_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
112_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
113_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
114_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
115_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
116_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
117_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
118_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
119_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
120_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	0.3387	-	0.3387	0
123_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
124_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
125_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
126_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
128_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
129_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
130_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
132_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
133_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
134_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
135_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
136_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
137_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	0.5383	0.2939	0.5383	0.2939
138_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	0.084	0.0458	0.084	0.0458

139_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	0.5383	0.2939	0.5383	0.2939
140_Small Miscellaneous/Other_Motors and VFDs	0.241	0.171	0.143	0.106	0.203	0.136	1.5119	0.9506	1.5119	0.95058
142_Small Miscellaneous/Other_Motors and VFDs	0.241	0.171	0.143	0.106	0.203	0.136	1.5119	0.9506	1.5119	0.95058
143_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	1.5135	0.9629	1.5135	0.96287
144_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.6926	0.579	0.6926	0.57897
145_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.0449	0.0449	0.0449	0.04486
146_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	-	0.285	0	0.02854
147_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
148_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
151_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
152_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
153_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
154_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
155_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
156_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
157_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
159_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
160_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
161_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
162_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
163_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
164_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
166_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
167_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
168_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
169_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
170_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
171_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	-	-	0	0
172_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
173_Small Miscellaneous/Other_Appliances	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
174_Small Miscellaneous/Other_Appliances	0.252	0.163	0.143	0.129	0.179	0.133	0.2226	0.238	0.2226	0.23798
175_Small Miscellaneous/Other_Water Heating	0.252	0.163	0.143	0.129	0.179	0.133	0.2226	0.238	0.2226	0.23798
176_Small Miscellaneous/Other_Appliances	0.252	0.163	0.143	0.129	0.179	0.133	0.2226	0.238	0.2226	0.23798
178_Small Miscellaneous/Other_Appliances	0.252	0.163	0.143	0.129	0.179	0.133	0.2226	0.238	0.2226	0.23798
179_Small Miscellaneous/Other_Appliances	0.252	0.163	0.143	0.129	0.179	0.133	0.2226	0.238	0.2226	0.23798
181_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.3737	0.5066	0.3737	0.50656
190_Small Miscellaneous/Other_Compressed Air Systems	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
191_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
192_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	-	-	0	0
193_Small Miscellaneous/Other_Drives	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
194_Small Miscellaneous/Other_Motors and VFDs	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
195_Small Miscellaneous/Other_Motors and VFDs	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
196_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
197_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
198_Small Miscellaneous/Other_Process Cooling and Refrigeration	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
199_Small Miscellaneous/Other_Process Heating	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
200_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
201_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
219_Small Miscellaneous/Other_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.58	0.39	0.58	0.39
220_Small Miscellaneous/Other_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.58	0.39	0.58	0.39
221_Small Miscellaneous/Other_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.58	0.39	0.58	0.39
222_Small Miscellaneous/Other_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.58	0.39	0.58	0.39
229_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
230_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
231_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
232_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
233_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
234_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
235_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
236_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
237_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
238_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
239_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
240_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
241_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
242_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
243_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
244_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
245_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
246_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
247_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
248_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
249_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
250_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
253_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
254_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
259_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	0.725	0.725	0.725	0.725
260_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
261_Small Miscellaneous/Other_Interior Lighting	0.298	0.118	0.172	0.075	0.238	0.099	0.58	0.39	0.58	0.39
262_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
263_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	0.3071	-	0.3071	0
264_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	0.3071	-	0.3071	0
265_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
266_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
267_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	1	-	1	0
268_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	1	1	1
269_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
270_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
271_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
272_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
273_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
274_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	1.224	0.7831	1.224	0.78314
275_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	1.224	0.7831	1.224	0.78314
276_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	1.224	0.7831	1.224	0.78314
278_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	0.6975	0.4463	0.6975	0.44629
279_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.0601	0.0999	0.0601	0.09987
280_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	0.0999	0	0.09987
281_Small Miscellaneous/Other_Ventilation	0.259	0.188	0.128	0.114	0.176	0.134	0.0601	0.0999	0.0601	0.09987
283_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.0169	0.0133	0.0169	0.01334
284_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	0.0133	0	0.01334
285_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.3031	0.24	0.3031	0.24002
286_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	1	1	1
287_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
288_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	1	1	1
289_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	0.24	0	0.24002
290_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
291_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
292_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.8234	0.8234	0.8234	0.82344
293_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.3031	0.24	0.3031	0.24002

294_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
295_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
296_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
298_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	0.0001	0.0001	0.0001	0.00012
299_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
300_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	1	1	1	1
301_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
302_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
303_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
304_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
305_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
306_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
307_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
308_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
309_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
310_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
311_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
312_Small Miscellaneous/Other_Total Electric	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
315_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
316_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
317_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
318_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
319_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
320_Small Miscellaneous/Other_Cooking	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
321_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
322_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
323_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
324_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
325_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
326_Small Miscellaneous/Other_Space Heating	0.005	0.01	0.246	0.365	0.16	0.214	-	-	0	0
327_Small Miscellaneous/Other_Cooling	0.576	0.29	0.018	0.01	0.07	0.036	-	-	0	0
328_Small Miscellaneous/Other_Other	0.252	0.163	0.143	0.129	0.179	0.133	-	-	0	0
329_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
330_Small Miscellaneous/Other_Plug Loads	0.241	0.171	0.143	0.106	0.203	0.136	-	-	0	0
331_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
332_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
333_Small Miscellaneous/Other_Water Heating	0.25	0.127	0.187	0.085	0.247	0.104	-	-	0	0
334_Small Miscellaneous/Other_Refrigeration	0.229	0.223	0.11	0.12	0.159	0.159	-	-	0	0
1_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
3_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
5_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
6_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
9_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
10_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
11_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
13_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
14_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
15_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
16_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
17_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
18_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
19_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
20_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
21_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
22_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
25_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
26_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
27_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
28_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
29_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
30_Small Office_Water Heating	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
31_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
32_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
33_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
34_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
35_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
36_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
37_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
38_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
39_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
40_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
41_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
42_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
44_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
45_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
46_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
47_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
48_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
49_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
50_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
51_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
52_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
53_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
54_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
55_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
56_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
57_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
58_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	1	-	1	0
60_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
61_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
62_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
63_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
64_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
65_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
67_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
70_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	0.4532	-	0.4532	0
71_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
72_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
73_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
74_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
75_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
77_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
78_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.0016	0	0.00157
79_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
80_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.0016	0	0.00157
81_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
82_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.0123	0	0.01234
83_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	1	0	1
84_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.0123	0	0.01234

86_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.0016		0	0.00157
87_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.1274		0	0.12742
88_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.0016		0	0.00157
89_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.1274		0	0.12742
102_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
103_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
104_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
105_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
107_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
108_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
109_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
110_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
111_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
112_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
113_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
114_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
115_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
116_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
117_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.1274		0	0.12742
118_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-	0.4532	-		0.4532	0
119_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		0.1274		0	0.12742
120_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-	0.4532	-		0.4532	0
123_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
124_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
125_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
126_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
128_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
129_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
130_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
132_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
133_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
134_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
135_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
136_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
137_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-	0.5179		0.334	0.5179	0.33405
138_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-	0.084		0.0458	0.084	0.04584
139_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-	0.5179		0.334	0.5179	0.33405
140_Small Office_Motors and VFDs		0.218	0.201	0.125	0.122	0.178	0.157	-	0.7004		0.5325	0.7004	0.53255
142_Small Office_Motors and VFDs		0.218	0.201	0.125	0.122	0.178	0.157	-	0.7004		0.5325	0.7004	0.53255
143_Small Office_Ventilation		0.25	0.193	0.123	0.118	0.172	0.145	-	0.6593		0.4918	0.6593	0.49177
144_Small Office_Ventilation		0.25	0.193	0.123	0.118	0.172	0.145	-	0.6926		0.579	0.6926	0.57897
145_Small Office_Ventilation		0.25	0.193	0.123	0.118	0.172	0.145	-	0.0525		0.0525	0.05251	
146_Small Office_Ventilation		0.25	0.193	0.123	0.118	0.172	0.145	-		0.0392		0	0.03917
147_Small Office_Refrigeration		0	0	0	0	0	0	-		-		0	0
148_Small Office_Refrigeration		0	0	0	0	0	0	-		-		0	0
151_Small Office_Cooking		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
152_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
153_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
154_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
155_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
156_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
157_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
159_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
160_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
161_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
162_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
163_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
164_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
166_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
167_Small Office_Water Heating		0.258	0.14	0.174	0.087	0.23	0.111	-		-		0	0
168_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
169_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
170_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
171_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-		-		0	0
172_Small Office_Other		0.254	0.181	0.13	0.126	0.169	0.14	-		-		0	0
173_Small Office_Appliances		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
174_Small Office_Appliances		0.254	0.181	0.13	0.126	0.169	0.14	-	0.2226		0.238	0.2226	0.23798
175_Small Office_Water Heating		0.254	0.181	0.13	0.126	0.169	0.14	-	0.2226		0.238	0.2226	0.23798
176_Small Office_Appliances		0.254	0.181	0.13	0.126	0.169	0.14	-	0.2226		0.238	0.2226	0.23798
178_Small Office_Appliances		0.254	0.181	0.13	0.126	0.169	0.14	-	0.2226		0.238	0.2226	0.23798
179_Small Office_Appliances		0.254	0.181	0.13	0.126	0.169	0.14	-	0.2226		0.238	0.2226	0.23798
181_Small Office_Ventilation		0.25	0.193	0.123	0.118	0.172	0.145	-	0.3737		0.5066	0.3737	0.50656
190_Small Office_Compressed Air Systems		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
191_Small Office_Cooling		0.542	0.287	0.024	0.017	0.082	0.047	-		-		0	0
192_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-		-		0	0
193_Small Office_Drives		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
194_Small Office_Motors and VFDs		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
195_Small Office_Motors and VFDs		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
196_Small Office_Other		0.254	0.181	0.13	0.126	0.169	0.14	-		-		0	0
197_Small Office_Other		0.254	0.181	0.13	0.126	0.169	0.14	-		-		0	0
198_Small Office_Process Cooling and Refrigeration		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
199_Small Office_Process Heating		0.218	0.201	0.125	0.122	0.178	0.157	-		-		0	0
200_Small Office_Space Heating		0.002	0.009	0.243	0.348	0.168	0.229	-		-		0	0
201_Small Office_Total Electric		0.254	0.181	0.13	0.126	0.169	0.14	-		-		0	0
219_Small Office_Exterior Lighting		0.092	0.261	0.087	0.208	0.102	0.25	-	0.48		0.35	0.48	0.35
220_Small Office_Exterior Lighting		0.092	0.261	0.087	0.208	0.102	0.25	-	0.48		0.35	0.48	0.35
221_Small Office_Exterior Lighting		0.092	0.261	0.087	0.208	0.102	0.25	-	0.48		0.35	0.48	0.35
222_Small Office_Exterior Lighting		0.092	0.261	0.087	0.208	0.102	0.25	-	0.48		0.35	0.48	0.35
229_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
230_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
231_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
232_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
233_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
234_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
235_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
236_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
237_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
238_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
239_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
240_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
241_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
242_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
243_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
244_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35
245_Small Office_Interior Lighting		0.328	0.092	0.186	0.06	0.257	0.078	-	0.48		0.35	0.48	0.35

250_Small Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
253_Small Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
254_Small Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
259_Small Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	0.725	0.725	0.725	0.725
260_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
261_Small Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
262_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
263_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	0.3071	-	-	0.3071
264_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	0.3071	-	-	0.3071
265_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	-	1
266_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	-	1
267_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	-	1
268_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	1	-	1
269_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
270_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
271_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
272_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
273_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
274_Small Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	1.224	0.7831	1.224	0.7831
275_Small Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	1.224	0.7831	1.224	0.7831
276_Small Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	1.224	0.7831	1.224	0.7831
278_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	0.6975	0.4463	0.6975	0.44629
279_Small Office_Ventilation	0.25	0.193	0.123	0.118	0.172	0.145	0.1847	0.1274	0.1847	0.12742
280_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.1274	0	0.12742
281_Small Office_Ventilation	0.25	0.193	0.123	0.118	0.172	0.145	0.1847	0.1274	0.1847	0.12742
283_Small Office_Refrigeration	0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334
284_Small Office_Refrigeration	0	0	0	0	0	0	-	0.0133	0	0.01334
285_Small Office_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
286_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
287_Small Office_Refrigeration	0	0	0	0	0	0	-	-	-	0
288_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
289_Small Office_Refrigeration	0	0	0	0	0	0	-	0.24	0	0.24002
290_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
291_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
292_Small Office_Refrigeration	0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344
293_Small Office_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
294_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
295_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
296_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
298_Small Office_Refrigeration	0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012
299_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
300_Small Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
301_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
302_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
303_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
304_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
305_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
306_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
307_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
308_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
309_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
310_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
311_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
312_Small Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
315_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
316_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
317_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
318_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
319_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
320_Small Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
321_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	-	0
322_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	-	0
323_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	-	0
324_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	-	0
325_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	-	0
326_Small Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	-	0
327_Small Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	-	0
328_Small Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	-	-	-	0
329_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
330_Small Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	-	0
331_Small Office_Refrigeration	0	0	0	0	0	0	-	-	-	0
332_Small Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	-	-	-	0
333_Small Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	-	-	-	0
334_Small Office_Refrigeration	0	0	0	0	0	0	-	-	-	0
1_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
3_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
5_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
6_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
9_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
10_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
11_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
13_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
14_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
15_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
16_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
17_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
18_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
19_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
20_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
21_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
22_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
25_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
26_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
27_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
28_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
29_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
30_Small Restaurant_Water Heating	0.497	0.268	0.046	0.026	0.105	0.057	-	-	-	0
31_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
32_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
33_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
34_Small Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	-	0
35_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
36_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
37_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
38_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
39_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
40_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
41_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0
42_Small Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0

44_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
45_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
46_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
47_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
48_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
49_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
50_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
51_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
52_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-		0	0
53_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	1	-		1	0
54_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	1	-		1	0
55_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	1	-		1	0
56_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.613	-		0.613	0
57_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.613	-		0.613	0
58_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.613	-		0.613	0
60_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
61_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
62_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
63_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
64_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
65_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
67_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
70_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-		0.2585	0
71_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
72_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
73_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
74_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
75_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
77_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
78_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.0594	0	0.05939	0
79_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
80_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.0594	0	0.05939	0
81_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
82_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.1224	0	0.12237	0
83_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.8287	0	0.82866	0
84_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.1224	0	0.12237	0
86_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.0594	0	0.05939	0
87_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
88_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.0594	0	0.05939	0
89_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
102_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
103_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
104_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
105_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
107_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
108_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
109_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
110_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
111_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
112_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
113_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
114_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
115_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0	0
116_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0	0
117_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
118_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0	0
119_Small Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216	0
120_Small Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	0.2585	-	0.2585	0	0
123_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
124_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
125_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
126_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
128_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
129_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
130_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
132_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
133_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
134_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
135_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
136_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
137_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	0.3172	0.3039	0.3172	0.30389	0
138_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	0.084	0.0458	0.084	0.04584	0
139_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	0.3172	0.3039	0.3172	0.30389	0
140_Small Restaurant_Motors and VFDs		0.247	0.172	0.145	0.101	0.203	0.132	0.9225	0.7692	0.9225	0.76924	0
142_Small Restaurant_Motors and VFDs		0.247	0.172	0.145	0.101	0.203	0.132	0.9225	0.7692	0.9225	0.76924	0
143_Small Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.9231	0.7716	0.9231	0.77159	0
144_Small Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.6926	0.579	0.6926	0.57897	0
145_Small Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.1881	0.1881	0.1881	0.18811	0
146_Small Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	-	0.1572	0	0.15724	0
147_Small Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0	0
148_Small Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0	0
151_Small Restaurant_Cooking		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
152_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
153_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
154_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
155_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
156_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
157_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
159_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
160_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
161_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
162_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
163_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
164_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
166_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
167_Small Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0	0
168_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
169_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
170_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
171_Small Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	-	-	0	0	0
172_Small Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0	0
173_Small Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0	0
174_Small Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798	0
175_Small Restaurant_Water Heating		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798	0
176_Small Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798	0
178_Small Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798	0
179_Small Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139					

191, Small Restaurant, Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
192, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	-	-	0	0
193, Small Restaurant, Drives	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
194, Small Restaurant, Motors and VFDs	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
195, Small Restaurant, Motors and VFDs	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
196, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
197, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
198, Small Restaurant, Process Cooling and Refrigeration	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
199, Small Restaurant, Process Heating	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
200, Small Restaurant, Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
201, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
219, Small Restaurant, Exterior Lighting	0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
220, Small Restaurant, Exterior Lighting	0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
221, Small Restaurant, Exterior Lighting	0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
222, Small Restaurant, Exterior Lighting	0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
229, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
230, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
231, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
232, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
233, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
234, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
235, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
236, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
237, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
238, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
239, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
240, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
241, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
242, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
243, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
244, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
245, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
246, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
247, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
248, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
249, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
250, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
253, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
254, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
259, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	0.725	0.725	0.725	0.725
260, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
261, Small Restaurant, Interior Lighting	0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
262, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
263, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	0.3071	-	0.3071	0
264, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	0.3071	-	0.3071	0
265, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
266, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
267, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
268, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	1
269, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
270, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
271, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
272, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
273, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
274, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	1.224	0.7831	1.224	0.78314
275, Small Restaurant, Water Heating	0.247	0.139	0.171	0.099	0.225	0.118	1.224	0.7831	1.224	0.78314
276, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	1.224	0.7831	1.224	0.78314
278, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	0.6975	0.4463	0.6975	0.44629
279, Small Restaurant, Ventilation	0.244	0.185	0.134	0.108	0.191	0.137	0.4312	0.4022	0.4312	0.40216
280, Small Restaurant, Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	0.4022	0	0.40216
281, Small Restaurant, Ventilation	0.244	0.185	0.134	0.108	0.191	0.137	0.4312	0.4022	0.4312	0.40216
283, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	0.0169	0.0133	0.0169	0.01334
284, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	0.0133	0	0.01334
285, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	0.3031	0.24	0.3031	0.24002
286, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
287, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
288, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
289, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	0.24	0	0.24002
290, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
291, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
292, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	0.8234	0.8234	0.8234	0.82344
293, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	0.3031	0.24	0.3031	0.24002
294, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
295, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
296, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
298, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	0.0001	0.0001	0.0001	0.00012
299, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
300, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
301, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
302, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
303, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
304, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
305, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
306, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
307, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
308, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
309, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
310, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
311, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
312, Small Restaurant, Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
315, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
316, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
317, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
318, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
319, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
320, Small Restaurant, Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
321, Small Restaurant, Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
322, Small Restaurant, Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
323, Small Restaurant, Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
324, Small Restaurant, Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
325, Small Restaurant, Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
326, Small Restaurant, Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
327, Small Restaurant, Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
328, Small Restaurant, Other	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
329, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
330, Small Restaurant, Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
331, Small Restaurant, Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
332, Small Restaurant, Water Heating	0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
333, Small Restaurant, Water Heating	0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0

334_Small Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-		0	0
1_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
3_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
5_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
6_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
9_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
10_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
11_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
13_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
14_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
15_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
16_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
17_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
18_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
19_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
20_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
21_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
22_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
25_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
26_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
27_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
28_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
29_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
30_Small Retail_Water Heating		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
31_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
32_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
33_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
34_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-		0	0
35_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
36_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
37_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
38_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
39_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
40_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
41_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
42_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
44_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
45_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
46_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
47_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
48_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
49_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
50_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
51_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
52_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-		0	0
53_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0	0
54_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0	0
55_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0	0
56_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.8326	-	0.8326	0	0
57_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.8326	-	0.8326	0	0
58_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.8326	-	0.8326	0	0
60_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
61_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
62_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
63_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
64_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
65_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
67_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
70_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
71_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
72_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
73_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
74_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
75_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
77_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
78_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0052	0	0.00522	0
79_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
80_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0052	0	0.00522	0
81_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
82_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0185	0	0.01847	0
83_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.807	0	0.80698	0
84_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0185	0	0.01847	0
86_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0052	0	0.00522	0
87_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
88_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.0052	0	0.00522	0
89_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
102_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
103_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
104_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
105_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
107_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
108_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
109_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
110_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
111_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
112_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
113_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
114_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
115_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0	0
116_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0	0
117_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
118_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
119_Small Retail_Space Heating		0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781	0
120_Small Retail_Cooling		0.56	0.303	0.018	0.01	0.07	0.039	0.4441	-	0.4441	0	0
123_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
124_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
125_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
126_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
128_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
129_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
130_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
132_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
133_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
134_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
135_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
136_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0	0
137_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	0.5325	0.2966	0.5325	0.29661	0
138_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	0.084	0.0458	0.084	0.04584	0
139_Small Retail_Water Heating		0.243	0.145	0.164	0.104	0.219	0.124	0.5325	0.2966	0.5325	0.29661	0

140_Small Retail_Motors and VFDs	0.23	0.189	0.132	0.115	0.187	0.147	0.8518	0.5678	0.8518	0.56785
142_Small Retail_Motors and VFDs	0.23	0.189	0.132	0.115	0.187	0.147	0.8518	0.5678	0.8518	0.56785
143_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.7858	0.5972	0.7858	0.5972
144_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.6926	0.579	0.6926	0.57897
145_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.1141	0.1141	0.1141	0.1141
146_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	-	0.0867	0	0.08671
147_Small Retail_Refrigeration	0	0	0	0	0	0	-	-	0	0
148_Small Retail_Refrigeration	0	0	0	0	0	0	-	-	0	0
151_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
152_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
153_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0
154_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
155_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0
156_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
157_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
159_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
160_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0
161_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
162_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0
163_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
164_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
166_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
167_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-	0	0
168_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
169_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
170_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
171_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	-	-	0	0
172_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
173_Small Retail_Appliances	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
174_Small Retail_Appliances	0.264	0.175	0.137	0.123	0.172	0.129	0.2226	0.238	0.2226	0.23798
175_Small Retail_Water Heating	0.264	0.175	0.137	0.123	0.172	0.129	0.2226	0.238	0.2226	0.23798
176_Small Retail_Appliances	0.264	0.175	0.137	0.123	0.172	0.129	0.2226	0.238	0.2226	0.23798
178_Small Retail_Appliances	0.264	0.175	0.137	0.123	0.172	0.129	0.2226	0.238	0.2226	0.23798
179_Small Retail_Appliances	0.264	0.175	0.137	0.123	0.172	0.129	0.2226	0.238	0.2226	0.23798
181_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.3737	0.5066	0.3737	0.50656
190_Small Retail_Compressed Air Systems	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
191_Small Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
192_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	-	-	0	0
193_Small Retail_Drives	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
194_Small Retail_Motors and VFDs	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
195_Small Retail_Motors and VFDs	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
196_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
197_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
198_Small Retail_Process Cooling and Refrigeration	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
199_Small Retail_Process Heating	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
200_Small Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
201_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
219_Small Retail_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.66	0.41	0.66	0.41
220_Small Retail_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.66	0.41	0.66	0.41
221_Small Retail_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.66	0.41	0.66	0.41
222_Small Retail_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.66	0.41	0.66	0.41
229_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
230_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
231_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
232_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
233_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
234_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
235_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
236_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
237_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
238_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
239_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
240_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
241_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
242_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
243_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
244_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
245_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
246_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
247_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
248_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
249_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
250_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
253_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
254_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
259_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	0.725	0.725	0.725	0.725
260_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
261_Small Retail_Interior Lighting	0.306	0.113	0.174	0.073	0.24	0.094	0.66	0.41	0.66	0.41
262_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	-	-	0	0
263_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	0.3071	-	0.3071	0
264_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	0.3071	-	0.3071	0
265_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	1	-	1	0
266_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	1	-	1	0
267_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	1	-	1	0
268_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	1	1	1	1
269_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
270_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
271_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
272_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
273_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-	0	0
274_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	1.224	0.7831	1.224	0.78314
275_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	1.224	0.7831	1.224	0.78314
276_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	1.224	0.7831	1.224	0.78314
278_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	0.6975	0.4463	0.6975	0.44629
279_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.3407	0.2278	0.3407	0.22781
280_Small Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2278	0	0.22781
281_Small Retail_Ventilation	0.266	0.188	0.127	0.107	0.18	0.132	0.3407	0.2278	0.3407	0.22781
283_Small Retail_Refrigeration	0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334
284_Small Retail_Refrigeration	0	0	0	0	0	0	-	0.0133	0	0.01334
285_Small Retail_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
286_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
287_Small Retail_Refrigeration	0	0	0	0	0	0	-	-	0	0
288_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
289_Small Retail_Refrigeration	0	0	0	0	0	0	-	0.24	0	0.24002
290_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
291_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
292_Small Retail_Refrigeration	0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344
293_Small Retail_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
294_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1

295_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
296_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
298_Small Retail_Refrigeration	0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012
299_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
300_Small Retail_Refrigeration	0	0	0	0	0	0	1	1	1	1
301_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
302_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
303_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
304_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
305_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
306_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
307_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
308_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
309_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
310_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
311_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
312_Small Retail_Total Electric	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
315_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
316_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
317_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
318_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
319_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
320_Small Retail_Cooking	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
321_Small Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-		0
322_Small Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-		0
323_Small Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-		0
324_Small Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-		0
325_Small Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-		0
326_Small Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-		0
327_Small Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-		0
328_Small Retail_Other	0.264	0.175	0.137	0.123	0.172	0.129	-	-		0
329_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
330_Small Retail_Plug Loads	0.23	0.189	0.132	0.115	0.187	0.147	-	-		0
331_Small Retail_Refrigeration	0	0	0	0	0	0	-	-		0
332_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-		0
333_Small Retail_Water Heating	0.243	0.145	0.164	0.104	0.219	0.124	-	-		0
334_Small Retail_Refrigeration	0	0	0	0	0	0	-	-		0
1_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
3_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
5_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
6_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
9_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
10_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
11_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
13_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
14_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
15_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
16_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
17_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
18_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
19_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
20_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
21_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
22_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
25_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
26_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
27_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
28_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
29_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
30_Small Warehouse_Water Heating	0.641	0.285	0.008	0.001	0.051	0.015	-	-		0
31_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
32_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
33_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
34_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0
35_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
36_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
37_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
38_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
39_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
40_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
41_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
42_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
44_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
45_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
46_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
47_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
48_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
49_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
50_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
51_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
52_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	0	0
53_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1	-	1	0
54_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1	-	1	0
55_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1	-	1	0
56_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-	1.0729	0
57_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-	1.0729	0
58_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-	1.0729	0
60_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
61_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
62_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
63_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
64_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
65_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
67_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
70_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-	0.1402	0
71_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
72_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
73_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
74_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
75_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
77_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
78_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.0034	0	0.00342
79_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
80_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.0034	0	0.00342
81_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662
82_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.0098	0	0.00982
83_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.9371	0	0.93711
84_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.0098	0	0.00982
86_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.0034	0	0.00342

87_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
88_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		0.0034	0	0.00342
89_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
102_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
103_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
104_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
105_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
107_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
108_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
109_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
110_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
111_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
112_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
113_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
114_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
115_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
116_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-		-	0	0
117_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
118_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402		-	0.1402	0
119_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
120_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	0.1402		-	0.1402	0
123_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
124_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
125_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
126_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
128_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
129_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
130_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
132_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
133_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
134_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
135_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
136_Small Warehouse_Water Heating	0	0	0	0	0	0	-		-	0	0
137_Small Warehouse_Water Heating	0	0	0	0	0	0	0.6277	0.1697	0.6277	0.16973	
138_Small Warehouse_Water Heating	0	0	0	0	0	0	0.084	0.0458	0.084	0.04584	
139_Small Warehouse_Water Heating	0	0	0	0	0	0	0.6277	0.1697	0.6277	0.16973	
140_Small Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	0.9294	0.6043	0.9294	0.60434	
142_Small Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	0.9294	0.6043	0.9294	0.60434	
143_Small Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.9294	0.6043	0.9294	0.60434	
144_Small Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.6926	0.579	0.6926	0.57897	
145_Small Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.1682	0.1682	0.1682	0.16822	
146_Small Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	-	0.1094	-	0.10939	0
147_Small Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0
148_Small Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0
151_Small Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
152_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
153_Small Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
154_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
155_Small Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
156_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
157_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
159_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
160_Small Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
161_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
162_Small Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
163_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
164_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
166_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
167_Small Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
168_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
169_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
170_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
171_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	-	-	-	0	0
172_Small Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
173_Small Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
174_Small Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	
175_Small Warehouse_Water Heating	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	
176_Small Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	
178_Small Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	
179_Small Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	
181_Small Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.3737	0.5066	0.3737	0.50656	
190_Small Warehouse_Compressed Air Systems	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
191_Small Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0
192_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	-	-	-	0	0
193_Small Warehouse_Drives	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
194_Small Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
195_Small Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
196_Small Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
197_Small Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
198_Small Warehouse_Process Cooling and Refrigeration	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
199_Small Warehouse_Process Heating	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
200_Small Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-		-	0	0
201_Small Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
219_Small Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48	0.37	0.48	0.37	
220_Small Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48	0.37	0.48	0.37	
221_Small Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48	0.37	0.48	0.37	
222_Small Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48	0.37	0.48	0.37	
229_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
230_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
231_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
232_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
233_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
234_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
235_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
236_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
237_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
238_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
239_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
240_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
241_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
242_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
243_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
244_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
245_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
246_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
247_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
248_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
249_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	
250_Small Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48	0.37	0.48	0.37	

[illegible]

192_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	-	-	-	0	0
193_Large Education - College/University_ Drives	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
194_Large Education - College/University_ Motors and VFDs	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
195_Large Education - College/University_ Motors and VFDs	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
196_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
197_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
198_Large Education - College/University_ Process Cooling and Refrigeration	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
199_Large Education - College/University_ Process Heating	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
200_Large Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	-	0	0
201_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
219_Large Education - College/University_ Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41	
220_Large Education - College/University_ Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41	
221_Large Education - College/University_ Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41	
222_Large Education - College/University_ Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.45	0.41	0.45	0.41	
229_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
230_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
231_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
232_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
233_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
234_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
235_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
236_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
237_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
238_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
239_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
240_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
241_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
242_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
243_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
244_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
245_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
246_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
247_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
248_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
249_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
250_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
253_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
254_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
259_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	0.725	0.725	0.725	0.725	0.725
260_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
261_Large Education - College/University_ Interior Lighting	0.31	0.081	0.199	0.056	0.276	0.078	0.45	0.41	0.45	0.41	
262_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
263_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0	0
264_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	0.3071	-	0.3071	0	0
265_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0	0
266_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0	0
267_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0	0
268_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	1	-	1	0	0
269_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
270_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
271_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
272_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
273_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
274_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314	
275_Large Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	1.224	0.7831	1.224	0.78314	
276_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	1.224	0.7831	1.224	0.78314	
278_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	0.6975	0.4463	0.6975	0.44629	
279_Large Education - College/University_ Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.3279	0.2376	0.3279	0.23757	
280_Large Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	0.2376	0	0.23757	
281_Large Education - College/University_ Ventilation	0.268	0.144	0.156	0.102	0.21	0.12	0.3279	0.2376	0.3279	0.23757	
283_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0169	0.0133	0.0169	0.01334	
284_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.0133	0	0.01334	
285_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002	
286_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
287_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	-	0	0
288_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
289_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	0.24	0	0.24002	
290_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
291_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
292_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.8234	0.8234	0.8234	0.82344	
293_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.3031	0.24	0.3031	0.24002	
294_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
295_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
296_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
298_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0001	0.0001	0.0001	0.00012	
299_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
300_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1	
301_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
302_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
303_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
304_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
305_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
306_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
307_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
308_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
309_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
310_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
311_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
312_Large Education - College/University_ Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
315_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
316_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
317_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
318_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
319_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
320_Large Education - College/University_ Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
321_Large Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	-	0	0
322_Large Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	-	0	0
323_Large Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	-	0	0
324_Large Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	-	0	0
325_Large Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	-	0	0
326_Large Education - College/University_ Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-	-	0	0
327_Large Education - College/University_ Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-	-	0	0
328_Large Education - College/University_ Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-	-	0	0
329_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
330_Large Education - College/University_ Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-	-	0	0
331_Large Education - College/University_ Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-	-	0	0
332_Large Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-	-	0	0
333_Large Education - College/University_ Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-	-	0	0
334_Large Education - College/											

[illegible]

296_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
298_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	0.0001	0.0001	0.0001	0.00012
299_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
300_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	1	1	1	1
301_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
302_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
303_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
304_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
305_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
306_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
307_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
308_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
309_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
310_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
311_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
312_Large Education - Other_Total Electric	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
315_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
316_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
317_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
318_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
319_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
320_Large Education - Other_Cooking	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
321_Large Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-		0
322_Large Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-		0
323_Large Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-		0
324_Large Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-		0
325_Large Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-		0
326_Large Education - Other_Space Heating	0.011	0.019	0.275	0.276	0.209	0.209	-	-		0
327_Large Education - Other_Cooling	0.642	0.249	0.012	0.002	0.07	0.025	-	-		0
328_Large Education - Other_Other	0.235	0.124	0.172	0.142	0.19	0.136	-	-		0
329_Large Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
330_Large Education - Other_Plug Loads	0.235	0.138	0.168	0.097	0.237	0.125	-	-		0
331_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-		0
332_Large Education - Other_Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-		0
333_Large Education - Other_Water Heating	0.268	0.049	0.265	0.033	0.347	0.038	-	-		0
334_Large Education - Other_Refrigeration	0.23	0.222	0.111	0.119	0.16	0.158	-	-		0
1_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
3_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
5_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
6_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
9_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
10_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
11_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
13_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
14_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
15_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
16_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
17_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
18_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
19_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
20_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
21_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
22_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
25_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
26_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
27_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
28_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
29_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
30_Large Grocery_Water Heating	0.564	0.323	0.012	0.006	0.061	0.035	-	-		0
31_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
32_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
33_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
34_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	-		0
35_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
36_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
37_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
38_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
39_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
40_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
41_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
42_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
44_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
45_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
46_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
47_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
48_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
49_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
50_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
51_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
52_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
53_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0
54_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0
55_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	1	-	1	0
56_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0
57_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0
58_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.7898	-	0.7898	0
60_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
61_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
62_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
63_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
64_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
65_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
67_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
70_Large Grocery_Cooling	0.564	0.323	0.012	0.006	0.061	0.035	0.3244	-	0.3244	0
71_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
72_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
73_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
74_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
75_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
77_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
78_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098
79_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
80_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098
81_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
82_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.036	0	0.03605
83_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.8681	0	0.8681
84_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.036	0	0.03605
86_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.0098	0	0.0098
87_Large Grocery_Space Heating	0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602

88_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-		0.0098	0	0.0098
89_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-		0.236	0	0.23602
102_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
103_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
104_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
105_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
107_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
108_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
109_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
110_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
111_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
112_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
113_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
114_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
115_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
116_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
117_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236		0	0.23602
118_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	0.3244	-	0.3244	0
119_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236		0	0.23602
120_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	0.3244	-	0.3244	0
123_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
124_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
125_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
126_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
128_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
129_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
130_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
132_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
133_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
134_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
135_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
136_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
137_Large Grocery_Water Heating		0	0	0	0	0	0.5325		0.2966		0.5325	0.29661
138_Large Grocery_Water Heating		0	0	0	0	0	0.084		0.0458		0.084	0.04584
139_Large Grocery_Water Heating		0	0	0	0	0	0.5325		0.2966		0.5325	0.29661
140_Large Grocery_Motors and VFDs		0.239	0.18	0.134	0.112	0.194	0.141		1.1644		0.7183	1.1644 0.71827
142_Large Grocery_Motors and VFDs		0.239	0.18	0.134	0.112	0.194	0.141		1.1644		0.7183	1.1644 0.71827
143_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138		1.0262		0.7799	1.0262 0.77986
144_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138		0.6926		0.579	0.6926 0.57989
145_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138		0.1099		0.1099	0.10989
146_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138	-		0.0835	0	0.08351
147_Large Grocery_Refrigeration		0	0	0	0	0	0	-	-		0	0
148_Large Grocery_Refrigeration		0	0	0	0	0	0	-	-		0	0
151_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
152_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
153_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
154_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
155_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
156_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
157_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
159_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
160_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
161_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
162_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
163_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
164_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
166_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
167_Large Grocery_Water Heating		0	0	0	0	0	0	-	-		0	0
168_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
169_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
170_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
171_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158	-	-		0	0
172_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	-	-		0	0
173_Large Grocery_Appliances		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
174_Large Grocery_Appliances		0.24	0.167	0.14	0.141	0.167	0.146		0.2226	0.238	0.2226	0.23798
175_Large Grocery_Water Heating		0.24	0.167	0.14	0.141	0.167	0.146		0.2226	0.238	0.2226	0.23798
176_Large Grocery_Appliances		0.24	0.167	0.14	0.141	0.167	0.146		0.2226	0.238	0.2226	0.23798
178_Large Grocery_Appliances		0.24	0.167	0.14	0.141	0.167	0.146		0.2226	0.238	0.2226	0.23798
179_Large Grocery_Appliances		0.24	0.167	0.14	0.141	0.167	0.146		0.2226	0.238	0.2226	0.23798
181_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138		0.3737	0.5066	0.3737	0.50656
190_Large Grocery_Compressed Air Systems		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
191_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-		0	0
192_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158	-	-		0	0
193_Large Grocery_Drives		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
194_Large Grocery_Motors and VFDs		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
195_Large Grocery_Motors and VFDs		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
196_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	-	-		0	0
197_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	-	-		0	0
198_Large Grocery_Process Cooling and Refrigeration		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
199_Large Grocery_Process Heating		0.239	0.18	0.134	0.112	0.194	0.141	-	-		0	0
200_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-		0	0
201_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-		0	0
219_Large Grocery_Exterior Lighting		0.092	0.26	0.088	0.208	0.102	0.25		0.93	0.84	0.93	0.84
220_Large Grocery_Exterior Lighting		0.092	0.26	0.088	0.208	0.102	0.25		0.93	0.84	0.93	0.84
221_Large Grocery_Exterior Lighting		0.092	0.26	0.088	0.208	0.102	0.25		0.93	0.84	0.93	0.84
222_Large Grocery_Exterior Lighting		0.092	0.26	0.088	0.208	0.102	0.25		0.93	0.84	0.93	0.84
229_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
230_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
231_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
232_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
233_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
234_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
235_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
236_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
237_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
238_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
239_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
240_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
241_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
242_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
243_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
244_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
245_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
246_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
247_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
248_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
249_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
250_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84
253_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158		0.93	0.84	0.93	0.84

254_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
259_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	0.725	0.725	0.725	0.725
260_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
261_Large Grocery_Interior Lighting		0.225	0.194	0.128	0.118	0.177	0.158	0.93	0.84	0.93	0.84
262_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
263_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	0.3071	-	0.3071	0
264_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	0.3071	-	0.3071	0
265_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
266_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
267_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	1	-	1	0
268_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	1	1	1	1
269_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
270_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
271_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
272_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
273_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
274_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
275_Large Grocery_Water Heating		0	0	0	0	0	0	1.224	0.7831	1.224	0.78314
276_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	1.224	0.7831	1.224	0.78314
278_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	0.6975	0.4463	0.6975	0.44629
279_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138	0.3113	0.236	0.3113	0.23602
280_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	0.236	0	0.23602
281_Large Grocery_Ventilation		0.241	0.184	0.138	0.11	0.189	0.138	0.3113	0.236	0.3113	0.23602
283_Large Grocery_Refrigeration		0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334
284_Large Grocery_Refrigeration		0	0	0	0	0	0	-	0.0133	0	0.01334
285_Large Grocery_Refrigeration		0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
286_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
287_Large Grocery_Refrigeration		0	0	0	0	0	0	-	-	0	0
288_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
289_Large Grocery_Refrigeration		0	0	0	0	0	0	-	0.24	0	0.24002
290_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
291_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
292_Large Grocery_Refrigeration		0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344
293_Large Grocery_Refrigeration		0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
294_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
295_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
296_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
298_Large Grocery_Refrigeration		0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012
299_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
300_Large Grocery_Refrigeration		0	0	0	0	0	0	1	1	1	1
301_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
302_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
303_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
304_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
305_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
306_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
307_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
308_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
309_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
310_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
311_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
312_Large Grocery_Total Electric		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
315_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
316_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
317_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
318_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
319_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
320_Large Grocery_Cooking		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
321_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
322_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0
323_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0
324_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
325_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
326_Large Grocery_Space Heating		0.001	0.008	0.247	0.319	0.185	0.24	-	-	0	0
327_Large Grocery_Cooling		0.564	0.323	0.012	0.006	0.061	0.035	-	-	0	0
328_Large Grocery_Other		0.24	0.167	0.14	0.141	0.167	0.146	-	-	0	0
329_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
330_Large Grocery_Plug Loads		0.239	0.18	0.134	0.112	0.194	0.141	-	-	0	0
331_Large Grocery_Refrigeration		0	0	0	0	0	0	0	-	0	0
332_Large Grocery_Water Heating		0	0	0	0	0	0	0	-	0	0
333_Large Grocery_Water Heating		0	0	0	0	0	0	0	-	0	0
334_Large Grocery_Refrigeration		0	0	0	0	0	0	0	-	0	0
1_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
3_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
5_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
6_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
9_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
10_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
11_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
13_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
14_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
15_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
16_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
17_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
18_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
19_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
20_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
21_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
22_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
25_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
26_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
27_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
28_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
29_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
30_Large Health - Hospital_Water Heating		0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
31_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
32_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
33_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
34_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
35_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
36_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
37_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
38_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
39_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
40_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
41_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
42_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
44_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0
45_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-	0.2974	0

46_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
47_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
48_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
49_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
50_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
51_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
52_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
53_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	1	-		1	0
54_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	1	-		1	0
55_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	1	-		1	0
56_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-		0.5161	0
57_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-		0.5161	0
58_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.5161	-		0.5161	0
60_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
61_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
62_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
63_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
64_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
65_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
67_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
70_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
71_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
72_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
73_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
74_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
75_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
77_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
78_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
79_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
80_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
81_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
82_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0284	0	0.02844
83_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.731	0	0.73099
84_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0284	0	0.02844
86_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
87_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
88_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0038	0	0.00378
89_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-		0.0973	0	0.09726
102_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
103_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
104_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
105_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
107_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
108_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
109_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
110_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
111_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
112_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
113_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
114_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
115_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-		0	0
116_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	-	-		0	0
117_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0.0973	0	0.09726
118_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
119_Large Health - Hospital_Space Heating		0.014	0.022	0.216	0.348	0.152	0.248	-	-	0.0973	0	0.09726
120_Large Health - Hospital_Cooling		0.506	0.352	0.019	0.007	0.074	0.042	0.2974	-		0.2974	0
123_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
124_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
125_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
126_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
128_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
129_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
130_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
132_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
133_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
134_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
135_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
136_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-		0	0
137_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	0.4183	0.2409	0.4183	0.24086	
138_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	0.084	0.0458	0.084	0.04584	
139_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	0.4183	0.2409	0.4183	0.24086	
140_Large Health - Hospital_Motors and VFDs		0.233	0.186	0.136	0.111	0.191	0.144	1.0014	0.849	1.0014	0.84896	
142_Large Health - Hospital_Motors and VFDs		0.233	0.186	0.136	0.111	0.191	0.144	1.0014	0.849	1.0014	0.84896	
143_Large Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	1.0014	0.849	1.0014	0.84896	
144_Large Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	0.6926	0.579	0.6926	0.57897	
145_Large Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	0.0402	0.0402	0.0402	0.04024	
146_Large Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	-	0.0341	0	0.03412	
147_Large Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-	-	0	0
148_Large Health - Hospital_Refrigeration		0.237	0.221	0.111	0.116	0.161	0.153	-	-	-	0	0
151_Large Health - Hospital_Cooking		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
152_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
153_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	-	0	0
154_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
155_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	-	0	0
156_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
157_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
159_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
160_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	-	0	0
161_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
162_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	-	0	0
163_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
164_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
166_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
167_Large Health - Hospital_Water Heating		0.222	0.17	0.149	0.117	0.199	0.143	-	-	-	0	0
168_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
169_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
170_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
171_Large Health - Hospital_Interior Lighting		0.278	0.141	0.158	0.089	0.218	0.117	-	-	-	0	0
172_Large Health - Hospital_Other		0.258	0.2	0.122	0.12	0.162	0.138	-	-	-	0	0
173_Large Health - Hospital_Appliances		0.233	0.186	0.136	0.111	0.191	0.144	-	-	-	0	0
174_Large Health - Hospital_Appliances		0.258	0.2	0.122	0.12	0.162	0.138	0.2226	0.238	0.2226	0.23798	
175_Large Health - Hospital_Water Heating		0.258	0.2	0.122	0.12	0.162	0.138	0.2226	0.238	0.2226	0.23798	
176_Large Health - Hospital_Appliances		0.258	0.2	0.122	0.12	0.162	0.138	0.2226	0.238	0.2226	0.23798	
178_Large Health - Hospital_Appliances		0.258	0.2	0.122	0.12	0.162	0.138	0.2226	0.238	0.2226	0.23798	
179_Large Health - Hospital_Appliances		0.258	0.2	0.122	0.12	0.162	0.138	0.2226	0.238	0.2226	0.23798	
181_Large Health - Hospital_Ventilation		0.232	0.211	0.117	0.117	0.169	0.154	0.3737	0.5066	0.3737	0.50656	
190_Large Health -												

193_Large Health - Hospital_Drives	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
194_Large Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
195_Large Health - Hospital_Motors and VFDs	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
196_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
197_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
198_Large Health - Hospital_Process Cooling and Refrigeration	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
199_Large Health - Hospital_Process Heating	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
200_Large Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
201_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
219_Large Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.52	0.42	0.52	0.42
220_Large Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.52	0.42	0.52	0.42
221_Large Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.52	0.42	0.52	0.42
222_Large Health - Hospital_Exterior Lighting	0.091	0.262	0.087	0.209	0.101	0.25	0.52	0.42	0.52	0.42
229_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
230_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
231_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
232_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
233_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
234_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
235_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
236_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
237_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
238_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
239_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
240_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
241_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
242_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
243_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
244_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
245_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
246_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
247_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
248_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
249_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
250_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
253_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
254_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
259_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	0.725	0.725	0.725	0.725
260_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
261_Large Health - Hospital_Interior Lighting	0.278	0.141	0.158	0.089	0.218	0.117	0.52	0.42	0.52	0.42
262_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
263_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	0.3071	-	0.3071	0
264_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	0.3071	-	0.3071	0
265_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
266_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
267_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	0
268_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	1	-	1	1
269_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	1	0	0
270_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
271_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
272_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
273_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
274_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	1.224	0.7831	1.224	0.78314
275_Large Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	1.224	0.7831	1.224	0.78314
276_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	1.224	0.7831	1.224	0.78314
278_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	0.6975	0.4463	0.6975	0.44629
279_Large Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	0.0995	0.0973	0.0995	0.09726
280_Large Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	0.0973	0	0.09726
281_Large Health - Hospital_Ventilation	0.232	0.211	0.117	0.117	0.169	0.154	0.0995	0.0973	0.0995	0.09726
283_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	0.0169	0.0133	0.0169	0.01334
284_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	0.0133	0	0.01334
285_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	0.3031	0.24	0.3031	0.24002
286_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	1	1	1
287_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	1	-	0
288_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	1	1	1
289_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	0.24	0	0.24002
290_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
291_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
292_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	0.8234	0.8234	0.8234	0.82344
293_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	0.3031	0.24	0.3031	0.24002
294_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
295_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
296_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
298_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	0.0001	0.0001	0.0001	0.00012
299_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
300_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	1	1	1	1
301_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
302_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
303_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
304_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
305_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
306_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
307_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
308_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
309_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
310_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
311_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
312_Large Health - Hospital_Total Electric	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
315_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
316_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
317_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
318_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
319_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
320_Large Health - Hospital_Cooking	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
321_Large Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
322_Large Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
323_Large Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
324_Large Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
325_Large Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
326_Large Health - Hospital_Space Heating	0.014	0.022	0.216	0.348	0.152	0.248	-	-	0	0
327_Large Health - Hospital_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0
328_Large Health - Hospital_Other	0.258	0.2	0.122	0.12	0.162	0.138	-	-	0	0
329_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
330_Large Health - Hospital_Plug Loads	0.233	0.186	0.136	0.111	0.191	0.144	-	-	0	0
331_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	-	0	0
332_Large Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-	-	0	0
333_Large Health - Hospital_Water Heating	0.222	0.17	0.149	0.117	0.199	0.143	-	-	0	0
334_Large Health - Hospital_Refrigeration	0.237	0.221	0.111	0.116	0.161	0.153	-	-	0	0
1_Large Health - Other_Cooling	0.506	0.352	0.019	0.007	0.074	0.042	-	-	0	0

[illegible]

[illegible]

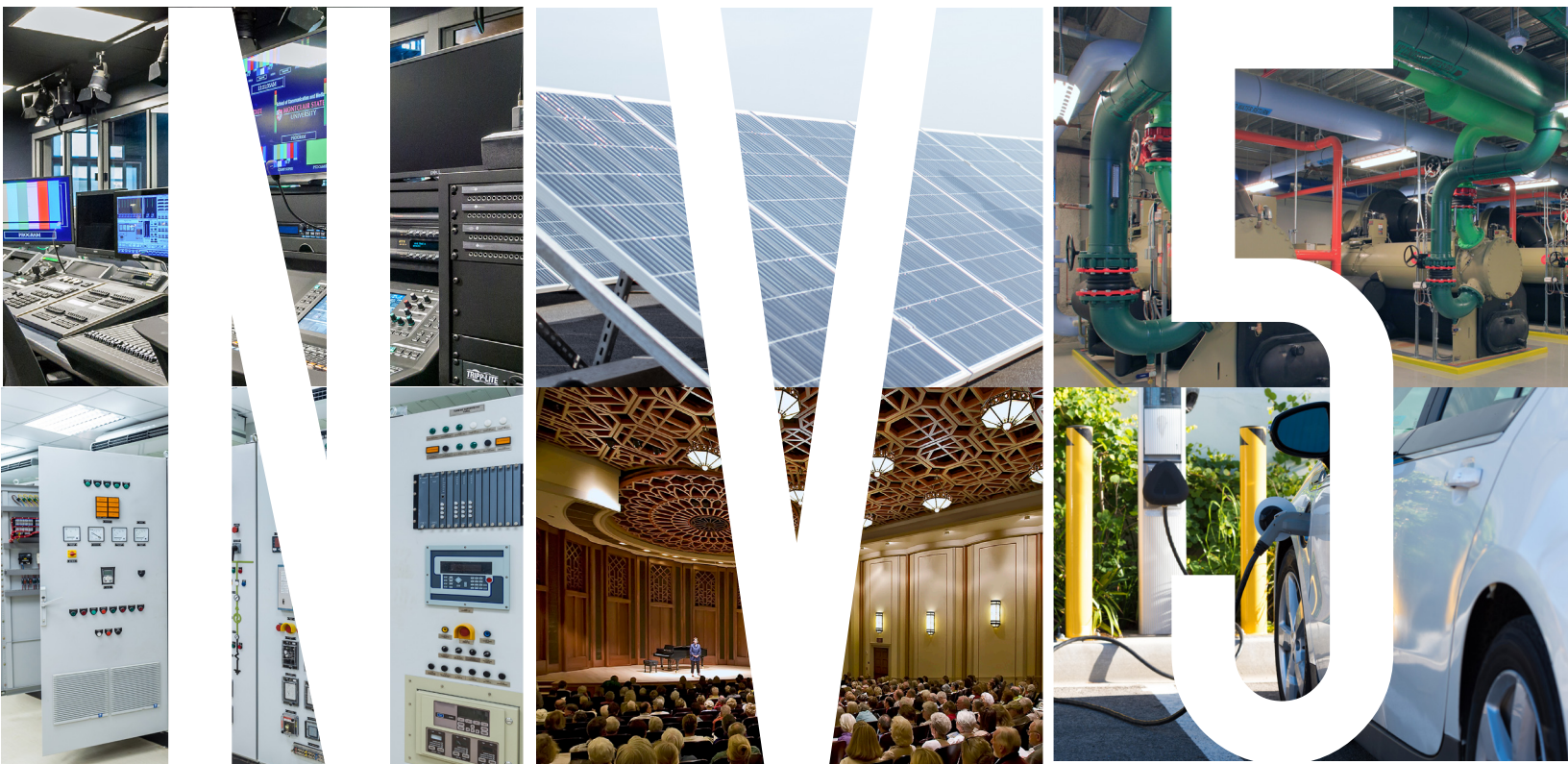
195_Large Office_Motors and VFDs	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
196_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
197_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
198_Large Office_Process Cooling and Refrigeration	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
199_Large Office_Process Heating	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
200_Large Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
201_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
219_Large Office_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.48	0.35	0.48	0.35
220_Large Office_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.48	0.35	0.48	0.35
221_Large Office_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.48	0.35	0.48	0.35
222_Large Office_Exterior Lighting	0.092	0.261	0.087	0.208	0.102	0.25	0.48	0.35	0.48	0.35
229_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
230_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
231_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
232_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
233_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
234_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
235_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
236_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
237_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
238_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
239_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
240_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
241_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
242_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
243_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
244_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
245_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
246_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
247_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
248_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
249_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
250_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
253_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
254_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
259_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	0.725	0.725	0.725	0.725
260_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
261_Large Office_Interior Lighting	0.328	0.092	0.186	0.06	0.257	0.078	0.48	0.35	0.48	0.35
262_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
263_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	0.3071	-	0.3071	0
264_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	0.3071	-	0.3071	0
265_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	1	0
266_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	1	0
267_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	-	1	0
268_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	1	1	1	1
269_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
270_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
271_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
272_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
273_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
274_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	1.224	0.7831	1.224	0.78314
275_Large Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	1.224	0.7831	1.224	0.78314
276_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	1.224	0.7831	1.224	0.78314
278_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	0.6975	0.4463	0.6975	0.44629
279_Large Office_Ventilation	0.25	0.193	0.123	0.118	0.172	0.145	0.0998	0.0966	0.0998	0.09664
280_Large Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	0.0966	0	0.09664
281_Large Office_Ventilation	0.25	0.193	0.123	0.118	0.172	0.145	0.0998	0.0966	0.0998	0.09664
283_Large Office_Refrigeration	0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334
284_Large Office_Refrigeration	0	0	0	0	0	0	-	0.0133	0	0.01334
285_Large Office_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
286_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
287_Large Office_Refrigeration	0	0	0	0	0	0	-	-	0	0
288_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
289_Large Office_Refrigeration	0	0	0	0	0	0	-	0.24	0	0.24002
290_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
291_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
292_Large Office_Refrigeration	0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344
293_Large Office_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002
294_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
295_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
296_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
298_Large Office_Refrigeration	0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012
299_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
300_Large Office_Refrigeration	0	0	0	0	0	0	1	1	1	1
301_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
302_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
303_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
304_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
305_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
306_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
307_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
308_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
309_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
310_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
311_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
312_Large Office_Total Electric	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
315_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
316_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
317_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
318_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
319_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
320_Large Office_Cooking	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
321_Large Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
322_Large Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
323_Large Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
324_Large Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
325_Large Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
326_Large Office_Space Heating	0.002	0.009	0.243	0.348	0.168	0.229	-	-	0	0
327_Large Office_Cooling	0.542	0.287	0.024	0.017	0.082	0.047	-	-	0	0
328_Large Office_Other	0.254	0.181	0.13	0.126	0.169	0.14	-	-	0	0
329_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
330_Large Office_Plug Loads	0.218	0.201	0.125	0.122	0.178	0.157	-	-	0	0
331_Large Office_Refrigeration	0	0	0	0	0	0	-	-	0	0
332_Large Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	-	-	0	0
333_Large Office_Water Heating	0.258	0.14	0.174	0.087	0.23	0.111	-	-	0	0
334_Large Office_Refrigeration	0	0	0	0	0	0	-	-	0	0
1_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
3_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
5_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0

145_Large Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.1881	0.1881	0.1881	0.1881
146_Large Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	-	0.1572	0	0.15724
147_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
148_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
151_Large Restaurant_Cooking		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
152_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
153_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
154_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
155_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
156_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
157_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
159_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
160_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
161_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
162_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
163_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
164_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
166_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
167_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
168_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
169_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
170_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
171_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	-	-	0	0
172_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
173_Large Restaurant_Appliances		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
174_Large Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798
175_Large Restaurant_Water Heating		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798
176_Large Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798
178_Large Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798
179_Large Restaurant_Appliances		0.243	0.17	0.142	0.123	0.184	0.139	0.2226	0.238	0.2226	0.23798
181_Large Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.3737	0.5066	0.3737	0.50656
190_Large Restaurant_Compressed Air Systems		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
191_Large Restaurant_Cooling		0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
192_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	-	-	0	0
193_Large Restaurant_Drives		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
194_Large Restaurant_Motors and VFDs		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
195_Large Restaurant_Motors and VFDs		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
196_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
197_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
198_Large Restaurant_Process Cooling and Refrigeration		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
199_Large Restaurant_Process Heating		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
200_Large Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
201_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
219_Large Restaurant_Exterior Lighting		0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
220_Large Restaurant_Exterior Lighting		0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
221_Large Restaurant_Exterior Lighting		0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
222_Large Restaurant_Exterior Lighting		0.091	0.261	0.088	0.208	0.102	0.25	0.77	0.65	0.77	0.65
229_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
230_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
231_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
232_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
233_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
234_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
235_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
236_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
237_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
238_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
239_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
240_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
241_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
242_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
243_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
244_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
245_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
246_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
247_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
248_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
249_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
250_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
253_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
254_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
259_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	0.725	0.725	0.725	0.725
260_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
261_Large Restaurant_Interior Lighting		0.25	0.173	0.139	0.104	0.194	0.14	0.77	0.65	0.77	0.65
262_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
263_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	0.3071	-	0.3071	0
264_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	0.3071	-	0.3071	0
265_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
266_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
267_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	0
268_Large Restaurant_Plug Loads		0.247	0.172	0.145	0.101	0.203	0.132	1	-	1	1
269_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
270_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
271_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
272_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
273_Large Restaurant_Total Electric		0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
274_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	1.224	0.7831	1.224	0.78314
275_Large Restaurant_Water Heating		0.247	0.139	0.171	0.099	0.225	0.118	1.224	0.7831	1.224	0.78314
276_Large Restaurant_Other		0.243	0.17	0.142	0.123	0.184	0.139	1.224	0.7831	1.224	0.78314
278_Large Restaurant_Cooking		0.247	0.172	0.145	0.101	0.203	0.132	0.6975	0.4463	0.6975	0.44629
279_Large Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.5825	0.3634	0.5825	0.36344
280_Large Restaurant_Space Heating		0.007	0.018	0.252	0.302	0.199	0.222	-	0.3634	0	0.36344
281_Large Restaurant_Ventilation		0.244	0.185	0.134	0.108	0.191	0.137	0.5825	0.3634	0.5825	0.36344
283_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	0.0169	0.0133	0.0169	0.01334
284_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	0.0133	0	0.01334
285_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	0.3031	0.24	0.3031	0.24002
286_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
287_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
288_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
289_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	-	0.24	0	0.24002
290_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
291_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
292_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	0.8234	0.8234	0.8234	0.82344
293_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	0.3031	0.24	0.3031	0.24002
294_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
295_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
296_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
298_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	0.0001	0.0001	0.0001	0.00012
299_Large Restaurant_Refrigeration		0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1

300_Large Restaurant_Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	1	1	1	1
301_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
302_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
303_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
304_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
305_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
306_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
307_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
308_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
309_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
310_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
311_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
312_Large Restaurant_Total Electric	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
315_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
316_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
317_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
318_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
319_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
320_Large Restaurant_Cooking	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
321_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
322_Large Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
323_Large Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
324_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
325_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
326_Large Restaurant_Space Heating	0.007	0.018	0.252	0.302	0.199	0.222	-	-	0	0
327_Large Restaurant_Cooling	0.497	0.268	0.046	0.026	0.105	0.057	-	-	0	0
328_Large Restaurant_Other	0.243	0.17	0.142	0.123	0.184	0.139	-	-	0	0
329_Large Restaurant_Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
330_Large Restaurant_Plug Loads	0.247	0.172	0.145	0.101	0.203	0.132	-	-	0	0
331_Large Restaurant_Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
332_Large Restaurant_Water Heating	0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
333_Large Restaurant_Water Heating	0.247	0.139	0.171	0.099	0.225	0.118	-	-	0	0
334_Large Restaurant_Refrigeration	0.22	0.229	0.106	0.126	0.154	0.165	-	-	0	0
1_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
3_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
5_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
6_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
9_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
10_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
11_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
13_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
14_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
15_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
16_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
17_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
18_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
19_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
20_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
21_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
22_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
25_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
26_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
27_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
28_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
29_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
30_Large Retail_Water Heating	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
31_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
32_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
33_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
34_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	0
35_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
36_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
37_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
38_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
39_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
40_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
41_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
42_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
44_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
45_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
46_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
47_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
48_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
49_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
50_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
51_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
52_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	-	-	0	0
53_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0
54_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0
55_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	1	-	1	0
56_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.7898	-	0.7898	0
57_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.7898	-	0.7898	0
58_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.7898	-	0.7898	0
60_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
61_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
62_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
63_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
64_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
65_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
67_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
70_Large Retail_Cooling	0.56	0.303	0.018	0.01	0.07	0.039	0.4213	-	0.4213	0
71_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
72_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
73_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
74_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
75_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
77_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
78_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.0102	0	0.01018
79_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
80_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.0102	0	0.01018
81_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
82_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.036	0	0.03605
83_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.8681	0	0.8681
84_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.036	0	0.03605
86_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.0102	0	0.01018
87_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
88_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.0102	0	0.01018
89_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	0.2451	0	0.24507
102_Large Retail_Space Heating	0.009	0.016	0.276	0.308	0.195	0.196	-	-	0	

49_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
50_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
51_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
52_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	-	-		0	0
53_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1	-		1	0
54_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1	-		1	0
55_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1	-		1	0
56_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-		1.0729	0
57_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-		1.0729	0
58_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	1.0729	-		1.0729	0
60_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
61_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
62_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
63_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
64_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
65_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
67_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
70_Large Warehouse_Cooling		0.641	0.285	0.008	0.001	0.051	0.015	0.1402	-		0.1402	0
71_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
72_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
73_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
74_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
75_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
77_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
78_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0034	0	0.00342
79_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
80_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0034	0	0.00342
81_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
82_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0098	0	0.00982
83_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.9371	0	0.93711
84_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0098	0	0.00982
86_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0034	0	0.00342
87_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
88_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.0034	0	0.00342
89_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-		0.3266	0	0.32662
102_Large Warehouse_Space Heating		0	0.001	0.222	0.486	0.097	0.194	-	-		0	0
103_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
104_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
105_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
107_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
108_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
109_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
110_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
111_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
112_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
113_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
114_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
115_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-		0	0
116_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-		0	0
117_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	0.3266	0	0.32662	
118_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	0.1402	-		0.1402	0
119_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	0.3266	0	0.32662	
120_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	0.1402	-		0.1402	0
123_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
124_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
125_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
126_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
128_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
129_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
130_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
132_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
133_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
134_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
135_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
136_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-		0	0
137_Large Warehouse_Water Heating	0	0	0	0	0	0	-	0.6277	0.1697	0.6277	0.16973	
138_Large Warehouse_Water Heating	0	0	0	0	0	0	-	0.084	0.0458	0.084	0.04584	
139_Large Warehouse_Water Heating	0	0	0	0	0	0	-	0.6277	0.1697	0.6277	0.16973	
140_Large Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	0.9294	0.6043	0.9294	0.60434	0.60434	
142_Large Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	0.9294	0.6043	0.9294	0.60434	0.60434	
143_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.9294	0.6043	0.9294	0.60434	0.60434	
144_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.6926	0.579	0.6926	0.57897	0.57897	
145_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.1682	0.1682	0.1682	0.16822	0.16822	
146_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	-	0.1094	-	0.10939	0.10939	
147_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0	
148_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0	
151_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
152_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
153_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0	
154_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
155_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0	
156_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
157_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
159_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
160_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0	
161_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
162_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0	
163_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
164_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
166_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
167_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0	
168_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
169_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
170_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
171_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	-	-	-	0	0	
172_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0	
173_Large Warehouse_Appliances	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
174_Large Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	0.23798	
175_Large Warehouse_Water Heating	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	0.23798	
176_Large Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	0.23798	
178_Large Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	0.23798	
179_Large Warehouse_Appliances	0.262	0.14	0.155	0.127	0.197	0.118	0.2226	0.238	0.2226	0.23798	0.23798	
181_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.3737	0.5066	0.3737	0.50656	0.50656	
190_Large Warehouse_Compressed Air Systems	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
191_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0	
192_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	-	-	-	0	0	
193_Large Warehouse_Drives	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
194_Large Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	
195_Large Warehouse_Motors and VFDs	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0	

196_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-		0	0
197_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-		0	0
198_Large Warehouse_Process Cooling and Refrigeration	0.282	0.136	0.163	0.083	0.23	0.105	-	-		0	0
199_Large Warehouse_Process Heating	0.282	0.136	0.163	0.083	0.23	0.105	-	-		0	0
200_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-		0	0
201_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-		0	0
219_Large Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48		0.37	0.48	0.37
220_Large Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48		0.37	0.48	0.37
221_Large Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48		0.37	0.48	0.37
222_Large Warehouse_Exterior Lighting	0.093	0.26	0.088	0.208	0.103	0.249	0.48		0.37	0.48	0.37
229_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
230_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
231_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
232_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
233_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
234_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
235_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
236_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
237_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
238_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
239_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
240_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
241_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
242_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
243_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
244_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
245_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
246_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
247_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
248_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
249_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
250_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
253_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
254_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
259_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	0.725	0.725	0.725	0.725
260_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
261_Large Warehouse_Interior Lighting	0.3	0.121	0.168	0.074	0.235	0.101	0.48		0.37	0.48	0.37
262_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
263_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	0.3071	-	-	0.3071	0
264_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	0.3071	-	-	0.3071	0
265_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	1	-	-	1	0
266_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	1	-	-	1	0
267_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	1	-	-	1	0
268_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	1	-	1	1	1
269_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
270_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
271_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
272_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
273_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
274_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	1.224	0.7831	1.224	0.78314
275_Large Warehouse_Water Heating	0	0	0	0	0	0	-	1.224	0.7831	1.224	0.78314
276_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	1.224	0.7831	1.224	0.78314
278_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	0.6975	0.4463	0.6975	0.44629	
279_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.5421	0.3266	0.5421	0.32662	
280_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	0.3266	0	0.32662	
281_Large Warehouse_Ventilation	0.273	0.198	0.122	0.121	0.161	0.126	0.5421	0.3266	0.5421	0.32662	
283_Large Warehouse_Refrigeration	0	0	0	0	0	0	0.0169	0.0133	0.0169	0.01334	
284_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	0.0133	0	0.01334	
285_Large Warehouse_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002	
286_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
287_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0
288_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
289_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	0.24	0	0.24002	
290_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
291_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
292_Large Warehouse_Refrigeration	0	0	0	0	0	0	0.8234	0.8234	0.8234	0.82344	
293_Large Warehouse_Refrigeration	0	0	0	0	0	0	0.3031	0.24	0.3031	0.24002	
294_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
295_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
296_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
298_Large Warehouse_Refrigeration	0	0	0	0	0	0	0.0001	0.0001	0.0001	0.00012	
299_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
300_Large Warehouse_Refrigeration	0	0	0	0	0	0	1	1	1	1	
301_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
302_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
303_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
304_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
305_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
306_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
307_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
308_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
309_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
310_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
311_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
312_Large Warehouse_Total Electric	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
315_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
316_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
317_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
318_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
319_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
320_Large Warehouse_Cooking	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
321_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0
322_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-	0	0
323_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-	0	0
324_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0
325_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0
326_Large Warehouse_Space Heating	0	0.001	0.222	0.486	0.097	0.194	-	-	-	0	0
327_Large Warehouse_Cooling	0.641	0.285	0.008	0.001	0.051	0.015	-	-	-	0	0
328_Large Warehouse_Other	0.262	0.14	0.155	0.127	0.197	0.118	-	-	-	0	0
329_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
330_Large Warehouse_Plug Loads	0.282	0.136	0.163	0.083	0.23	0.105	-	-	-	0	0
331_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0
332_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
333_Large Warehouse_Water Heating	0	0	0	0	0	0	-	-	-	0	0
334_Large Warehouse_Refrigeration	0	0	0	0	0	0	-	-	-	0	0



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