Technical Resource Manual

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Table of Abbreviations

<u>Term</u>	Abbrev	<u>Term</u>	Abbrev
Air Source Heat Pump	ASHP	Building Automation System	BAS
Central Air Conditioner	CAC		
Demand Side	DSM	Energy Efficiency Ratio	EER
Management			
Electronically	ECM	Energy Management	EMS
Commutated Motors		System	
Energy Independence & Security Act	EISA	Equivalent Full Load Hours	EFLH
Evaluation Measurement & Verification	EM&V	Integrated Part Load Value	IPLV
On-line iEnergy Technical Reference Library	iTRL	High Intensity Discharge	HID
Hours of Use	HOU	Heating Ventilation & Air Conditioning	HVAC
Kilowatt per Hour	kWh	Kilowatt	kW
Missouri Energy Efficiency Investment Act	MEEIA	Net Present Value	NPV
National Electrical Manufacturers Association	NEMA	Packaged Terminal Heat Pump	PTHP
Packaged Terminal Air Conditioner	PTAC	Remaining Efficient Life	REL
Real Discount Rate	RDR	Seasonal Energy Efficiency Ratio	SEER
Remaining Useful Life	RUL	Technical Analysis Study	TAS
Solar Heat Gain Coefficient	SHGC	Thermostatic Expansion Valves	TXV
Technical Resource Manual	TRM	Utility Discount Rate	UDR
Typical Meteorological Year	TMY	Variable Air Volume	VAV
Unit Energy Consumption	UEC	Variable Speed Drive	VSD
Variable Frequency Drive	VFD		_

Introduction

The Ameren Missouri Technical Resource Manual (TRM) was developed to establish deemed measure level savings values with associated attributes and supporting documentation. For measures which cannot be deemed, the relevant protocols to determine the measure savings values are described. These savings values and protocols will be used prospectively and updated annually.

This TRM appendix was developed using the iEnergy Technical Reference Library (iTRL) as a web-based platform. This web-based interface gives Ameren Missouri the ability to consolidate and organize efficiency measures and measure parameters to update measure savings as new information becomes available from EM&V data and other sources. Data referenced in the TRM are also dynamically linked such that a user will always know what parameters were used to establish measure level savings.

The application delivers improved transparency and consistency by enabling utility program administrators, evaluators and regulators to calculate, verify and audit TRM savings for all DSM programs. The TRM is organized by customer program type: residential and business. Within each section is a listing of energy efficiency measures broken down by programs:

- Residential Programs
 - o Lighting
 - o HVAC
 - Efficient Products
 - Low Income
 - Energy Efficiency Kits
 - o Home Energy Reports
- o Business Programs
 - Standard
 - Small Business Direct Install
 - o Custom
 - o Retro-Commissioning
 - New Construction

A measure level table of efficiency measures is provided for each program. The measure level table contains:

Measure Reference Number,

- Measure Name,
- Effective Start Date of the savings values,
- Effective End Date of the savings values,
- Incremental Cost of the measure
- Cost Unit of the measure,
- Gross Annual Demand Reduction (kW),
- Gross Incremental Annual Electric Savings (kWh)
- Savings Unit of the measure, and
- Measure Life.

The measure level table displays basic information about the energy efficiency measure while additional savings attributes associated with the measure gross energy and demand savings and supporting documentation is available from the on-line TRM by using the Measure Reference number.

Accuracy, transparency, and ease of updating measure savings is the overarching reason for converting the TRM to its electronic counterpart, iTRL. Since calculations for similar measures are performed electronically using the same formula, transcription error is eliminated. Within iTRL, the formulas used to calculate savings are displayed, or in the case of deemed values, the reference source for the deemed value is included, increasing transparency. Finally, when better data is available, through EM&V results, for instance, parameters such as Hours of Use (HOU) or Equivalent Full Load Hours (EFLH) can be updated and all affected measures are easily updated.

To arrive at the individual measure level assumptions, Ameren Missouri consulted multiple databases, Ameren Missouri 2013 and 2014 Evaluation Measurement & Verification (EM&V) Reports, and other TRMs. Missouri specific data, where available, took precedence over all other data available. Measure level values were given primary precedence if they came from Ameren Missouri EM&V reports. For measures not contained in the EM&V reports, Ameren Missouri consulted its internal database developed by Morgan Marketing Partners which utilizes Missouri specific weather, building vintages, and home sizes. Finally, other state and utility TRMs were consulted. These other TRMs were mainly used to derive engineering equations for estimating energy savings and other formatting ideas and practices.

The measure level gross annual demand reduction (kW) identified in the TRM is determined by applying the end-use category energy to coincident peak demand factors found in Appendix E of this Stipulation.

The TRM values will be updated annually as better data becomes available. New measure level data savings values will be applied prospectively for the next program year.

The Ameren Missouri web-based TRM can be accessed by Ameren Missouri Energy Efficiency Regulatory Stakeholder Advisory Team member at: https://ameren.dsmcentral.com.

Please contract Greg Lovett @ <u>GLovett@ameren.com</u> to request a password to access the site.

The following program measure sections identify various energy efficiency measures for both residential and business customers. The values expressed represent Ameren Missouri's best effort to utilize recent Missouri specific data and, where this type of data was not readily available, national best practices.

Protocol for Deeming New Measures Not Found Within the TRM

A measure or technology maybe discovered to yield cost effective energy and demand savings and is not included within this TRM. The 11 Step Review Process, referenced in Chapter 4 and described in detail in the MEEIA program tariff, will be followed to deem measure level energy and demand savings, incremental costs, effective useful life and other appropriate attributes and supporting documentation.

After the 11 Step Review Process is completed, the TRM will be updated with the new measure savings value and the new measure will be used prospectively.

Residential Energy Efficiency Program Measures

The individual measures included in the specific Residential Programs may be applied to other Residential Programs as long as the attributes associated with the energy and demand savings are constant.

Residential Lighting Program Measures

The Lighting Program provides upstream incentives for replacing lights with high efficiency bulbs and fixtures.

One aspect of the Lighting Program that merits additional discussion is the calculation of incremental costs associated with lighting measures in cases where the efficient technology has a longer life than the baseline measure being replaced. An example of this is an LED bulb. An LED lasts 25 years, while a halogen bulb only lasts 2 years and a compact fluorescent lasts 9 years. This differential in lifetimes indicates that the baseline bulb would actually need to be replaced multiple times over the life of the LED. As a result, the incremental cost of an LED is set to zero even though the initial cost of the LED is greater than a single baseline bulb.

The following is a listing of all the Residential Lighting Measures extracted from iTRL.

Ameren Missouri Residential Lighting Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost		Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED - 10.5W Dov	wnlight E26: Light	ing						
962	Jan 1, 2017		0	per bulb	0.006	40.8	per bulb	25
LED - 10W: Ligh	nting							
1204	Jan 1, 2017		0	per bulb	0.006	38.2	per bulb	25
LED - 12W Dimr	nable Light Bulb :	Lighting						
963	Jan 1, 2017		0	per bulb	0.012	77.7	per bulb	25
LED - 15W: Ligh	nting							
1205	Jan 1, 2017		0	per bulb	0.007	50.0	per bulb	25
LED - 15W Flood	l Light PAR30 Bul	b: Lighting						
964	Jan 1, 2017		0	per bulb	0.009	60.1	per bulb	25
LED - 18W Flood	l Light PAR38 Bul	b: Lighting						
965	Jan 1, 2017		0	per bulb	0.013	88.2	per bulb	25
LED - 20W: Ligh	nting							
1206	Jan 1, 2017		0	per bulb	0.013	66.5	per bulb	25

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED - 4W Cande	elabra: Lighting							
1231	Jan 1, 2017		0	per bulb	0.006	42.0	per bulb	25
LED - 8W Globe	Light G25 Bulb: I	ighting						
966	Jan 1, 2017		0	per bulb	0.006	42.8	per bulb	25

Residential HVAC Program Measures

The HVAC program provides incentives for replacement of HVAC units with energy efficient models. It also provides incentives for HVAC tune-ups and duct sealing.

The replacement of HVAC systems can either be applied as an "early replacement" or as a "replace on fail". An "early replacement" analysis uses the existing equipment as the baseline for energy and demand savings while "replace on fail" uses the baseline efficiency for a new Standard/Code measure when determining energy and demand savings.

The incremental cost for an "early replacement" is calculated as the difference between the full cost of the efficient measure and the Net Present Value of the Standard/Code baseline equipment assuming the Standard/Code measure will be installed at the expiration of the remaining useful life of the existing equipment, typically after one third of the useful life of the new measure. For "replace on fail", the incremental cost is the cost of the efficient measure less the cost of the Standard/Code measure.

Some equipment has multiple measures listed based upon what it is replacing. For example, an efficient ASHP can either replace an existing ASHP or a CAC with an electric resistance furnace.

The following is a listing of all the Residential HVAC Measures extracted from iTRL.

Ameren Missouri Residential HVAC Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost		Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
ASHP - SEER 15	ER Elec Resist Fu	rnace: HVAC						
919	Jan 1, 2017		1607	per measure	6.480	13903	per measure	18
ASHP - SEER 15	ER with ASHP: H	IVAC						
920	Jan 1, 2017		1184	per measure	2.266	4862	per measure	18
ASHP SEER 15	MF ER Replace AS	SHP: HVAC						
1239	Jan 1, 2017		592	per measure	1.115	2392.5	per measure	12
ASHP SEER 15	MF ER Replace El	ec Resist Furnace:	HVAC					
1266	Jan 1, 2017		803	per measure	3.366	7222.5	per measure	12
ASHP SEER 15	MF Replace at Fail	ASHP: HVAC						
1267	Jan 1, 2017		261	per measure	0.343	735.0	per measure	12
ASHP SEER 15	MF Replace at Fail	Elec Resist Furna	ace: HVAC					
1268	Jan 1, 2017		537	per measure	3.153	6764.0	per measure	12
ASHP- SEER 15	Replace at Fail El	ec Resist Furnace	: HVAC					
921	Jan 1, 2017		1074	per measure	5.389	11562	per measure	18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
ASHP - SEER 15 Replace at Fail with ASHP: HVAC										
922	Jan 1, 2017		522	per measure	0.401	860	per measure	18		
ASHP - SEER 16	6+ ER Elec Resist F	Furnace: HVAC								
923	Jan 1, 2017		2018	per measure	7.666	16448	per measure	18		
ASHP - SEER 16	6+ ER with ASHP:	HVAC								
924	Jan 1, 2017		1595	per measure	3.023	6487	per measure	18		
ASHP- SEER 16	6+ Replace at Fail I	Elec Resist Furnac	ce: HVAC							
925	Jan 1, 2017		1485	per measure	6.134	13160	per measure	18		
ASHP - SEER 16	6+ Replace at Fail v	with ASHP: HVA	C							
926	Jan 1, 2017		522	per measure	0.825	1770	per measure	18		
ASHP SEER 16	MF ER Replace AS	SHP: HVAC								
1240	Jan 1, 2017		797	per measure	1.473	3161.0	per measure	12		
ASHP SEER 16	MF ER Replace El	ec Resist Furnace	: HVAC							
1269	Jan 1, 2017		1009	per measure	3.535	7584.5	per measure	12		
ASHP SEER 16	ASHP SEER 16 MF Replace at Fail ASHP: HVAC									
1270	Jan 1, 2017		467	per measure	0.440	944	per measure	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand Reduction	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
ASHP SEER 16 MF Replace at Fail Elec Resist Furnace: HVAC									
1271	Jan 1, 2017		743	per measure	3.057	6560	per measure	12	
CAC - SEER 14 I	ER: HVAC								
945	Jan 1, 2017		890	per measure	1.550	1636	per measure	18	
CAC - SEER 14 I	Replace at Fail: H	VAC							
944	Jan 1, 2017		357	per measure	0.306	323	per measure	18	
CAC - SEER 15 I	ER: HVAC								
947	Jan 1, 2017		1247	per measure	1.826	1927	per measure	18	
CAC - SEER 15 I	Replace at Fail: H	VAC							
946	Jan 1, 2017		714	per measure	0.357	377	per measure	18	
CAC - SEER 16+	ER: HVAC								
949	Jan 1, 2017		1304	per measure	1.828	1929	per measure	18	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
CAC - SEER 16+	- Replace at Fail: H	IVAC						
948	Jan 1, 2017		771	per measure	0.333	351	per measure	18
DFHP SEER 15_	MF: HVAC							
1241	Jan 1, 2017		254	per measure	0.086	185	per measure	12
DFHP - SEER 15	5_SF: HVAC							
928	Jan 1, 2017		508	per measure	0.172	370	per measure	12
DFHP SEER 16_	MF: HVAC							
1242	Jan 1, 2017		382	per measure	0.335	271	per measure	12
DFHP - SEER 16	5_SF: HVAC							
929	Jan 1, 2017		763	per measure	0.253	542	per measure	12
DFHP - SEER 17	/_SF: HVAC							
930	Jan 1, 2017		1017	per measure	0.483	1037	per measure	12
DFHP SEER 17+	MF: HVAC							
1243	Jan 1, 2017		509	per measure	0.242	518.5	per measure	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
DFHP - SEER 18	S_SF: HVAC							
931	Jan 1, 2017		1342	per measure	0.503	1079	per measure	12
Ductless ASHP E	CR: HVAC							
1250	Jan 1, 2017		1982	per measure	2.141	4594	per measure	18
Ductless ASHP R	Replace Electric Re	sistance ER: HVA	.C					
1252	Jan 1, 2017		2108	per measure	30479	7465	per measure	18
Ductless ASHP R	Replace Electric Re	sistance ROF: HV	AC					
1253	Jan 1, 2017		1051	per measure	3.685	7906	per measure	18
Ductless ASHP R	OF: HVAC							
1251	Jan 1, 2017		888	per measure	0.814	1746	per measure	18
Duct Sealing Lev	el 1: HVAC							
905	Jan 1, 2016		325	per home	0.299	641.1	per home	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Duct Sealing Lev	el 2: HVAC							
906	Jan 1, 2016		325	per home	0.519	1113.1	per home	20
ECM Auto Fan I	Early Replacement	: HVAC						
908	Jan 1, 2017		168	per measure	0.370	794	per measure	15
ECM Auto Fan N	MF: HVAC							
1257	Jan 1, 2017		263	per measure	0.183	392.5	per measure	15
ECM Auto Fan I	Replace at Fail: HV	AC						
907	Jan 1, 2017		263	per measure	0.366	785	per measure	15
ECM Continuou	s Fan Early Replac	ement: HVAC						
911	Jan 1, 2017		168	per measure	1.533	3289	per measure	15
ECM Continuou	s Fan MF: HVAC							
1244	Jan 1, 2017		263	per measure	0.766	1644.5	per measure	15
ECM Continuou	s Fan Replace at F	ail: HVAC						
910	Jan 1, 2017		125	per measure	1.533	3289	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Geothermal HP I	Desuperheater: HV	AC						
932	Jan 1, 2016		239	per measure	0.065	730.5	per measure	10
GSHP - 23 EER 1	ER: HVAC							
1248	Jan 1, 2017		4859	per measure	4.012	8607	per measure	18
GSHP - 23 EER	Replace at Fail							
1249	Jan 1, 2017		3200	per measure	1.681	3607	per measure	18
GSHP SEER 14+	ER ASHP with G	SHP ER: HVAC						
1247	Jan 1, 2017		5250	per measure	5.904	12667	per measure	18
GSHP - SEER 14	+ ER Elec Resist F	Furnace: HVAC						
934	Jan 1, 2017		5250	per measure	12.678	27201	per measure	18
GSHP - SEER 14	+ Replace Elec Re	sist Furnace: HVA	AC .					
935	Jan 1, 2017		4717	per measure	10.645	22840	per measure	18
Heat Pump Strip	Installed: HVAC							
913	Jan 1, 2016		154	per measure	0.621	1332.0	per measure	15
Heat Pump Strip	Reset: HVAC							
914	Jan 1, 2016		25	per measure	0.621	1332.0	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Heat Pump Wate	er Heater: HVAC							
1232	Jan 1, 2017		1480	per measure	0.254	2865	per measure	15
HVAC Maintena	nce and Tune-up_	MF: HVAC						
1245	Jan 1, 2016		70	per measure	0.165	174	per measure	10
HVAC Maintena	nce and Tune-up_	SF: HVAC						
943	Jan 1, 2017		70	per measure	0.0165	174	per measure	10
Indoor Coil Clea	ning: HVAC							
941	Jan 1, 2017		63	per cleaning	0.055	117	per measure	5
Learning Therm	ostat: HVAC							
1222	Jan 1, 2016		224	per measure	0.438	462	per measure	10
Outdoor Coil Clo	eaning: HVAC							
942	Jan 1, 2017		31	per cleaning	0.120	258	per measure	5
PTAC 10.3 EER	_SF: HVAC							
950	Jan 2, 2013		124	per measure	0.126	133.0	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
PTAC 10 EER_N	PTAC 10 EER_MF: HVAC								
1233	Jan 1, 2016		124	per measure	0.126	133	per measure	15	
PTAC 9.3 EER_S	SF: HVAC								
951	Jan 2, 2013		136	per measure	0.201	212.5	per measure	15	
PTAC 9 EER_M	F: HVAC								
1234	Jan 1, 2016		136	per measure	0.201	212.5	per measure	15	
PTHP 10.9 EER	SF: HVAC								
936	Jan 2, 2013		155	per measure	0.114	244.3	per measure	15	
PTHP 10 EER_N	1F: HVAC								
1235	Jan 1, 2016		155	per measure	0.114	244.3	per measure	15	
PTHP 9.1 EER_S	SF: HVAC								
937	Jan 2, 2013		169	per measure	0.157	336.2	per measure	15	
PTHP 9 EER_M	PTHP 9 EER_MF: HVAC								
1236	Jan 1, 2016		169	per measure	0.157	336.2	per measure	15	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
RCA 10% impro	RCA 10% improvement_MF: HVAC								
1246	Jan 1, 2016		70	per measure	0.346	365	per measure	10	
RCA 10% impro	vement_SF: HVA	C							
940	Jan 1, 2017		127	per measure	0.399	856	per measure	10	
SEER 14 MF ER	: HVAC								
1275	Jan 1, 2017		445	per measure	0.773	815.5	per measure	12	
SEER 14 MF Rep	place on Fail: HVA	AC .							
1237	Jan 1, 2017		178.5	per measure	0.155	163.8	per measure	12	
SEER 15 MF ER	: HVAC								
1276	Jan 1, 2017		623.5	per measure	0.903	953.5	per measure	12	
SEER 15 MF Rep	SEER 15 MF Replace on Fail: HVAC								
1238	Jan 1, 2017		357	per measure	0.180	190	per measure	12	

Efficient Products Program Measures

The Efficient Products Program provides mail-in and on-line rebates for retail products and the sale of products at a discounted price through an on-line store. Various end-use cost-effective measures included consist of qualified energy star appliances, power management, water heaters, window air conditioning units, pool pumps, and various building shell measures.

The following is a listing of all the Residential Efficient Products Measures extracted from iTRL.

Ameren Missouri Residential Efficient Products Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
AC - Energy Star	AC - Energy Star Room: Efficient Products								
857	Jan 1, 2016		50	per measure	0.047	49.6	per measure	12	
Air Sealing (Infil	tration reduction)	- 50%_SF: Efficie	nt Products						
874	Jan 1, 2016		264	per home	0.345	739.8	per home	13	
Ceiling Insulation	n R5-R30 All Elect	ric: Efficient Prod	lucts						
875	Jan 1, 2016		.46	per sq ft	2.0E-4	0.46	per sq ft	25	
Ceiling Insulation	n R5-R38 All Elect	ric: Efficient Prod	lucts						
876	Jan 1, 2016		0.58	per sq ft	2.0E-4	0.48	per sq ft	25	
Ceiling Insulation	n R5-R49 All Elect	ric: Efficient Prod	lucts						
881	Jan 1, 2016		0.70	per sq ft	2.0E-4	0.49	per sq ft	25	
Energy Star Air	Purifier:Efficient I	Products							
1177	Jan 1, 2017		70	per measure	0.240	515	per measure	9	
Energy Star Wat	Energy Star Water Cooler - Cold Only: Efficient Products								
1180	Jan 2, 2013		17	per measure	0.006	47.4	per measure	10	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Energy Star Wat	Energy Star Water Cooler - Hot and Cold: Efficient Products								
1181	Jan 1, 2017		17	per measure	0.018	140	per measure	10	
Heat Pump Wate	r Heaters: Efficien	nt Products							
872	Jan 1, 2017		1480	per measure	0.254	2865	per measure	15	
Learning Thermo	ostat: Efficient Pro	ducts							
1230	Jan 1, 2016		224	per measure	0.438	462	per unit	10	
Pool Pump and M	Totor Single Speed	: Efficient Produc	ts						
860	Jan 2, 2013		85	per measure	0.0957	694.0	per measure	10	
Pool Pump and n	notor w auto contro	ols - multi speed: l	Efficient Products						
859	Jan 1, 2016		579	per measure	0.2483	1799.7	per measure	10	
Smart Strip - Mo	tion Sensing: Effic	ient Products							
1258	Jan 1, 2017		8.96	per measure	0.007	64.	per measure	5	
Smart Strip plug	Smart Strip plug outlet_Load Sensing: Efficient Products								
1031	Jan 1, 2017		4	per measure	0.007	59	per measure	5	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
VFDs on Resider	VFDs on Residential Swimming Pool Pumps: Efficient Products								
861	Jan 1, 2017		425	per measure	0.283	2052.8	per measure	10	
Window Replace	Window Replacement_SF: Efficient Products								
882	Jan 1, 2016		4.33	per sq ft	0.0021	4.41	per sq ft	20	

Low Income Program Measures

The Low Income Program provides the direct installation of energy efficient lighting and hot water measures into low income single family homes and multi-tenant properties. The program can also include the replacement and tune-up of HVAC systems, the replacement of appliances, and the installation of building shell measures.

The following is a listing of all the Residential Low Income Measures extracted from iTRL.

Ameren Missouri Low Income Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
AC - Energy Star	AC - Energy Star Room_MF: Low Income								
974	Jan 1, 2017		442	per measure	0.473	499	per measure	12	
AC - Energy Star	Room_SF: Low I	ncome							
975	Jan 1, 2016		445	per measure	0.259	273	per measure	12	
AC - Energy Star	Room - Thru-Wa	ll_MF: Low Incon	ne						
972	Jan 1, 2017		637	per measure	0.473	499	per measure	12	
AC - Energy Star	Room - Thru-Wa	ll_SF: Low Incom	e						
973	Jan 1, 2016		641	per measure	0.259	273	per measure	12	
Air Sealing (Infil	tration reduction)	- 50%_MF: Low I	ncome						
1220	Jan 1, 2016		400	per home	0.1864	400	per home	13	
Air Sealing (Infil	tration reduction)	- 50%_SF: Low In	ncome						
1207	Jan 1, 2016		500	per home	0.233	500	per home	10	
Ceiling Insulation	Ceiling Insulation R5-R30 All Electric_MF: Low Income								
1209	Jan 1, 2016		1.37	per sq ft	2.0E-4	0.46	per sq ft	25	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Ceiling Insulation	n R5-R30 All Elect	ric_SF: Low Incom	ne					
1208	Jan 1, 2016		1.47	per sq ft	2.0E-4	0.46	per sq ft	10
Dirty Filter Aları	m_MF: Low Incom	ne						
1260	Jan 1, 2016		5	per measure	0.051	110	per measure	14
Dirty Filter Aları	m_SF: Low Income	e						
1259	Jan 1, 2016		5	per measure	0.051	110	per measure	14
Energy Star Refr	rigerator_MF: Low	Income						
968	Jan 1, 2017		750	per measure	0.114	888	per measure	10
Energy Star Refr	rigerator_SF: Low	Income						
1221	Jan 1, 2016		750	per measure	0.104	807	per measure	10
HVAC Maintena	nce and Tune-up_	MF: Low Income						
999	Jan 1, 2017		90	per measure	0.067	143	per measure	10
HVAC Maintena	nce and Tune-up_	SF: Low Income						
1000	Jan 1, 2016		100	per measure	0.081	174	per measure	10

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
LED - 10.5W Dov	LED - 10.5W Downlight E26 Light Bulb_MF: Low Income								
1018	Jan 1, 2017		0	per bulb	0.003	21.3	per bulb	25	
LED - 10.5W Dov	wnlight E26 Light	Bulb_SF: Low Inc	come						
1019	Jan 1, 2016		0	per bulb	0.004	28	per bulb	25	
LED - 12W Dimr	nable Light Bulb_l	MF: Low Income							
1021	Jan 1, 2017		0	per bulb	0.003	22.8	per bulb	25	
LED - 12W Dimr	nable Light Bulb _	SF: Low Income							
1020	Jan 1, 2016		0	per bulb	0.004	28	per bulb	25	
LED - 15W Flood	l Light PAR30 Bul	b_MF: Low Incor	ne						
1022	Jan 1, 2017		0	per bulb	0.005	31.5	per bulb	25	
LED - 15W Flood	l Light PAR30 Bul	b_SF: Low Incom	e						
1023	Jan 1, 2016		0	per bulb	0.005	33.5	per bulb	25	
LED - 18W Flood	LED - 18W Flood Light PAR38 Bulb_MF: Low Income								
1024	Jan 1, 2017		0	per bulb	0.004	29.8	per bulb	25	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
LED - 18W Flood	LED - 18W Flood Light PAR38 Bulb_SF: Low Income								
1025	Jan 1, 2016		0	per bulb	0.005	33.5	per bulb	25	
LED - 8W Globe	Light G25 Bulb_M	AF: Low Income							
1026	Jan 1, 2017		0	per bulb	0.002	12.8	per bulb	25	
LED - 8W Globe	Light G25 Bulb_S	F: Low Income							
1027	Jan 1, 2016		0	per bulb	0.005	33.5	per bulb	25	
Low Flow Faucet	Aerator _MF: Lo	w Income							
1033	Jan 1, 2017		14	per measure	0.004	42	per measure	12	
Low Flow Faucet	Aerator _SF: Low	v Income							
1034	Jan 1, 2016		16	per measure	0.005	57	per measure	12	
Low Flow Showe	rhead_MF: Low I	ncome							
1035	Jan 1, 2017		42	per measure	0.018	202.4	per measure	12	
Low Flow Showe	Low Flow Showerhead_SF: Low Income								
1036	Jan 1, 2016		42	per measure	0.032	361	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Pipe Insulation_N	MF: Low Income							
1037	Jan 1, 2017		1.5	per ft	0.002	22	per ft	6
Pipe Insulation_S	SF: Low Income							
1038	Jan 1, 2016		1.6	per ft	0.002	25.7	per ft	6
PTAC 10.3 EER	MF: Low Income							
1005	Jan 1, 2016		124	per measure	0.126	133.0	per measure	15
PTAC 9.3 EER_I	MF: Low Income							
1006	Jan 1, 2016		136	per measure	0.201	212.5	per measure	15
PTHP 10.9 EER_	MF: Low Income							
991	Jan 1, 2016		155	per measure	0.114	244.3	per measure	15
PTHP 9.1 EER_N	MF: Low Income							
992	Jan 1, 2016		169	per measure	0.157	336.2	per measure	15
RCA 10% impro	vement_MF: Low	Income						
995	Jan 1, 2017		75	per measure	0.239	512	per measure	10

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
RCA 10% impro	vement_SF: Low I	ncome							
996	Jan 1, 2016		80	per measure	0.089	191	per measure	10	
Refrigerator Coil	Cleaning Brush_S	SF: Low Income							
1172	Jan 2, 2013		8.5	per measure	0.002	16.5	per measure	2	
Setback thermost	tat - full setback_N	IF: Low Income							
993	Jan 1, 2016		75	per measure	0.109	234	per measure	9	
Setback thermost	tat - full setback_S	F: Low Income							
994	Jan 1, 2016		75	per measure	0.109	234	per measure	15	
Smart Strip plug	outlet_MF: Low I	ncome							
1030	Jan 1, 2017		40	per measure	0.011	70	per measure	5	
Water Heater, Ta	ank Blanket-Insula	tion - Electric_Ml	F: Low Income						
1039	Jan 1, 2016		18	per measure	0.004	41	per measure	15	
Water Heater, Ta	Water Heater, Tank Blanket-Insulation - Electric_SF: Low Income								
1041	Jan 1, 2016		58.81	per measure	0.016	180.0	per measure	15	

Measure Reference No.	Start Date	End Date	Incremental Cost		Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Window Film_M	Window Film_MF: Low Income								
970	Jan 1, 2016		538	per measure	0.1515	325	per measure	10	
Window Replacement_SF: Low Income									
1211	Jan 1, 2016		14	per sq ft	0.0012	2.53	per sq ft	20	

Energy Efficiency Kit Program Measures

The Kit Program offers free home energy kits to customers and may include lighting and hot water measures for customers with electric water heaters. The kits may be distributed through schools, directly installed into multifamily properties, or distributed to targeted customers that request them.

The following is a listing of all the Kit Measures extracted from iTRL.

Ameren Missouri Kit Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost		Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Dirty filter alarm	_LI: Kits								
1264	Jan 1, 2016		5	per measure	0.051	110	per measure	14	
Dirty filter alarm	Dirty filter alarm_MF: Kits								
1225	Jan 1, 2017		5	per measure	0.091	195.8	per measure	14	
Dirty filter alarm	Dirty filter alarm_SF: Kits								
1224	Jan 1, 2016		5	per measure	0.051	110	per measure	14	
Dirty filter alarm	Dirty filter alarm_SK: Kits								
1226	Jan 1, 2017		5	per measure	0.091	195.8	per measure	14	
LED - 12 W_LI: Kits									
1263	Jan 1, 2016		0	per measure	0.004	25.8	per measure	25	
LED - 12 W_MF: Kits									
1203	Jan 1, 2017		0	per bulb	0.006	37.7	per bulb	25	
LED - 12 W_SF: Kits									
1202	Jan 1, 2017		0	per bulb	0.004	23.9	per bulb	25	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
LED - 12 W_SK:	Kits								
1227	Jan 1, 2017		0	per bulb	0.006	37.7	per bulb	25	
Low Flow Faucet	Low Flow Faucet Aerator_LI: Kits								
1262	Jan 1, 2016		3	per measure	0.003	39	per measure	12	
Low Flow Faucet	Low Flow Faucet Aerator - Bathroom _MF: Kits								
865	Jan 1, 2017		2.5	per measure	0.003	38	per measure	12	
Low Flow Faucet	Low Flow Faucet Aerator - Bathroom_SK: Kits								
1228	Jan 1, 2017		2.5	per measure	0.002	22.1	per measure	12	
Low Flow Faucet	Low Flow Faucet Aerator - Electric water heater_SF: Kits								
864	Jan 1, 2017		2.5	per measure	0.002	20.3	per measure	12	
Low Flow Faucet Aerator - Kitchen _MF: Kits									
1273	Jan 1, 2017		2.5	per measure	0.007	78.3	per measure	12	
Low Flow Faucet Aerator - Kitchen_SK: Kits									
1274	Jan 1, 2017		2.5	per measure	0.007	79.7	per measure	12	
Low Flow Showerhead - Electric water heater_LI: Kits									
1261	Jan 1, 2016		9	per measure	0.019	218	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Low Flow Showe	Low Flow Showerhead - Electric water heater_MF: Kits									
867	Jan 1, 2017		9	per measure	0.018	206.2	per measure	12		
Low Flow Showe	Low Flow Showerhead - Electric water heater_SF: Kits									
866	Jan 1, 2017		9	per measure	0.009	104.3	per measure	12		
Low Flow Showe	Low Flow Showerhead - Electric water heater_SK: Kits									
1229	Jan 1, 2017		9	per measure	0.016	181.6	per measure	12		
Pipe Insulation_N	Pipe Insulation_MF: Kits									
868	Jan 1, 2017		0.42	per ft	0.002	22.7	per ft	6		
Pipe Insulation_S	Pipe Insulation_SF: Kits									
1167	Jan 1, 2017		0.42	per ft	0.001	10.7	per ft	6		
Pipe Insulation_SK: Kits										
1272	Jan 1, 2017		0.42	per ft	0.002	26.0	per ft	6		
Refrigerator Coil	Refrigerator Coil Cleaning Brush_LI: Kits									
1265	Jan 1, 2016		3	per measure	0.002	16.5	per measure	2		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Refrigerator Coil Cleaning Brush_MF: Kits								
1255	Jan 1, 2016		3	per measure	0.002	16.5	per measure	2
Refrigerator Coil Cleaning Brush_SF: Kits								
1256	Jan 1, 2016		3	per measure	0.002	16.5	per measure	2
Refrigerator Coil Cleaning Brush_SK: Kits								
1254	Jan 1, 2016		3	per measure	0.002	16.5	per measure	2

Home Energy Report Program Measures

The Home Energy Report Program encourages energy consumption behavior changes of participating residential customers by mailing Home Energy Reports to targeted residential customers on an established frequency for the duration of the program.

The following is a listing of all the Home Energy Report Measures extracted from iTRL.

Ameren Missouri Behavior Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Home Energy Re	eport: Behavior							
1223	Jan 1, 2016		0	per home	.07	150	per home	1

Business Energy Efficiency Program Measures

The Business Energy Efficiency Prescriptive measures are listed below primarily for the Standard program. The Small Business Direct Install (SBDI) Program can share most of these measures when appropriate for small businesses. The Custom, Retro-Commissioning (RCx) program and New Construction program measures are similar in that they require calculation of the savings by the methodology outlined in the Custom Section. Where they differ is RCx only applies to Compressed Air, Building Automation System (BAS), and Lighting. The New Construction program can include both Custom measures and those listed in the Prescriptive measure list. The individual measures included in the Prescriptive measure list may be applied to other Business Programs as long as the attributes associated with the energy and demand savings are consistent with the deemed values.

The following is a listing of all the Business Prescriptive Measures extracted from iTRL, Ameren Missouri's on-line database for maintaining information on energy saving measures.

Ameren Missouri Prescriptive Measures Listing for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
4L T9: Biz Presc	riptive							
3059	Jan 1, 2016		219.50	per measure	0.2216	1166.29	per measure	11
6L T8: Biz Presc	riptive							
3060	Jan 1, 2016		208	per measure	0.1579	830.97	per measure	11
AC 135,000 - 240	,000: Biz Prescript	ive						
726	Jan 2, 2013		110.89	per ton	0.1084	119.0	per ton	15
AC 240,000 - 760	,000: Biz Prescript	ive						
726-1	Jan 2, 2016		115.13	per ton	0.0568	62.4	per ton	15
AC greater than	760,000: Biz Presc	riptive						
727	Jan 2, 2013		98.38	per ton	0.0839	92.1	per ton	15
AC less than 65,0	000 1 Ph: Biz Presc	riptive						
728	Jan 2, 2013		55.57	per ton	0.0594	65.2	per ton	15
Air-Cooled Recip	Chiller COP = 2.8	8, IPLV = 3.41: Biz	z Prescriptive					
2800	Jan 1, 2016		45.07	per ton	0.02	126.5	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Air-Cooled Recip	Chiller COP = 2.8	8, IPLV = 3.89: Biz	z Prescriptive						
2801 Jan 1, 2016 92.04 per ton 0.041 268.7 per ton 20									
Air-Cooled Recip	Air-Cooled Recip Chiller COP = 2.8, IPLV = 4.24: Biz Prescriptive								
2802	Jan 1, 2016		119.59	per ton	0.053	338.6	per ton	20	
Air-Cooled Recip	Chiller COP = 3.0	08, IPLV = 3.36: B	iz Prescriptive						
2803	Jan 1, 2016		58.58	per ton	0.104	222.9	per ton	20	
Air-Cooled Recip	Chiller COP = 3.0	08, IPLV = 3.76: B	iz Prescriptive						
2804	Jan 1, 2016		99.68	per ton	0.123	338	per ton	20	
Air-Cooled Recip	Chiller COP = 3.0	08, IPLV = 4.28: B	iz Prescriptive						
2805	Jan 1, 2016		141.63	per ton	0.142	467.5	per ton	20	
Air-Cooled Recip	Chiller COP = 3.0	08, IPLV = 4.67: B	iz Prescriptive						
2806	Jan 1, 2016		166.96	per ton	0.152	531.2	per ton	20	
Air-Cooled Recip	Chiller COP = 3.3	36, IPLV = 3.66: B	iz Prescriptive						
2807	Jan 1, 2016		106.23	per ton	0.192	410.9	per ton	20	
Air-Cooled Recip	Chiller COP = 3.3	36, IPLV = 4.10: B	iz Prescriptive						
2808	Jan 1, 2016		144.29	per ton	0.209	516.5	per ton	20	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Air-Cooled Recip	Chiller COP = 3.3	36, IPLV = 4.67: B	iz Prescriptive					
2809	Jan 1, 2016		182.94	per ton	0.227	635.2	per ton	20
Air-Cooled Recip	Chiller COP = 3.3	36, IPLV = 5.09: B	iz Prescriptive					
2810	Jan 1, 2016		205.88	per ton	0.236	693.6	per ton	20
Air-Cooled Screv	v Chiller COP = 2.	8, IPLV = 3.46: Bi	z Prescriptive					
2811	Jan 1, 2016		50.57	per ton	0.024	142.4	per ton	20
Air-Cooled Screv	v Chiller COP = 2.	8, IPLV = 3.64: Bi	z Prescriptive					
2812	Jan 1, 2016		69.12	per ton	0.044	204.6	per ton	20
Air-Cooled Screv	v Chiller COP = 2.	8, IPLV = 4.75: Bi	z Prescriptive					
2813	Jan 1, 2016		152.46	per ton	0.065	380.3	per ton	20
Air-Cooled Screv	v Chiller COP = 3.	08, IPLV = 3.36: F	Biz Prescriptive					
2814	Jan 1, 2016		58.58	per ton	0.106	223.5	per ton	20
Air-Cooled Screv	Air-Cooled Screw Chiller COP = 3.08, IPLV = 3.80: Biz Prescriptive							
2815	Jan 1, 2016		103.31	per ton	0.128	353.2	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Air-Cooled Screv	v Chiller COP = 3.	08, IPLV = 4.00: B	Biz Prescriptive						
2816 Jan 1, 2016 120.4 per ton 0.146 409.8 per ton 20									
Air-Cooled Screv	Air-Cooled Screw Chiller COP = 3.08, IPLV = 5.22: Biz Prescriptive								
2817	Jan 1, 2016		196.24	per ton	0.166	569.8	per ton	20	
Air-Cooled Screv	v Chiller COP = 3.	36, IPLV = 3.66: B	Biz Prescriptive						
2818	Jan 1, 2016		106.23	per ton	0.196	412.2	per ton	20	
Air-Cooled Screv	v Chiller COP = 3.	36, IPLV = 4.15: B	Biz Prescriptive						
2819	Jan 1, 2016		148.11	per ton	0.216	531	per ton	20	
Air-Cooled Screv	v Chiller COP = 3.	36, IPLV = 4.42: B	Biz Prescriptive						
2820	Jan 1, 2016		167.22	per ton	0.233	583	per ton	20	
Air-Cooled Screv	v Chiller COP = 3.	36, IPLV = 5.69: B	Biz Prescriptive						
2821	Jan 1, 2016		232.77	per ton	0.251	729.6	per ton	20	
Anti-Sweat Heat	er Controls Cool	er: Biz Prescriptiv	re						
838	Jan 2, 2013		151	per measure	0.1855	1366.9	per measure	12	
Beverage Vendin	g Machine Contro	l: Biz Prescriptive							
839	Jan 1, 2016		216	per measure	0.1086	800	per measure	5	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Built-in to individ	dual fixtures: Biz P	rescriptive							
3061	Jan 1, 2016		1	per measure	0.0735	387	per measure	11	
Central Lighting	Control: College/U	Jniversity: Biz Pro	escriptive						
776-1	Jan 1, 2016		3700	per 10,000 square feet	3.6517	19223.2	per 10,000 square feet	12	
Central Lighting	Control: Elementa	ary School: Biz Pr	escriptive						
776-10	Jan 1, 2016		3700	per 10,000 square feet	1.4378	7568.8	per 10,000 square feet	12	
Central Lighting	Control: Exterior:	Biz Prescriptive							
776-15	Jan 1, 2016		3700	per 10,000 square feet	2.6001	13687.5	per 10,000 square feet	12	
Central Lighting	Control: Garage,	24/7 lighting: Biz	Prescriptive						
776-19	Jan 1, 2016		3700	per 10,000 square feet	5.2003	27375.0	per 10,000 square feet	12	
Central Lighting	Control: Garage:	Biz Prescriptive							
776-4	Jan 1, 2016		3700	per 10,000 square feet	2.1015	11062.5	per 10,000 square feet	12	
Central Lighting	Central Lighting Control: Grocery: Biz Prescriptive								
776-5	Jan 1, 2016		3700	per 10,000 square feet	3.8611	20325.5	per 10,000 square feet	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Central Lighting	Control: Heavy In	dustry: Biz Presc	riptive						
776-11	Jan 1, 2016		3700	per 10,000 square feet	3.6497	19212.4	per 10,000 square feet	12	
Central Lighting	Central Lighting Control: High School/Middle School: Biz Prescriptive								
776-12	Jan 1, 2016		3700	per 10,000 square feet	2.5592	13471.9	per 10,000 square feet	12	
Central Lighting	Control: Hospital:	Biz Prescriptive							
776-6	Jan 1, 2016		3700	per 10,000 square feet	3.1195	16421.4	per 10,000 square feet	12	
Central Lighting	Control: Hotel/Mo	otel Common Area	as: Biz Prescriptive						
776-7	Jan 1, 2016		3700	per 10,000 square feet	4.5893	24158.7	per 10,000 square feet	12	
Central Lighting	Control: Hotel/Mo	otel Guest Rooms:	Biz Prescriptive						
776-13	Jan 1, 2016		3700	per 10,000 square feet	0.4613	2428.1	per 10,000 square feet	12	
Central Lighting	Control: Light Ind	dustry: Biz Prescr	iptive						
776-9	Jan 1, 2016		3700	per 10,000 square feet	3.4421	18119.8	per 10,000 square feet	12	
Central Lighting	Central Lighting Control: Miscellaneous: Biz Prescriptive								
776-14	Jan 1, 2016		3700	per 10,000 square feet	3.2901	17319.9	per 10,000 square feet	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Central Lighting	Control: Multifan	nily Common Area	s: Biz Prescriptive						
776-16	Jan 1, 2016		3700	per 10,000 square feet	3.5321	18593.8	per 10,000 square feet	12	
Central Lighting	Control: Office: B	iz Prescriptive							
776-8	Jan 1, 2016		3700	per 10,000 square feet	2.764	14549.9	per 10,000 square feet	12	
Central Lighting	Control: Religious	s Worship/Church	: Biz Prescriptive						
776-18	Jan 1, 2016		3700	per 10,000 square feet	0.9878	5200.0	per 10,000 square feet	12	
Central Lighting	Control: Restaura	nt: Biz Prescripti	ve						
776-3	Jan 1, 2016		3700	per 10,000 square feet	3.4119	17960.9	per 10,000 square feet	12	
Central Lighting	Control: Retail/Se	ervice: Biz Prescri	otive						
776-2	Jan 1, 2016		3700	per 10,000 square feet	3.0003	15793.9	per 10,000 square feet	12	
Central Lighting	Control: Warehou	ıse: Biz Prescripti	ve						
776-20	Jan 1, 2016		3700	per 10,000 square feet	2.9961	15771.8	per 10,000 square feet	12	
Ceramic Metal H	Ceramic Metal Halide 20-100W: College/University: Biz Prescriptive								
731-1	Jan 1, 2016		225	per measure	0.1414	744.3	per measure	16	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Ceramic Metal H	Ialide 20-100W: El	ementary School:	Biz Prescriptive						
731-10	Jan 1, 2016		225	per measure	0.0557	293.1	per measure	16	
Ceramic Metal H	Ialide 20-100W: Ex	terior: Biz Prescr	iptive						
731-15	Jan 1, 2016		225	per measure	0.1007	530.0	per measure	16	
Ceramic Metal H	Ialide 20-100W: Ga	arage, 24/7 lighting	g: Biz Prescriptive						
731-19	Jan 1, 2016		225	per measure	0.2014	1060.0	per measure	16	
Ceramic Metal H	Ialide 20-100W: Ga	arage: Biz Prescri	ptive						
731-4	Jan 1, 2016		225	per measure	0.0814	428.3	per measure	16	
Ceramic Metal H	Ialide 20-100W: Gi	rocery: Biz Prescr	iptive						
731-5	Jan 1, 2016		225	per measure	0.1495	787.0	per measure	16	
Ceramic Metal H	Talide 20-100W: H	eavy Industry: Biz	Prescriptive						
731-11	Jan 1, 2016		225	per measure	0.1413	743.9	per measure	16	
Ceramic Metal H	Ceramic Metal Halide 20-100W: High School/Middle School: Biz Prescriptive								
731-12	Jan 1, 2016		225	per measure	0.0991	521.6	per measure	16	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Ceramic Metal H	Ialide 20-100W: H	ospital: Biz Prescr	iptive							
731-6 Jan 1, 2016 225 per measure 0.1208 635.8 per measure 16										
Ceramic Metal H	Ialide 20-100W: H	otel/Motel Commo	on Areas: Biz Presc	riptive						
731-7	Jan 1, 2016		225	per measure	0.1777	935.4	per measure	16		
Ceramic Metal H	Ialide 20-100W: H	otel/Motel Guest R	Rooms: Biz Prescrij	ptive						
731-13	Jan 1, 2016		225	per measure	0.0179	94.0	per measure	16		
Ceramic Metal H	Ialide 20-100W: Li	ght Industry: Biz	Prescriptive							
731-9	Jan 1, 2016		225	per measure	0.1333	701.6	per measure	16		
Ceramic Metal H	Ialide 20-100W: M	iscellaneous: Biz F	Prescriptive							
731-14	Jan 1, 2016		225	per measure	0.1274	670.6	per measure	16		
Ceramic Metal H	Ialide 20-100W: M	ultifamily Commo	on Areas: Biz Presc	riptive						
731-16	Jan 1, 2016		225	per measure	0.1368	720.0	per measure	16		
Ceramic Metal H	Ialide 20-100W: Of	ffice: Biz Prescript	tive							
731-8	Jan 1, 2016		225	per measure	0.107	563.4	per measure	16		
Ceramic Metal H	Ialide 20-100W: Ro	eligious Worship/C	Church: Biz Prescr	iptive						
731-18	Jan 1, 2016		225	per measure	0.0382	201.3	per measure	16		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Ceramic Metal H	Talide 20-100W: Re	estaurant: Biz Pre	scriptive					
731-3	Jan 1, 2016		225	per measure	0.1321	695.4	per measure	16
Ceramic Metal H	Talide 20-100W: Re	etail/Service: Biz F	rescriptive					
731-2	Jan 1, 2016		225	per measure	0.1162	611.5	per measure	16
Ceramic Metal H	Ialide 20-100W: W	arehouse: Biz Pre	scriptive					
731-20	Jan 1, 2016		225	per measure	0.116	610.7	per measure	16
Delamping: Biz F	Prescriptive							
3084	Jan 1, 2017		1.5	per foot	0.0058	30.4	per ft	15
Electronics - Moi	nitor Power Manag	gement: Biz Presci	riptive					
3065	Jan 1, 2016		6.03	per building	0.2438	1,767.47	per building	5
ENERGY STAR	Commercial Glass	Door Freezers 15	to 30 ft3: Biz Pres	criptive				
827	Jan 2, 2013		950	per measure	0.272	2004.0	per measure	12
ENERGY STAR	Commercial Glass	Door Freezers 30	to 50ft3: Biz Preso	criptive				
828	Jan 2, 2013		1307	per measure	0.5252	3869.0	per measure	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
ENERGY STAR	Commercial Glass	S Door Freezers le	ss than 15ft3: Biz l	Prescriptive				
826	Jan 2, 2013		220	per measure	0.2298	1693	per measure	12
ENERGY STAR	Commercial Glass	s Door Freezers m	ore than 50ft3: Biz	Prescriptive				
829	Jan 2, 2013		2300	per measure	0.9662	7118.0	per measure	12
ENERGY STAR	Commercial Glass	Door Refrigerate	ors 15 to 30 ft3: Biz	Prescriptive				
843	Jan 1, 2016		500	per measure	0.0907	668	per measure	12
ENERGY STAR	Commercial Glass	S Door Refrigerato	ors less than 15ft3:	Biz Prescriptiv	e			
842	Jan 1, 2016		250	per measure	0.098	722	per measure	12
ENERGY STAR	Commercial Solid	Door Freezers 15	to 30 ft3: Biz Preso	criptive				
831	Jan 2, 2013		400	per measure	0.118	869.0	per measure	12
ENERGY STAR	Commercial Solid	Door Freezers 30	to 50ft3: Biz Presc	riptive				
832	Jan 2, 2013		550	per measure	0.2346	1728.0	per measure	12
ENERGY STAR	Commercial Solid	Door Freezers le	ss than 15ft3: Biz F	Prescriptive				
830	Jan 2, 2013		150	per measure	0.0808	595.0	per measure	12
ENERGY STAR	Commercial Solid	Door Freezers mo	ore than 50ft3: Biz	Prescriptive				
833	Jan 2, 2013		700	per measure	0.51	3757.0	per measure	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
ENERGY STAR	ENERGY STAR Hot Holding Cabinets Full Size - Electric: Biz Prescriptive									
679 Jan 1, 2016 1783 per measure 1.3241 6624 per measure 12										
ENERGY STAR	Ice Machines 500	to 1000 lbs: Biz Pı	escriptive							
835	Jan 1, 2016		1500	per measure	0.1211	892	per measure	12		
ENERGY STAR	Ice Machines less	than 500 lbs: Biz	Prescriptive							
834	Jan 1, 2016		600	per measure	0.0813	599	per measure	12		
ENERGY STAR	Ice Machines mor	e than 1000 lbs: B	iz Prescriptive							
836	Jan 1, 2016		2000	per measure	0.1746	1286	per measure	12		
Energy Star Lap	top: Biz Prescripti	ve								
3066	Jan 1, 2016		0.51	per building	0.1035	750.40	per building	4		
Energy Star POS	Terminal: Biz Pro	escriptive								
3067	Jan 1, 2016		292.72	per building	0.3046	2,208.48	per building	4		
Energy Star Serv	ver: Biz Prescriptiv	re								
3068	Jan 1, 2016		0.04	per building	0.3472	2,516.82	per building	3		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
ENERGY STAR	Steam Cookers 3	Pan - Electric: Biz	Prescriptive						
675 Jan 2, 2013 4150 per measure 2.2364 11188.0 per measure 12									
ENERGY STAR	Steam Cookers 4	Pan - Electric: Biz	Prescriptive						
676	Jan 2, 2013		4150	per measure	2.4306	12159.2	per measure	12	
ENERGY STAR	Steam Cookers 5	Pan - Electric: Biz	Prescriptive						
677	Jan 2, 2013		4150	per measure	2.6264	13138.9	per measure	12	
ENERGY STAR	Steam Cookers 6	Pan - Electric: Biz	Prescriptive						
678	Jan 2, 2013		4150	per measure	3.0323	15169.4	per measure	12	
ENERGY STAR	Vending Machine	: Biz Prescriptive							
846	Jan 1, 2016		140	per measure	0.1362	1003.35	per measure	10	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: College/U1	niversity: Biz Pr	rescriptive				
738-1	Jan 1, 2017		500	per measure	0.0030	525.9	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Elementar	y School: Biz P	rescriptive				
738-10	Jan 1, 2017		500	per measure	0.0012	207.1	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Exterior: 1	Biz Prescriptive					
738-15	Jan 1, 2017		500	per measure	0.0021	374.5	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Garage HID repl	acement above 175	SW to 250W HID 1	retrofit: Garage, 24	1/7 lighting: Biz	Prescriptive				
738-19	Jan 1, 2017		500	per measure	0.0042	749.0	per measure	12	
Garage HID repl	acement above 175	SW to 250W HID	retrofit: Garage: B	iz Prescriptive					
738-4	Jan 1, 2017		500	per measure	0.0017	302.7	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Grocery: I	Biz Prescriptive					
738-5	Jan 1, 2017		500	per measure	0.0031	556.1	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Heavy Ind	ustry: Biz Preso	riptive				
738-11	Jan 1, 2017		500	per measure	0.0030	525.7	per measure	12	
Garage HID repl	acement above 175	W to 250W HID 1	retrofit: High Scho	ol/Middle Schoo	ol: Biz Prescriptive				
738-12	Jan 1, 2017		500	per measure	0.0021	368.6	per measure	12	
Garage HID repl	acement above 175	SW to 250W HID 1	retrofit: Hospital: l	Biz Prescriptive					
738-6	Jan 1, 2017		500	per measure	0.0025	449.3	per measure	12	
Garage HID repl	Garage HID replacement above 175W to 250W HID retrofit: Hotel/Motel Common Areas: Biz Prescriptive								
738-7	Jan 1, 2017		500	per measure	0.0037	661.0	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Garage HID repl	acement above 175	5W to 250W HID	retrofit: Hotel/Mot	el Guest Rooms	: Biz Prescriptive				
738-13	Jan 1, 2017		500	per measure	.0004	66.4	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID	retrofit: Light Indu	ıstry: Biz Prescı	riptive				
738-9	Jan 1, 2017		500	per measure	0.0028	495.8	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID	retrofit: Miscellane	eous: Biz Prescr	iptive				
738-14	Jan 1, 2017		500	per measure	0.0027	473.9	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Multifami	ly Common Are	as: Biz Prescriptive				
738-16	Jan 1, 2017		500	per measure	0.0029	508.7	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID	retrofit: Office: Biz	z Prescriptive					
738-8	Jan 1, 2017		500	per measure	0.0022	398.1	per measure	12	
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Religious \	Worship/Churcl	h: Biz Prescriptive				
738-18	Jan 1, 2017		500	per measure	0.0008	142.3	per measure	12	
Garage HID repl	Garage HID replacement above 175W to 250W HID retrofit: Restaurant: Biz Prescriptive								
738-3	Jan 1, 2017		500	per measure	0.0028	491.4	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Garage HID repl	acement above 175	5W to 250W HID	retrofit: Retail/Ser	vice: Biz Prescri	ptive				
738-2 Jan 1, 2017 500 per measure 0.0024 432.1 per measure 12									
Garage HID repl	acement above 175	5W to 250W HID 1	retrofit: Warehous	e: Biz Prescript	ive				
738-20	Jan 1, 2017		500	per measure	0.0024	431.5	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: College/U1	niversity: Biz Pr	escriptive				
739-1	Jan 1, 2017		800	per measure	0.0074	1326.2	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Elementar	y School: Biz Pi	rescriptive				
739-10	Jan 1, 2017		800	per measure	0.0029	522.2	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Exterior: 1	Biz Prescriptive					
739-15	Jan 1, 2017		800	per measure	0.0053	944.3	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Garage, 24	1/7 lighting: Biz	Prescriptive				
739-19	Jan 1, 2017		800	per measure	0.0106	1888.6	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Garage: B	iz Prescriptive					
739-4	Jan 1, 2017		800	per measure	0.0043	763.2	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Grocery: 1	Biz Prescriptive					
739-5	Jan 1, 2017		800	per measure	0.0079	1402.2	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Garage HID repl	acement above 250	W to 400W HID 1	etrofit: Heavy Ind	ustry: Biz Preso	riptive				
739-11	Jan 1, 2017		800	per measure	0.0074	1325.5	per measure	12	
Garage HID repl	acement above 250	W to 400W HID	etrofit: High Scho	ol/Middle Schoo	ol: Biz Prescriptive				
739-12	Jan 1, 2017		800	per measure	0.0052	929.4	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	etrofit: Hospital: l	Biz Prescriptive					
739-6	Jan 1, 2017		800	per measure	0.0064	1132.9	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Hotel/Mot	el Common Are	as: Biz Prescriptive				
739-7	Jan 1, 2017		800	per measure	0.0094	1666.7	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Hotel/Mot	el Guest Rooms	: Biz Prescriptive				
739-13	Jan 1, 2017		800	per measure	0.0009	167.5	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	etrofit: Light Indu	ıstry: Biz Prescı	riptive				
739-9	Jan 1, 2017		800	per measure	0.0070	1250.1	per measure	12	
Garage HID repl	Garage HID replacement above 250W to 400W HID retrofit: Miscellaneous: Biz Prescriptive								
739-14	Jan 1, 2017		800	per measure	0.0067	1194.9	per measure	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Multifami	ly Common Are	as: Biz Prescriptive				
739-16 Jan 1, 2017 800 per measure 0.0072 1282.8 per measure 12									
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Office: Biz	Prescriptive					
739-8	Jan 1, 2017		800	per measure	0.0056	1003.8	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Religious \	Worship/Churcl	n: Biz Prescriptive				
739-18	Jan 1, 2017		800	per measure	0.0020	358.7	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Restauran	t: Biz Prescripti	ve				
739-3	Jan 1, 2017		800	per measure	0.0070	1239.1	per measure	12	
Garage HID repl	acement above 250	OW to 400W HID 1	retrofit: Retail/Ser	vice: Biz Prescri	ptive				
739-2	Jan 1, 2017		800	per measure	0.0061	1089.6	per measure	12	
Garage HID repl	acement above 250)W to 400W HID 1	retrofit: Warehous	e: Biz Prescript	ive				
739-20	Jan 1, 2017		800	per measure	0.0061	1088.1	per measure	12	
Garage HID repl	acement to 175W l	HID retrofit: Biz F	Prescriptive						
3075	Jan 1, 2016		400	per measure	0.1161	611.0	per measure	12	
GSHP under 135	,000 17EER: Biz P	rescriptive							
686	Jan 2, 2013		180	per ton	0.1066	240.1	per ton	15	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
GSHP under 135	,000 19EER: Biz P	rescriptive						
687	Jan 2, 2013		180	per ton	0.1356	305.4	per ton	15
High Bay 3L T5H	HO Replacing 250	W HID: College/U	niversity: Biz Pres	criptive				
757-1	Jan 1, 2016		180	per fixture	0.1356	713.6	per fixture	12
High Bay 3L T5H	HO Replacing 250°	W HID: Elementa	ry School: Biz Pres	scriptive				
757-10	Jan 1, 2016		180	per fixture	0.0534	281.0	per fixture	12
High Bay 3L T5H	HO Replacing 250°	W HID: Exterior:	Biz Prescriptive					
757-15	Jan 1, 2016		180	per fixture	0.0965	508.1	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Garage, 2	4/7 lighting: Biz Pı	rescriptive				
757-19	Jan 1, 2016		180	per fixture	0.193	1016.2	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Garage: I	Biz Prescriptive					
757-4	Jan 1, 2016		180	per fixture	0.078	410.6	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Grocery:	Biz Prescriptive					
757-5	Jan 1, 2016		180	per fixture	0.1433	754.5	per fixture	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
High Bay 3L T5H	HO Replacing 250	W HID: Heavy Inc	dustry: Biz Prescri	ptive					
757-11 Jan 1, 2016 180 per fixture 0.1355 713.2 per fixture 12									
High Bay 3L T5H	HO Replacing 250	W HID: High Scho	ool/Middle School:	Biz Prescriptive	e				
757-12	Jan 1, 2016		180	per fixture	0.095	500.1	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Hospital:	Biz Prescriptive						
757-6	Jan 1, 2016		180	per fixture	0.1158	609.6	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Hotel/Mo	tel Common Areas	: Biz Prescripti	ve				
757-7	Jan 1, 2016		180	per fixture	0.1704	896.8	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Hotel/Mo	tel Guest Rooms: I	Biz Prescriptive					
757-13	Jan 1, 2016		180	per fixture	0.0171	90.1	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Light Ind	ustry: Biz Prescrip	otive					
757-9	Jan 1, 2016		180	per fixture	0.1278	672.6	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Miscellan	eous: Biz Prescript	tive					
757-14	Jan 1, 2016		180	per fixture	0.1221	642.9	per fixture	12	
High Bay 3L T5H	HO Replacing 250	W HID: Multifam	ily Common Areas	: Biz Prescripti	ve				
757-16	Jan 1, 2016		180	per fixture	0.1311	690.2	per fixture	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
High Bay 3L T5H	HO Replacing 250	W HID: Office: Bi	z Prescriptive					
757-8	Jan 1, 2016		180	per fixture	0.1026	540.1	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Religious	Worship/Church:	Biz Prescriptive	,			
757-18	Jan 1, 2016		180	per fixture	0.0367	193.0	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Restaurai	nt: Biz Prescriptive	,				
757-3	Jan 1, 2016		180	per fixture	0.1266	666.7	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Retail/Ser	vice: Biz Prescript	ive				
757-2	Jan 1, 2016		180	per fixture	0.1114	586.3	per fixture	12
High Bay 3L T5H	HO Replacing 250	W HID: Warehous	se: Biz Prescriptive	2				
757-20	Jan 1, 2016		180	per fixture	0.1112	585.4	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: College/Univer	sity: Biz Prescr	iptive			
758-1	Jan 1, 2016		700	per fixture	0.409	2153.0	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Elementary Sc	hool: Biz Prescr	riptive			
758-10	Jan 1, 2016		700	per fixture	0.161	847.7	per fixture	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Exterior: Biz F	Prescriptive						
758-15	758-15 Jan 1, 2016 700 per fixture 0.2912 1533.0 per fixture 12									
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Garage, 24/7 li	ghting: Biz Pres	scriptive					
758-19	Jan 1, 2016		700	per fixture	0.5824	3066.0	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Garage: Biz Pı	escriptive						
758-4	Jan 1, 2016		700	per fixture	0.2354	1239.0	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Grocery: Biz P	rescriptive						
758-5	Jan 1, 2016		700	per fixture	0.4325	2276.5	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Heavy Industr	y: Biz Prescript	ive					
758-11	Jan 1, 2016		700	per fixture	0.4088	2151.8	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: High School/M	iddle School: B	iz Prescriptive					
758-12	Jan 1, 2016		700	per fixture	0.2866	1508.9	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Hospital: Biz F	Prescriptive						
758-6	Jan 1, 2016		700	per fixture	0.3494	1839.2	per fixture	12		
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Hotel/Motel Co	ommon Areas: I	Biz Prescriptive					
758-7	Jan 1, 2016		700	per fixture	0.514	2705.8	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Hotel/Motel G	uest Rooms: Biz	Prescriptive			
758-13	Jan 1, 2016		700	per fixture	0.0517	272.0	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Light Industry	: Biz Prescriptiv	ve			
758-9	Jan 1, 2016		700	per fixture	0.3855	2029.4	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Miscellaneous:	Biz Prescriptiv	e			
758-14	Jan 1, 2016		700	per fixture	0.3685	1939.8	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Multifamily Co	ommon Areas: I	Biz Prescriptive			
758-16	Jan 1, 2016		700	per fixture	0.3956	2082.5	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Office: Biz Pre	scriptive				
758-8	Jan 1, 2016		700	per fixture	0.3096	1629.6	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Religious Wor	ship/Church: Bi	z Prescriptive			
758-18	Jan 1, 2016		700	per fixture	0.1106	582.4	per fixture	12
High Bay 6L T5H	HO Double fixture	replace 1000W H	ID: Restaurant: Bi	z Prescriptive				
758-3	Jan 1, 2016		700	per fixture	0.3821	2011.6	per fixture	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay 6L T5H	O Double fixture	replace 1000W H	ID: Retail/Service:	Biz Prescriptiv	e					
758-2	Jan 1, 2016		700	per fixture	0.336	1768.9	per fixture	12		
High Bay 6L T5H	High Bay 6L T5HO Double fixture replace 1000W HID: Warehouse: Biz Prescriptive									
758-20	Jan 1, 2016		700	per fixture	0.3356	1766.4	per fixture	12		
High Bay Fluores	High Bay Fluorescent 4LF32T8 Replacing 250W HID: College/University: Biz Prescriptive									
759-1	Jan 1, 2016		160	per fixture	0.2248	1183.5	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	D: Elementary Scho	ool: Biz Prescrip	otive					
759-10	Jan 1, 2016		160	per fixture	0.0885	466.0	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Exterior: Biz Pr	escriptive						
759-15	Jan 1, 2016		160	per fixture	0.1601	842.7	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	D: Garage, 24/7 ligl	nting: Biz Presc	riptive					
759-19	Jan 1, 2016		160	per fixture	0.3201	1685.3	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Garage: Biz Pre	scriptive						
759-4	Jan 1, 2016		160	per fixture	0.1294	681.1	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	D: Grocery: Biz Pro	escriptive				
759-5	Jan 1, 2016		160	per fixture	0.2377	1251.3	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	D: Heavy Industry:	Biz Prescriptiv	e			
759-11	Jan 1, 2016		160	per fixture	0.2247	1182.8	per fixture	12
High Bay Fluorescent 4LF32T8 Replacing 250W HID: High School/Middle School: Biz Prescriptive								
759-12	Jan 1, 2016		160	per fixture	0.1576	829.4	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Hospital: Biz Pr	escriptive				
759-6	Jan 1, 2016		160	per fixture	0.1921	1011.0	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Hotel/Motel Con	nmon Areas: Bi	z Prescriptive			
759-7	Jan 1, 2016		160	per fixture	0.2825	1487.3	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Hotel/Motel Gue	est Rooms: Biz I	Prescriptive			
759-13	Jan 1, 2016		160	per fixture	0.0284	149.5	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	: Light Industry:	Biz Prescriptive	·			
759-9	Jan 1, 2016		160	per fixture	0.2119	1115.5	per fixture	12
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Miscellaneous: I	Biz Prescriptive				
759-14	Jan 1, 2016		160	per fixture	0.2026	1066.3	per fixture	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Multifamily Con	nmon Areas: Bi	z Prescriptive					
759-16	Jan 1, 2016		160	per fixture	0.2175	1144.7	per fixture	12		
High Bay Fluorescent 4LF32T8 Replacing 250W HID: Office: Biz Prescriptive										
759-8	Jan 1, 2016		160	per fixture	0.1702	895.8	per fixture	12		
High Bay Fluores	High Bay Fluorescent 4LF32T8 Replacing 250W HID: Religious Worship/Church: Biz Prescriptive									
759-18	Jan 1, 2016		160	per fixture	0.0608	320.1	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII	D: Restaurant: Biz	Prescriptive						
759-3	Jan 1, 2016		160	per fixture	0.2101	1105.8	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Retail/Service: E	Biz Prescriptive						
759-2	Jan 1, 2016		160	per fixture	0.1847	972.3	per fixture	12		
High Bay Fluores	scent 4LF32T8 Re	placing 250W HII): Warehouse: Biz	Prescriptive						
759-20	Jan 1, 2016		160	per fixture	0.1845	971.0	per fixture	12		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): College/Universi	ty: Biz Prescrip	tive					
760-1	Jan 1, 2016		160	per fixture	0.2884	1518.3	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII	D: Elementary Scho	ool: Biz Prescrip	otive			
760-10	Jan 1, 2016		160	per fixture	0.1136	597.8	per fixture	12
High Bay Fluorescent 6LF32T8 Replacing 400W HID: Exterior: Biz Prescriptive								
760-15	Jan 1, 2016		160	per fixture	0.2054	1081.1	per fixture	12
High Bay Fluorescent 6LF32T8 Replacing 400W HID: Garage, 24/7 lighting: Biz Prescriptive								
760-19	Jan 1, 2016		160	per fixture	0.4107	2162.2	per fixture	12
High Bay Fluore	scent 6LF32T8 Re	placing 400W HII): Garage: Biz Pre	scriptive				
760-4	Jan 1, 2016		160	per fixture	0.166	873.8	per fixture	12
High Bay Fluore	scent 6LF32T8 Re	placing 400W HII	D: Grocery: Biz Pro	escriptive				
760-5	Jan 1, 2016		160	per fixture	0.305	1605.4	per fixture	12
High Bay Fluore	scent 6LF32T8 Re	placing 400W HII	D: Heavy Industry:	Biz Prescriptiv	e			
760-11	Jan 1, 2016		160	per fixture	0.2883	1517.5	per fixture	12
High Bay Fluore	scent 6LF32T8 Re	placing 400W HII): High School/Mid	ldle School: Biz	Prescriptive			
760-12	Jan 1, 2016		160	per fixture	0.2021	1064.1	per fixture	12
High Bay Fluore	scent 6LF32T8 Re	placing 400W HII): Hospital: Biz Pr	escriptive				
760-6	Jan 1, 2016		160	per fixture	0.2464	1297.0	per fixture	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Hotel/Motel Con	nmon Areas: Bi	z Prescriptive					
760-7	Jan 1, 2016		160	per fixture	0.3625	1908.1	per fixture	12		
High Bay Fluorescent 6LF32T8 Replacing 400W HID: Hotel/Motel Guest Rooms: Biz Prescriptive										
760-13	Jan 1, 2016		160	per fixture	0.0364	191.8	per fixture	12		
High Bay Fluores	High Bay Fluorescent 6LF32T8 Replacing 400W HID: Light Industry: Biz Prescriptive									
760-9	Jan 1, 2016		160	per fixture	0.2719	1431.2	per fixture	12		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Miscellaneous: F	Biz Prescriptive						
760-14	Jan 1, 2016		160	per fixture	0.2599	1368.0	per fixture	12		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Multifamily Con	nmon Areas: Bi	z Prescriptive					
760-16	Jan 1, 2016		160	per fixture	0.279	1468.6	per fixture	12		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Office: Biz Preso	criptive						
760-8	Jan 1, 2016		160	per fixture	0.2183	1149.2	per fixture	12		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Religious Worsh	ip/Church: Biz	Prescriptive					
760-18	Jan 1, 2016		160	per fixture	0.078	410.7	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay Fluores	scent 6LF32T8 Re	placing 400W HII): Restaurant: Biz	Prescriptive						
760-3	Jan 1, 2016		160	per fixture	0.2695	1418.6	per fixture	12		
High Bay Fluorescent 6LF32T8 Replacing 400W HID: Retail/Service: Biz Prescriptive										
760-2	Jan 1, 2016		160	per fixture	0.237	1247.4	per fixture	12		
High Bay Fluores	High Bay Fluorescent 6LF32T8 Replacing 400W HID: Warehouse: Biz Prescriptive									
760-20	Jan 1, 2016		160	per fixture	0.2366	1245.7	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Co	llege/University	: Biz Prescriptive					
761-1	Jan 1, 2016		400	per fixture	0.5632	2965.0	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Ele	ementary School	l: Biz Prescriptive					
761-10	Jan 1, 2016		400	per fixture	0.2218	1167.4	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Ex	terior: Biz Preso	criptive					
761-15	Jan 1, 2016		400	per fixture	0.4011	2111.2	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Ga	rage, 24/7 lighti	ng: Biz Prescriptive	2				
761-19	Jan 1, 2016		400	per fixture	0.8021	4222.3	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Ga	rage: Biz Presc	riptive				
761-4	Jan 1, 2016		400	per fixture	0.3241	1706.3	per fixture	12	
High Bay Fluores	High Bay Fluorescent 8LF32T8 Double fixture replace 1000W HID: Grocery: Biz Prescriptive								
761-5	Jan 1, 2016		400	per fixture	0.5955	3135.0	per fixture	12	
High Bay Fluorescent 8LF32T8 Double fixture replace 1000W HID: Heavy Industry: Biz Prescriptive									
761-11	Jan 1, 2016		400	per fixture	0.5629	2963.3	per fixture	12	
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Hi	gh School/Midd	le School: Biz Presc	riptive			
761-12	Jan 1, 2016		400	per fixture	0.3947	2077.9	per fixture	12	
High Bay Fluores	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Ho	spital: Biz Pres	criptive				
761-6	Jan 1, 2016		400	per fixture	0.4811	2532.8	per fixture	12	
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Ho	tel/Motel Comn	non Areas: Biz Pres	criptive			
761-7	Jan 1, 2016		400	per fixture	0.7078	3726.2	per fixture	12	
High Bay Fluore	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Ho	tel/Motel Guest	Rooms: Biz Prescri	iptive			
761-13	Jan 1, 2016		400	per fixture	0.0711	374.5	per fixture	12	
High Bay Fluore	scent 8LF32T8 Do	uble fixture replac	ce 1000W HID: Lig	ght Industry: Bi	z Prescriptive				
761-9	Jan 1, 2016		400	per fixture	0.5309	2794.8	per fixture	12	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Mi	scellaneous: Biz	Prescriptive					
761-14	Jan 1, 2016		400	per fixture	0.5075	2671.4	per fixture	12		
High Bay Fluores	High Bay Fluorescent 8LF32T8 Double fixture replace 1000W HID: Multifamily Common Areas: Biz Prescriptive									
761-16	Jan 1, 2016		400	per fixture	0.5448	2867.9	per fixture	12		
High Bay Fluores	High Bay Fluorescent 8LF32T8 Double fixture replace 1000W HID: Office: Biz Prescriptive									
761-8	Jan 1, 2016		400	per fixture	0.4263	2244.2	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Re	ligious Worship	/Church: Biz Presci	riptive				
761-18	Jan 1, 2016		400	per fixture	0.1524	802.0	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Re	staurant: Biz Pr	escriptive					
761-3	Jan 1, 2016		400	per fixture	0.5263	2770.3	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Re	tail/Service: Biz	Prescriptive					
761-2	Jan 1, 2016		400	per fixture	0.4628	2436.0	per fixture	12		
High Bay Fluores	scent 8LF32T8 Do	uble fixture repla	ce 1000W HID: Wa	arehouse: Biz Pı	rescriptive					
761-20	Jan 1, 2016		400	per fixture	0.4621	2432.6	per fixture	12		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): College/Universi	ty: Biz Prescrip	tive				
762-1	Jan 1, 2017		414	per fixture	0.1871	984.9	per fixture	11	
High Bay Fluores	High Bay Fluorescent 8LF32T8 Replacing 400W HID: Elementary School: Biz Prescriptive								
762-10	Jan 1, 2017		414	per fixture	0.0737	387.8	per fixture	11	
High Bay Fluorescent 8LF32T8 Replacing 400W HID: Exterior: Biz Prescriptive									
762-15	Jan 1, 2017		414	per fixture	0.1332	701.3	per fixture	11	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII	D: Garage, 24/7 ligh	nting: Biz Presc	riptive				
762-19	Jan 1, 2017		414	per fixture	0.2664	1402.5	per fixture	11	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Garage: Biz Pre	scriptive					
762-4	Jan 1, 2017		414	per fixture	0.1077	566.8	per fixture	11	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Grocery: Biz Pro	escriptive					
762-5	Jan 1, 2017		414	per fixture	0.1978	1041.4	per fixture	11	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII	: Heavy Industry:	Biz Prescriptiv	e				
762-11	Jan 1, 2017		414	per fixture	0.1870	984.3	per fixture	11	
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): High School/Mid	ldle School: Biz	Prescriptive				
762-12	Jan 1, 2017		414	per fixture	0.1311	690.2	per fixture	11	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Hospital: Biz Pr	escriptive						
762-6	Jan 1, 2017		414	per fixture	0.1598	841.3	per fixture	11		
High Bay Fluorescent 8LF32T8 Replacing 400W HID: Hotel/Motel Common Areas: Biz Prescriptive										
762-7	Jan 1, 2017		414	per fixture	0.2351	1237.7	per fixture	11		
High Bay Fluores	High Bay Fluorescent 8LF32T8 Replacing 400W HID: Hotel/Motel Guest Rooms: Biz Prescriptive									
762-13	Jan 1, 2017		414	per fixture	0.0236	124.4	per fixture	11		
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII	D: Light Industry:	Biz Prescriptive						
762-9	Jan 1, 2017		414	per fixture	0.1763	928.3	per fixture	11		
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Miscellaneous: I	Biz Prescriptive						
762-14	Jan 1, 2017		414	per fixture	0.1686	887.4	per fixture	11		
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Multifamily Con	nmon Areas: Bi	z Prescriptive					
762-16	Jan 1, 2017		414	per fixture	0.1810	952.6	per fixture	11		
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Office: Biz Preso	criptive						
762-8	Jan 1, 2017		414	per fixture	0.1416	745.5	per fixture	11		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Religious Worsh	ip/Church: Biz	Prescriptive			
762-18	Jan 1, 2017		414	per fixture	0.0506	266.4	per fixture	11
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII	D: Restaurant: Biz	Prescriptive				
762-3	Jan 1, 2017		414	per fixture	0.1748	920.2	per fixture	11
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII	D: Retail/Service: F	Biz Prescriptive				
762-2	Jan 1, 2017		414	per fixture	0.1537	809.2	per fixture	11
High Bay Fluores	scent 8LF32T8 Re	placing 400W HII): Warehouse: Biz	Prescriptive				
762-20	Jan 1, 2017		414	per fixture	0.1535	808.0	per fixture	11
HP 135,000 - 240	,000: Biz Prescript	ive						
683	Jan 2, 2013		125	per ton	0.0635	143.0	per ton	15
HP over 240,000:	Biz Prescriptive							
684	Jan 2, 2013		130	per ton	0.0777	175.1	per ton	15
HP under 65,000	1 Ph: Biz Prescrip	tive						
685	Jan 2, 2013		73.5	per ton	0.0507	114.1	per ton	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
HP Water Heater	r 100 to 300 MBH:	Biz Prescriptive						
851	Jan 2, 2013		25000	per measure	25.5502	141041.0	per measure	15
HP Water Heater	r 10 to 50 MBH: B	iz Prescriptive						
850	Jan 2, 2013		6000	per measure	3.8325	21156.0	per measure	15
HP Water Heater	r 300 to 500 MBH:	Biz Prescriptive						
852	Jan 2, 2013		42000	per measure	51.1002	282081.0	per measure	15
HP Water Heater	r 50 to 100 MBH: I	Biz Prescriptive						
853	Jan 2, 2013		14000	per measure	9.5813	52890.0	per measure	15
HP Water Heater	r above 500 MBH:	Biz Prescriptive						
854	Jan 2, 2013		63000	per measure	76.6505	423122.0	per measure	15
HVAC - Occupai	ncy Sensors: Biz Pı	rescriptive						
3058	Jan 1, 2016		6002	per building	5.7347	12916.48	per building	8
Induction Street	Induction Street Lighting: Biz Prescriptive							
3003	Jan 1, 2016		0	per fixture	0.0011	192	per fixture	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Interior Ceiling	(6 fixtures controll	ed): Biz Prescripti	ive							
3062	3062 Jan 1, 2016 161 per measure 0.1804 949.8 per measure 11									
Interior High-Ba	y T5 (3 fix. Contro	olled): Biz Prescrij	otive							
3063	Jan 1, 2016		25	per measure	0.0361	190.2	per measure	15		
Interior Wall (3	fixtures controlled): College/Univers	ity: Biz Prescriptiv	⁄e						
779-1	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		
Interior Wall (3	fixtures controlled): Elementary Sch	ool: Biz Prescripti	ve						
779-10	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		
Interior Wall (3	fixtures controlled): Exterior: Biz Pr	rescriptive							
779-15	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		
Interior Wall (3	fixtures controlled): Garage, 24/7 lig	hting: Biz Prescrip	otive						
779-19	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		
Interior Wall (3	fixtures controlled): Garage: Biz Pre	escriptive							
779-4	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		
Interior Wall (3	fixtures controlled): Grocery: Biz Pr	escriptive							
779-5	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Interior Wall (3	fixtures controlled): Heavy Industry	: Biz Prescriptive					
779-11	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): High School/Mi	ddle School: Biz Pi	rescriptive				
779-12	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Hospital: Biz Pr	rescriptive					
779-6	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Hotel/Motel Con	mmon Areas: Biz I	Prescriptive				
779-7	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Hotel/Motel Gu	est Rooms: Biz Pre	escriptive				
779-13	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Light Industry:	Biz Prescriptive					
779-9	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Miscellaneous:	Biz Prescriptive					
779-14	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Interior Wall (3	fixtures controlled): Multifamily Con	mmon Areas: Biz I	Prescriptive				
779-16	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Office: Biz Pres	criptive					
779-8	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Religious Worsl	nip/Church: Biz Pr	escriptive				
779-18	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Restaurant: Biz	Prescriptive					
779-3	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Retail/Service: 1	Biz Prescriptive					
779-2	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
Interior Wall (3	fixtures controlled): Warehouse: Biz	Prescriptive					
779-20	Jan 2, 2013		91	per 3 fixtures	0.060	620.9	per 3 fixtures	11
LED (BAR/R) Re	LED (BAR/R) Reflector Lamp EISA Compliant: Biz Prescriptive							
3007	Jan 1, 2017		48.27		0.0344	181.3	per lamp	9

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED (BAR/R) Re	eflector Lamp EIS	A Exempt: Biz Pro	escriptive					
3007-1	Jan 1, 2017		48.27		0.0467	246.0	per lamp	9
LED (PAR) Refle	ector Lamp: Biz Pı	rescriptive						
3008	Jan 1, 2017		74.64		0.0398	209.5	per lamp	9
LED 100 Watt L	amp (12 hrs/day):	Biz Prescriptive						
3004-1	Jan 1, 2017		233.64		0.0052	924.2	per lamp	12
LED 100 Watt L	amp (24 hrs/day):	Biz Prescriptive						
3004-2	Jan 1, 2017		233.64		0.0104	1848.4	per lamp	9
LED 120 Watt L	amp (12 hrs/day):	Biz Prescriptive						
3005-1	Jan 1, 2017		361.64		0.2147	1130.0	per lamp	12
LED 120 Watt L	amp (24 hrs/day):	Biz Prescriptive						
3005-2	Jan 1, 2017		361.64		0.0127	2260.1	per lamp	9
LED 12-20 Watt	A-Line Lamp: Biz	Prescriptive						
3009	Jan 1, 2016		19.64		0.0283	148.8	per lamp	9
LED 1-8 Watt De	LED 1-8 Watt Decorative Lamp: Biz Prescriptive							
3010	Jan 1, 2017		22.64		0.0454	239.1	per lamp	5

Measure Reference No.	Start Date	End Date	Incremental Cost		Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED 5-11 Watt A	-Line Lamp: Biz I	Prescriptive						
3011	Jan 1, 2016		15.64		0.0161	85.0	per lamp	9
LED 52 Watt La	mp (12 hrs/day): I	Biz Prescriptive						
3006-1	Jan 1, 2016		191.39		0.003	538.7	per lamp	12
LED 52 Watt La	mp (24 hrs/day): I	Biz Prescriptive						
3006-2	Jan 1, 2016		191.39		0.0061	1077.5	per lamp	9
LED Exit Sign - 3	3_0 W_CF 18 base							
8001	Jan 1, 2016		91.68	per fixture	0.0425	223.8	per fixture	16
LED Exit Sign - 3	3_0 W_CF 9 base							
8000	Jan 1, 2016		45.45	per fixture	0.0462	243.1	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	College/Universit	y: Biz Prescriptive					
793-1	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	LED Exit Sign - 3_0 W_Inc30 base: Elementary School: Biz Prescriptive							
793-10	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
LED Exit Sign - 3	3_0 W_Inc30 base:	Exterior: Biz Pre	scriptive							
793-15	793-15 Jan 1, 2016 63 per fixture 0.0425 223.81 per fixture 16									
LED Exit Sign - 3	3_0 W_Inc30 base:	Garage, 24/7 light	ting: Biz Prescripti	ive						
793-19	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	3_0 W_Inc30 base:	Garage: Biz Pres	criptive							
793-4	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	3_0 W_Inc30 base:	Grocery: Biz Pres	scriptive							
793-5	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	3_0 W_Inc30 base:	Heavy Industry:	Biz Prescriptive							
793-11	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	3_0 W_Inc30 base:	High School/Mide	dle School: Biz Pre	escriptive						
793-12	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	3_0 W_Inc30 base:	Hospital: Biz Pre	scriptive							
793-6	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		
LED Exit Sign - 3	LED Exit Sign - 3_0 W_Inc30 base: Hotel/Motel Common Areas: Biz Prescriptive									
793-7	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED Exit Sign - 3	3_0 W_Inc30 base:	Hotel/Motel Gues	st Rooms: Biz Pres	criptive				
793-13	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Light Industry: B	Biz Prescriptive					
793-9	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Miscellaneous: B	iz Prescriptive					
793-14	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Multifamily Com	mon Areas: Biz Pr	escriptive				
793-16	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Office: Biz Presci	riptive					
793-8	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Religious Worshi	p/Church: Biz Pre	scriptive				
793-18	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Restaurant: Biz I	Prescriptive					
793-3	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LED Exit Sign - 3	3_0 W_Inc30 base:	Retail/Service: Bi	iz Prescriptive					
793-2	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED Exit Sign - 3	3_0 W_Inc30 base:	Warehouse: Biz I	Prescriptive					
793-20	Jan 1, 2016		63	per fixture	0.0425	223.81	per fixture	16
LED MR16 (12 V	Watt) Lamp: Biz Pr	rescriptive						
3012	Jan 1, 2016		39.64		0.0329	173.1	per lamp	9
LED MR16 (8 W	att) Lamp: Biz Pro	escriptive						
3013	Jan 1, 2017		36.64		0.0580	305.2	per lamp	9
Lighted Snack D	ispensing Machine	: Biz Prescriptive						
847	Jan 1, 2016		47	per measure	0.0445	328	per measure	4
Linear Tube LEI	O 4ft Efficient Lam	p Upgrade - 25W	T8 Base: Biz Preso	eriptive				
3023	Jan 1, 2016		29.64		0.0063	33.4	per lamp	17
Linear Tube LEI	O 4ft Efficient Lam	p Upgrade - 28W	T8 Base					
3024	Jan 1, 2016		29.64		0.0081	42.5	per lamp	17
Linear Tube LEI	Linear Tube LED 4ft Efficient Lamp Upgrade - 32W T8 Base: Biz Prescriptive							
3025	Jan 1, 2017		29.64		0.0104	54.7	per lamp	17

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Linear Tube LEI	O 4ft Efficient Lam	p Upgrade - T12 I	Base: Biz Prescript	ive				
3026	Jan 1, 2017		29.64		0.0104	54.7	per lamp	17
Linear Tube T8 4	4ft Efficient Lamp	Upgrade - T12 Ba	se: Biz Prescriptive	e				
3019	Jan 1, 2016		10.49		0.0035	18.2	per lamp	10
Linear Tube T8	Aft Efficient Lamp	Upgrade - T8 Bas	e: Biz Prescriptive					
3020			10.49		0.0035	18.2	per lamp	10
Linear Tube T8	4ft High Efficient I	amp Upgrade - T	12 Base: Biz Presci	riptive				
3021	Jan 1, 2016		11.69		0.0061	31.9	per lamp	12
Linear Tube T8	lft High Efficient I	amp Upgrade - T	8 Base: Biz Prescri	ptive				
3022	Jan 1, 2016		11.69		0.0061	31.9	per lamp	12
Low Flow Faucet	Aerator - Electric	water heater: Biz	Prescriptive					
848	Jan 2, 2013		31.10	per building	0.0315	173.9	per building	9
Low Flow Showe	Low Flow Showerhead_MF: Biz Prescriptive							
3074	Jan 1, 2016		42.00	per measure	0.0380	210.00	per measure	12

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
LW HPT8 4 ft 1	lamp: Biz Prescrip	tive						
3081	Jan 1, 2016		25.29	per measure	0.0055	29.00	per measure	12
LW HPT8 4 ft 2	lamp: Biz Prescrip	tive						
3082	Jan 1, 2016		30.49	per measure	0.0091	48.00	per measure	12
LW HPT8 4 ft 3	lamp: Biz Prescrip	tive						
3083	Jan 1, 2016		31.56	per measure	0.0118	62.00	per measure	12
LW HPT8 4 ft 4	lamp: Biz Prescrip	tive						
3076	Jan 1, 2016		60.00	per measure	0.0175	92.00	per measure	12
Occupancy Senso	or (Dual Technolog	gy) - Controlling L	ighting Circuit > 1	50 watts				
3016	Jan 1, 2016		128.08	per sensor	0.1463	770.4	per sensor	8
Occupancy Senso	or (Single Technolo	ogy) - Controlling	Lighting Circuit >	120 watts				
3079	Jan 1, 2016		119.56	per sensor	0.0874	460.0	per sensor	11
Occupancy Senso	or (Single Technolo	ogy) - Controlling	Lighting Circuit G	T 50 watts and	LTEQ 120 Watts			
3080	Jan 1, 2016		42.35	per sensor	0.0237	125.0	per sensor	11
Occupancy Senso	Occupancy Sensor - Controlling Fixture GT 200 watts and LTEQ 500 watts							
3077	Jan 1, 2016		116.33	per sensor	0.0570	300.0	per sensor	10

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Occupancy Senso	Occupancy Sensors over 500 W: College/University: Biz Prescriptive								
786-1	Jan 1, 2016		311	per 750 square feet	0.3155	1660.9	per 750 square feet	10	
Occupancy Senso	ors over 500 W: El	ementary School:	Biz Prescriptive						
786-10	Jan 1, 2016		311	per 750 square feet	0.1242	653.9	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ex	terior: Biz Prescri	ptive						
786-15	Jan 1, 2016		311	per 750 square feet	0.2247	1182.6	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ga	arage, 24/7 lighting	g: Biz Prescriptive						
786-19	Jan 1, 2016		311	per 750 square feet	0.4493	2365.2	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ga	arage: Biz Prescrip	otive						
786-4	Jan 1, 2016		311	per 750 square feet	0.1816	955.8	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Gi	ocery: Biz Prescri	ptive						
786-5	Jan 1, 2016		311	per 750 square feet	0.3336	1756.1	per 750 square feet	10	
Occupancy Senso	Occupancy Sensors over 500 W: Heavy Industry: Biz Prescriptive								
786-11	Jan 1, 2016		311	per 750 square feet	0.3153	1660.0	per 750 square feet	10	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Occupancy Senso	Occupancy Sensors over 500 W: High School/Middle School: Biz Prescriptive								
786-12	Jan 1, 2016		311	per 750 square feet	0.2211	1164.0	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ho	ospital: Biz Prescr	ptive						
786-6	Jan 1, 2016		311	per 750 square feet	0.2695	1418.8	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ho	otel/Motel Commo	n Areas: Biz Presc	riptive					
786-7	Jan 1, 2016		311	per 750 square feet	0.3965	2087.3	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Ho	otel/Motel Guest R	ooms: Biz Prescrip	otive					
786-13	Jan 1, 2016		311	per 750 square feet	0.0399	209.8	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Li	ght Industry: Biz	Prescriptive						
786-9	Jan 1, 2016		311	per 750 square feet	0.2974	1565.6	per 750 square feet	10	
Occupancy Senso	ors over 500 W: Mi	iscellaneous: Biz P	rescriptive						
786-14	Jan 1, 2016		311	per 750 square feet	0.2843	1496.4	per 750 square feet	10	
Occupancy Senso	ors over 500 W: M	ultifamily Commo	n Areas: Biz Presc	riptive					
786-16	Jan 1, 2016		311	per 750 square feet	0.3052	1606.5	per 750 square feet	10	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Occupancy Senso	Occupancy Sensors over 500 W: Office: Biz Prescriptive							
786-8	Jan 1, 2016		311	per 750 square feet	0.2388	1257.1	per 750 square feet	10
Occupancy Senso	ors over 500 W: Re	ligious Worship/C	hurch: Biz Prescr	iptive				
786-18	Jan 1, 2016		311	per 750 square feet	0.0854	449.3	per 750 square feet	10
Occupancy Senso	ors over 500 W: Re	estaurant: Biz Pres	scriptive					
786-3	Jan 1, 2016		311	per 750 square feet	0.2948	1551.8	per 750 square feet	10
Occupancy Senso	ors over 500 W: Re	tail/Service: Biz P	rescriptive					
786-2	Jan 1, 2016		311	per 750 square feet	0.2592	1364.6	per 750 square feet	10
Occupancy Senso	ors over 500 W: W	arehouse: Biz Pres	scriptive					
786-20	Jan 1, 2016		311	per 750 square feet	0.2589	1362.7	per 750 square feet	10
Occupancy Senso	ors under 500 W: (College/University	Biz Prescriptive					
787-1	Jan 1, 2016		144	per 300 square feet	0.1262	664.4	per 300 square feet	10
Occupancy Senso	Occupancy Sensors under 500 W: Elementary School: Biz Prescriptive							
787-10	Jan 1, 2016		144	per 300 square feet	0.0497	261.6	per 300 square feet	10

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Occupancy Senso	ors under 500 W: I	Exterior: Biz Presc	riptive							
787-15	787-15 Jan 1, 2016 144 per 300 square feet 0.0899 473.0 per 300 square feet 10									
Occupancy Senso	ors under 500 W: (Garage, 24/7 lightin	ng: Biz Prescriptiv	e						
787-19	Jan 1, 2016		144	per 300 square feet	0.1797	946.1	per 300 square feet	10		
Occupancy Senso	ors under 500 W: (Garage: Biz Prescr	iptive							
787-4	Jan 1, 2016		144	per 300 square feet	0.0726	382.3	per 300 square feet	10		
Occupancy Senso	ors under 500 W: (Grocery: Biz Presc	riptive							
787-5	Jan 1, 2016		144	per 300 square feet	0.1334	702.4	per 300 square feet	10		
Occupancy Senso	ors under 500 W: I	Heavy Industry: Bi	z Prescriptive							
787-11	Jan 1, 2016		144	per 300 square feet	0.1261	664.0	per 300 square feet	10		
Occupancy Senso	ors under 500 W: I	High School/Middl	e School: Biz Preso	eriptive						
787-12	Jan 1, 2016		144	per 300 square feet	0.0884	465.6	per 300 square feet	10		
Occupancy Senso	ors under 500 W: I	Hospital: Biz Presc	riptive							
787-6	Jan 1, 2016		144	per 300 square feet	0.1078	567.5	per 300 square feet	10		
Occupancy Senso	ors under 500 W: I	Hotel/Motel Comm	on Areas: Biz Pres	scriptive						
787-7	Jan 1, 2016		144	per 300 square feet	0.1586	834.9	per 300 square feet	10		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Occupancy Senso	ors under 500 W: I	Hotel/Motel Guest	Rooms: Biz Prescr	iptive				
787-13	Jan 1, 2016		144	per 300 square feet	0.0159	83.9	per 300 square feet	10
Occupancy Senso	ors under 500 W: I	Light Industry: Biz	Prescriptive					
787-9	Jan 1, 2016		144	per 300 square feet	0.119	626.2	per 300 square feet	10
Occupancy Senso	ors under 500 W: N	Aiscellaneous: Biz	Prescriptive					
787-14	Jan 1, 2016		144	per 300 square feet	0.1137	598.6	per 300 square feet	10
Occupancy Senso	ors under 500 W: N	Aultifamily Comm	on Areas: Biz Pres	scriptive				
787-16	Jan 1, 2016		144	per 300 square feet	0.1221	642.6	per 300 square feet	10
Occupancy Senso	ors under 500 W: (Office: Biz Prescri	ptive					
787-8	Jan 1, 2016		144	per 300 square feet	0.0955	502.8	per 300 square feet	10
Occupancy Senso	ors under 500 W: I	Religious Worship	Church: Biz Preso	riptive				
787-18	Jan 1, 2016		144	per 300 square feet	0.0341	179.7	per 300 square feet	10
Occupancy Senso	Occupancy Sensors under 500 W: Restaurant: Biz Prescriptive							
787-3	Jan 1, 2016		144	per 300 square feet	0.1179	620.7	per 300 square feet	10

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Occupancy Senso	ors under 500 W: I	Retail/Service: Biz	Prescriptive							
787-2	787-2 Jan 1, 2016 144 per 300 square feet 0.1037 545.8 per 300 square feet 10									
Occupancy Senso	ors under 500 W: V	Warehouse: Biz Pr	escriptive							
787-20	Jan 1, 2016		144	per 300 square feet	0.1035	545.1	per 300 square feet	10		
Office Electronic	s - Monitor, Max I	Efficiency: Biz Pre	scriptive							
3064	Jan 1, 2016		136.99	per measure	0.1894	1,372.98	per measure	4		
Office Equipmen	t - Plug Load Occı	ipancy Sensors: B	iz Presriptive							
3069	Jan 1, 2016		256.82	per building	0.9260	6,712.97	per building	5		
Passive Infrared	or Ultrasonic_2: C	College/University:	Biz Prescriptive							
781-1	Jan 2, 2013		92	per measure	0.023	616.3		11		
Passive Infrared	or Ultrasonic_2: E	Elementary School:	Biz Prescriptive							
781-10	Jan 2, 2013		92	per measure	0.023	616.3		11		
Passive Infrared	or Ultrasonic_2: E	exterior: Biz Presc	riptive							
781-15	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		
Passive Infrared	or Ultrasonic_2: G	Sarage, 24/7 lightin	ng: Biz Prescriptive	2						
781-19	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Passive Infrared	or Ultrasonic_2: G	arage: Biz Prescr	iptive					
781-4	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: G	rocery: Biz Presci	riptive					
781-5	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: H	eavy Industry: Bi	z Prescriptive					
781-11	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: H	igh School/Middle	e School: Biz Presc	riptive				
781-12	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: H	lospital: Biz Presc	riptive					
781-6	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: H	otel/Motel Comm	on Areas: Biz Pres	criptive				
781-7	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: H	otel/Motel Guest	Rooms: Biz Prescri	iptive				
781-13	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Passive Infrared	or Ultrasonic_2: L	ight Industry: Biz	Prescriptive					
781-9	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: M	Iiscellaneous: Biz	Prescriptive					
781-14	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: M	Iultifamily Comm	on Areas: Biz Pres	criptive				
781-16	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: O	ffice: Biz Prescrip	tive					
781-8	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: R	eligious Worship/	Church: Biz Presc	riptive				
781-18	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: R	estaurant: Biz Pre	escriptive					
781-3	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic_2: R	etail/Service: Biz	Prescriptive					
781-2	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Passive Infrared	or Ultrasonic_2: V	Varehouse: Biz Pro	escriptive						
781-20 Jan 2, 2013 92 per measure 0.023 616.3 per measure 11									
Passive Infrared	or Ultrasonic: Coll	lege/University: B	iz Prescriptive						
780-1	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Elei	mentary School: B	iz Prescriptive						
780-10	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Ext	erior: Biz Prescrip	otive						
780-15	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Gar	rage, 24/7 lighting:	Biz Prescriptive						
780-19	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Gar	age: Biz Prescript	ive						
780-4	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Gro	cery: Biz Prescrip	tive						
780-5	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	
Passive Infrared	or Ultrasonic: Hea	vy Industry: Biz I	Prescriptive						
780-11	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Passive Infrared	or Ultrasonic: Hig	h School/Middle S	chool: Biz Prescrip	otive				
780-12	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Hos	pital: Biz Prescrip	otive					
780-6	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Hot	el/Motel Common	Areas: Biz Prescr	iptive				
780-7	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Hot	el/Motel Guest Ro	oms: Biz Prescript	ive				
780-13	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Ligi	nt Industry: Biz P	rescriptive					
780-9	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Mis	cellaneous: Biz Pr	escriptive					
780-14	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11
Passive Infrared	or Ultrasonic: Mul	tifamily Common	Areas: Biz Prescri	iptive				
780-16	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Passive Infrared	or Ultrasonic: Offi	ice: Biz Prescriptiv	ve							
780-8	780-8 Jan 2, 2013 92 per measure 0.023 616.3 per measure 11									
Passive Infrared	or Ultrasonic: Reli	igious Worship/Ch	nurch: Biz Prescrip	tive						
780-18	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		
Passive Infrared	or Ultrasonic: Res	taurant: Biz Presc	riptive							
780-3	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		
Passive Infrared	or Ultrasonic: Ret	ail/Service: Biz Pr	escriptive							
780-2	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		
Passive Infrared	or Ultrasonic: Wa	rehouse: Biz Presc	eriptive							
780-20	Jan 2, 2013		92	per measure	0.023	616.3	per measure	11		
PC Power Manag	gement Software: 1	Biz Prescriptive								
1178	Jan 2, 2013		20	per unit	0.0276	200.0	per unit	4		
Pool Heater Heat	t Pump: Biz Prescr	riptive								
3071	Jan 1, 2016		199.14	per measure	0.2497	1,810.39	per measure	15		
Pool Pump - Tim	er: Biz Prescriptiv	e								
3072	Jan 1, 2016		100	per measure	0.0830	601.89	per measure	10		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Pumps HP 10: Bi	z Prescriptive							
2795	Jan 1, 2016		332	per measure	0.2778	2014	per measure	15
Pre Rinse Spraye	ers - Electric water	heater: Biz Presci	riptive					
849	Jan 2, 2013		85.8	per measure	1.0201	5631.1	per measure	5
Pumps HP 15 (Ef	of increase 16.09): 1	Biz Prescriptive						
796	Jan 1, 2016		585	per measure	0.4167	3021	per measure	15
Pumps HP 20: Bi	z Prescriptive							
2797	Jan 1, 2016		850	per measure	0.5556	4028	per measure	15
Pumps HP 3 (Eff	increase 7.19): Biz	Prescriptive						
798	Jan 1, 2016		350	per measure	0.0833	604	per measure	15
Pumps HP 5: Biz	Prescriptive							
2799	Jan 1, 2016		341	per measure	0.1389	1007	per measure	15
Pumps HP 7.5: B	iz Prescriptive							
2794	Jan 1, 2016		498	per measure	0.2084	1511	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Pumps HP 7.5 (E	ff Increase: 6.05):	Biz Prescriptive							
1137	Jan 2, 2013		498	per measure	0.2372	1719.9	per measure	15	
Pumps HP 7.5 (E	ff Increase: 7.48):	Biz Prescriptive							
800	Jan 2, 2013		498	per measure	0.2538	1840.2	per measure	15	
Refrigerated Disp	play Case Lighting	5ft T8 to 5ft LED	- cooler: Biz Preso	riptive					
3035	Jan 1, 2016		250		0.0416	219	per measure	8	
Refrigerated Disp	play Case Lighting	5ft T8 to 5ft LED	- freezer: Biz Pres	criptive					
3036	Jan 1, 2016		250		0.0448	236	per measure	8	
Refrigerated Disp	play Case Lighting	6ft T8 to 6ft LED	- cooler: Biz Preso	riptive					
3037	Jan 1, 2016		250		0.0498	262	per measure	8	
Refrigerated Disp	play Case Lighting	6ft T8 to 6ft LED	- freezer: Biz Pres	criptive					
3038	Jan 1, 2016		250		0.0538	283	per measure	8	
Refrigerator - Do	Refrigerator - Door Gasket Replacemen: Biz Prescriptivet								
3073	Jan 1, 2016		2,653.75	per measure	3.2747	24,124.99	per measure	8	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Strip Curtain for	Walk-in Cooler: I	Biz Prescriptive							
845	Jan 1, 2016		286.16	per measure	0.0573	422	per measure	4	
Strip Curtain - W	Valk In Freezer: Bi	z Prescriptive							
3034	Jan 1, 2016		286.16		4.0686	29974	per measure	6	
T5 High-Bay 4L-	F54HO: College/U	niversity: Biz Pres	scriptive						
1102-1	Jan 1, 2017		339	per fixture	0.2466	1298.0	per fixture	11	
T5 High-Bay 4L-	F54HO: Elementa	ry School: Biz Pre	scriptive						
1102-10	Jan 1, 2017		339	per fixture	0.0971	511.0	per fixture	11	
T5 High-Bay 4L-	F54HO: Exterior:	Biz Prescriptive							
1102-15	Jan 1, 2017		339	per fixture	0.1756	924.2	per fixture	11	
T5 High-Bay 4L-	F54HO: Garage, 2	4/7 lighting: Biz P	rescriptive						
1102-19	Jan 1, 2017		339	per fixture	0.3511	1848.4	per fixture	11	
T5 High-Bay 4L-	T5 High-Bay 4L-F54HO: Garage: Biz Prescriptive								
1102-4	Jan 1, 2017		339	per fixture	0.1419	746.9	per fixture	11	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
T5 High-Bay 4L-	F54HO: Grocery:	Biz Prescriptive						
1102-5	Jan 1, 2017		339	per fixture	0.2607	1372.4	per fixture	11
T5 High-Bay 4L-	F54HO: Heavy Inc	dustry: Biz Prescr	iptive					
1102-11	Jan 1, 2017		339	per fixture	0.2464	1297.2	per fixture	11
T5 High-Bay 4L-	F54HO: High Scho	ool/Middle School	Biz Prescriptive					
1102-12	Jan 1, 2017		339	per fixture	0.1728	909.6	per fixture	11
T5 High-Bay 4L-	F54HO: Hospital:	Biz Prescriptive						
1102-6	Jan 1, 20176		339	per fixture	0.2106	1108.8	per fixture	11
T5 High-Bay 4L-	F54HO: Hotel/Mo	tel Common Areas	s: Biz Prescriptive					
1102-7	Jan 1, 2017		339	per fixture	0.3099	1631.2	per fixture	11
T5 High-Bay 4L-	F54HO: Hotel/Mo	tel Guest Rooms:	Biz Prescriptive					
1102-13	Jan 1, 2017		339	per fixture	0.0311	163.9	per fixture	11
T5 High-Bay 4L-	F54HO: Light Ind	ustry: Biz Prescrij	ptive					
1102-9	Jan 1, 2017		339	per fixture	0.2324	1223.5	per fixture	11
T5 High-Bay 4L-	T5 High-Bay 4L-F54HO: Miscellaneous: Biz Prescriptive							
1102-14	Jan 1, 2017		339	per fixture	0.2221	1169.4	per fixture	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
T5 High-Bay 4L-	T5 High-Bay 4L-F54HO: Multifamily Common Areas: Biz Prescriptive								
1102-16	Jan 1, 2017		339	per fixture	0.2385	1255.5	per fixture	11	
T5 High-Bay 4L-	F54HO: Office: Bi	z Prescriptive							
1102-8	Jan 1, 2017		339	per fixture	0.1866	982.4	per fixture	11	
T5 High-Bay 4L-	F54HO: Religious	Worship/Church:	Biz Prescriptive						
1102-18	Jan 1, 2017		339	per fixture	0.0667	351.1	per fixture	11	
T5 High-Bay 4L-	F54HO: Restaurai	nt: Biz Prescriptiv	e						
1102-3	Jan 1, 2017		339	per fixture	0.2304	1212.7	per fixture	11	
T5 High-Bay 4L-	F54HO: Retail/Ser	vice: Biz Prescrip	tive						
1102-2	Jan 1, 2017		339	per fixture	0.2026	1066.4	per fixture	11	
T5 High-Bay 4L-	F54HO: Warehous	se: Biz Prescriptiv	e						
1102-20	Jan 1, 2017		339	per fixture	0.2023	1064.9	per fixture	11	
T5 High-Bay 6L-	T5 High-Bay 6L-F54HO: College/University: Biz Prescriptive								
1106-1	Jan 1, 2017		256	per fixture	0.1040	547.5	per fixture	11	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
T5 High-Bay 6L-	F54HO: Elementa	ry School: Biz Pre	scriptive					
1106-10	Jan 1, 2017		256	per fixture	0.0410	215.6	per fixture	11
T5 High-Bay 6L-	F54HO: Exterior:	Biz Prescriptive						
1106-15	Jan 1, 2017		256	per fixture	0.0740	389.8	per fixture	11
T5 High-Bay 6L-	F54HO: Garage, 2	4/7 lighting: Biz P	rescriptive					
1106-19	Jan 1, 2017		256	per fixture	0.1481	779.6	per fixture	11
T5 High-Bay 6L-	F54HO: Garage: I	Biz Prescriptive						
1106-4	Jan 1, 2017		256	per fixture	0.0599	315.1	per fixture	11
T5 High-Bay 6L-	F54HO: Grocery:	Biz Prescriptive						
1106-5	Jan 1, 2017		256	per fixture	0.1100	578.9	per fixture	11
T5 High-Bay 6L-	F54HO: Heavy Inc	dustry: Biz Prescr	iptive					
1106-11	Jan 1, 2017		256	per fixture	0.1039	547.2	per fixture	11
T5 High-Bay 6L-	F54HO: High Scho	ool/Middle School	Biz Prescriptive					
1106-12	Jan 1, 2017		256	per fixture	0.0729	383.7	per fixture	11
T5 High-Bay 6L-	T5 High-Bay 6L-F54HO: Hospital: Biz Prescriptive							
1106-6	Jan 1, 2017		256	per fixture	0.0888	467.7	per fixture	11

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
T5 High-Bay 6L-	T5 High-Bay 6L-F54HO: Hotel/Motel Common Areas: Biz Prescriptive								
1106-7	Jan 1, 2017		256	per fixture	0.1307	688.0	per fixture	11	
T5 High-Bay 6L-	F54HO: Hotel/Mo	tel Guest Rooms:	Biz Prescriptive						
1106-13	Jan 1, 2017		256	per fixture	0.0131	69.2	per fixture	11	
T5 High-Bay 6L-	F54HO: Light Ind	ustry: Biz Prescri	ptive						
1106-9	Jan 1, 2017		256	per fixture	0.0980	516.1	per fixture	11	
T5 High-Bay 6L-	F54HO: Miscellan	eous: Biz Prescrip	tive						
1106-14	Jan 1, 2017		256	per fixture	0.0937	493.3	per fixture	11	
T5 High-Bay 6L-	F54HO: Multifam	ily Common Area	s: Biz Prescriptive						
1106-16	Jan 1, 2017		256	per fixture	0.1006	529.6	per fixture	11	
T5 High-Bay 6L-	F54HO: Office: Bi	z Prescriptive							
1106-8	Jan 1, 2017		256	per fixture	0.0787	414.4	per fixture	11	
T5 High-Bay 6L-	T5 High-Bay 6L-F54HO: Religious Worship/Church: Biz Prescriptive								
1106-18	Jan 1, 2017		256	per fixture	0.0281	148.1	per fixture	11	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
T5 High-Bay 6L-	F54HO: Restaurai	nt: Biz Prescriptiv	e					
1106-3	Jan 1, 2017		256	per fixture	0.0972	511.5	per fixture	11
T5 High-Bay 6L-	F54HO: Retail/Ser	vice: Biz Prescrip	tive					
1106-2	Jan 1, 2017		256	per fixture	0.0854	449.8	per fixture	11
T5 High-Bay 6L-	F54HO: Warehous	se: Biz Prescriptiv	e					
1106-20	Jan 1, 2017		256	per fixture	0.0853	449.2	per fixture	11
Tractor Heater T	Timers: Biz Prescri	ptive						
681	Jan 2, 2013		35	per measure	0.0	576.0	per measure	10
Vending Equipm	ent Controller: Biz	z Prescriptive						
794	Jan 2, 2013		141	per measure	0.2271	1646.0	per measure	5
VFD CHW Pum	p CV reheat econ:	Biz Prescriptive						
3046	Jan 1, 2016		198		2.4845	5596	per measure	15
VFD HP 10 Proc	cess Pumping: Biz	Prescriptive						
801	Jan 2, 2013		2860	per measure	1.4778	10713.4	per measure	15
VFD HP 15 Proc	VFD HP 15 Process Pumping: Biz Prescriptive							
802	Jan 2, 2013		3265	per measure	2.2391	16232.3	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
VFD HP 20 Proc	ess Pumping: Biz	Prescriptive						
803	Jan 2, 2013		4515	per measure	2.9856	21643.7	per measure	15
VFD HP 25 Proc	ess Pumping: Biz	Prescriptive						
804	Jan 2, 2013		5120	per measure	3.7319	27054.1	per measure	15
VFD HP 30 Proc	ess Pumping: Biz	Prescriptive						
806	Jan 2, 2013		5770	per measure	4.4783	32464.6	per measure	15
VFD HP 3 Proce	ess Pumping: Biz P	rescriptive						
805	Jan 2, 2013		1845	per measure	0.4478	3246.3	per measure	15
VFD HP 40 Proc	ess Pumping: Biz	Prescriptive						
807	Jan 2, 2013		8095	per measure	5.971	43285.5	per measure	15
VFD HP 50 Proc	ess Pumping: Biz	Prescriptive						
809	Jan 2, 2013		8950	per measure	7.4639	54108.2	per measure	15
VFD HP 5 Proce	ess Pumping: Biz P	rescriptive						
808	Jan 2, 2013		2070	per measure	0.7389	5356.5	per measure	15

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
VFD HP 7.5 Pro	cess Pumping: Biz	Prescriptive						
810	Jan 2, 2013		2860	per measure	1.1196	8116.6	per measure	15
VFDs on Comme	rcial Swimming Po	ool Pumps: Biz Pr	escriptive					
3070	Jan 1, 2016		286	per measure	0.3464	2,511.00	per measure	15
Window replacer	nent: Biz Prescript	tive						
671	Jan 2, 2013		7994.87	per building	12.5684	28308.24	per building	20
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.51 kWperTon v	vith 0.36 kWperTo	n IPLV: Biz Pre	escriptive			
2733	Jan 1, 2016		149.24	per ton	0.131	359.1	per ton	20
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.51 kWperTon v	vith 0.39 kWperTo	n IPLV: Biz Pre	escriptive			
705	Jan 1, 2016		143.51	per ton	0.128	336.6	per ton	20
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.51 kWperTon w	vith 0.3 kWperTon	IPLV: Biz Pres	criptive			
2732	Jan 1, 2016		161.85	per ton	0.137	402.8	per ton	20
Wtr-Cool cent Cl	Wtr-Cool cent Chiller 150 - 300 ton 0.51 kWperTon with 0.41 kWperTon IPLV: Biz Prescriptive							
2734	Jan 1, 2016		137.78	per ton	0.125	316.2	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.51 kWperTon w	vith 0.48 kWperTo	n IPLV: Biz Pre	escriptive				
2735	2735 Jan 1, 2016 122.87 per ton 0.116 256.4 per ton 20								
Wtr-Cool cent Cl	Wtr-Cool cent Chiller 150 - 300 ton 0.57 kWperTon with 0.34 kWperTon IPLV: Biz Prescriptive								
2736	Jan 1, 2016		105.29	per ton	0.082	292.5	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.57 kWperTon w	vith 0.43 kWperTo	n IPLV: Biz Pre	escriptive				
706	Jan 1, 2016		84.65	per ton	0.071	218.2	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.57 kWperTon w	vith 0.46 kWperTo	n IPLV: Biz Pre	escriptive				
2738	Jan 1, 2016		78.2	per ton	0.068	195.4	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.57 kWperTon w	vith 0.4 kWperTon	IPLV: Biz Pres	criptive				
2737	Jan 1, 2016		91.1	per ton	0.075	243.4	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.57 kWperTon w	vith 0.54 kWperTo	n IPLV: Biz Pre	escriptive				
2739	Jan 1, 2016		61.44	per ton	0.058	128.2	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.63 kWperTon w	vith 0.38 kWperTo	n IPLV: Biz Pre	escriptive				
2740	Jan 1, 2016		48.73	per ton	0.026	182.4	per ton	20	
Wtr-Cool cent Cl	hiller 150 - 300 ton	0.63 kWperTon w	vith 0.45 kWperTo	n IPLV: Biz Pre	escriptive				
707	Jan 1, 2016		32.96	per ton	0.018	127.9	per ton	20	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool cent Cl	niller 150 - 300 ton	0.63 kWperTon w	vith 0.48 kWperTo	n IPLV: Biz Pre	escriptive			
2741	Jan 1, 2016		25.8	per ton	0.014	100.0	per ton	20
Wtr-Cool cent Cl	Wtr-Cool cent Chiller 150 - 300 ton 0.63 kWperTon with 0.51 kWperTon IPLV: Biz Prescriptive							
2742	Jan 1, 2016		18.63	per ton	0.011	74.6	per ton	20
Wtr-Cool cent Cl	niller over 300 ton	0.46 kWperTon w	ith 0.28 kWperTor	n IPLV: Biz Pre	scriptive			
2721	Jan 1, 2016		130.19	per ton	0.125	371.0	per ton	20
Wtr-Cool cent Cl	niller over 300 ton	0.46 kWperTon w	ith 0.33 kWperTo	n IPLV: Biz Pre	scriptive			
2722	Jan 1, 2016		118.26	per ton	0.120	331.2	per ton	20
Wtr-Cool cent Cl	niller over 300 ton	0.46 kWperTon w	ith 0.35 kWperTo	n IPLV: Biz Pre	scriptive			
708	Jan 1, 2016		112.83	per ton	0.117	310.8	per ton	20
Wtr-Cool cent Cl	niller over 300 ton	0.46 kWperTon w	ith 0.37 kWperTo	n IPLV: Biz Pre	scriptive			
2723	Jan 1, 2016		107.41	per ton	0.114	292.2	per ton	20
Wtr-Cool cent Cl	Wtr-Cool cent Chiller over 300 ton 0.46 kWperTon with 0.44 kWperTon IPLV: Biz Prescriptive							
2724	Jan 1, 2016		92.22	per ton	0.106	234.2	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool cent C	hiller over 300 ton	0.52 kWperTon w	ith 0.31 kWperTor	n IPLV: Biz Pre	scriptive			
2725	Jan 1, 2016		88.82	per ton	0.075	270.8	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.52 kWperTon w	ith 0.37 kWperToi	ı IPLV: Biz Pre	scriptive			
2726	Jan 1, 2016		75.40	per ton	0.069	226.0	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.52 kWperTon w	ith 0.39 kWperTo	n IPLV: Biz Pre	scriptive			
2727	Jan 1, 2016		69.30	per ton	0.065	203.1	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.52 kWperTon w	ith 0.42 kWperTo	n IPLV: Biz Pre	scriptive			
2728	Jan 1, 2016		63.20	per ton	0.062	182.2	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.52 kWperTon w	ith 0.49 kWperTo	n IPLV: Biz Pre	scriptive			
709	Jan 1, 2016		46.11	per ton	0.053	117.1	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.58 kWperTon w	ith 0.35 kWperTor	ı IPLV: Biz Pre	scriptive			
2729	Jan 1, 2016		47.46	per ton	0.025	170.5	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.58 kWperTon w	ith 0.41 kWperTor	ı IPLV: Biz Pre	scriptive			
710	Jan 1, 2016		32.54	per ton	0.017	120.8	per ton	20
Wtr-Cool cent C	hiller over 300 ton	0.58 kWperTon w	ith 0.44 kWperTor	n IPLV: Biz Pre	scriptive			
2730	Jan 1, 2016		25.76	per ton	0.014	95.4	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Wtr-Cool cent Cl	hiller over 300 ton	0.58 kWperTon w	ith 0.47 kWperTo	n IPLV: Biz Pre	scriptive				
2731	Jan 1, 2016		18.98	per ton	0.010	72.3	per ton	20	
Wtr-Cool Centrifugal Chiller under 150 ton 0.56 kWperTon with 0.34 kWperTon IPLV: Biz Prescriptive									
2709	Jan 1, 2016		203.03	per ton	0.15305	452.09	per ton	20	
Wtr-Cool Centri	fugal Chiller under	: 150 ton 0.56 kW _l	perTon with 0.43 k	WperTon IPLV	: Biz Prescriptive				
711	Jan 2, 2013		186	per ton	0.142	422.3	per ton	20	
Wtr-Cool Centri	fugal Chiller under	: 150 ton 0.56 kW _l	perTon with 0.46 k	WperTon IPLV	: Biz Prescriptive				
2712	Jan 1, 2016		180.87	per ton	0.13906	356.3	per ton	20	
Wtr-Cool Centri	fugal Chiller under	: 150 ton 0.56 kW _I	perTon with 0.4 kV	VperTon IPLV:	Biz Prescriptive				
2710	Jan 1, 2016		191.42	per ton	0.14605	403.67	per ton	20	
Wtr-Cool Centri	fugal Chiller under	: 150 ton 0.56 kW _I	perTon with 0.53 k	WperTon IPLV	: Biz Prescriptive				
2713	Jan 1, 2016		166.1	per ton	0.12909	285.73	per ton	20	
Wtr-Cool Centri	Wtr-Cool Centrifugal Chiller under 150 ton 0.63 kWperTon with 0.38 kWperTon IPLV: Biz Prescriptive								
2714	Jan 1, 2016		124.6	per ton	0.09153	329.89	per ton	20	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.63 kWj	perTon with 0.45 k	WperTon IPLV	: Biz Prescriptive					
2715	2715 Jan 1, 2016 111.54 per ton 0.0836 275.5 per ton 20									
Wtr-Cool Centri	Wtr-Cool Centrifugal Chiller under 150 ton 0.63 kWperTon with 0.48 kWperTon IPLV: Biz Prescriptive									
712	Jan 2, 2013		186	per ton	0.079	276.0	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.63 kWj	perTon with 0.51 k	WperTon IPLV	: Biz Prescriptive					
2716	Jan 1, 2016		99.67	per ton	0.07579	222.22	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.63 kWj	perTon with 0.60 k	WperTon IPLV	: Biz Prescriptive					
2717	Jan 1, 2016		83.05	per ton	0.06452	142.88	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.7 kWpc	erTon with 0.44 kV	VperTon IPLV:	Biz Prescriptive					
2718	Jan 1, 2016		46.16	per ton	0.03001	207.39	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.7 kWpo	erTon with 0.53 kV	VperTon IPLV:	Biz Prescriptive					
2719	Jan 1, 2016		25.06	per ton	0.01668	116.17	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.7 kWpc	erTon with 0.57 kV	VperTon IPLV:	Biz Prescriptive					
2720	Jan 1, 2016		18.46	per ton	0.01245	88.02	per ton	20		
Wtr-Cool Centri	fugal Chiller under	r 150 ton 0.7 kWpc	erTon with 0.5 kW	perTon IPLV: I	Biz Prescriptive					
713	Jan 2, 2013		186	per ton	0.021	164.0	per ton	20		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool screw o	chiller 150 - 300 to	n 0.57 kWperTon	with 0.34 kWperTo	on IPLV: Biz Pr	escriptive			
2771	Jan 1, 2016		149.41	per ton	0.163	423.8	per ton	20
Wtr-Cool screw chiller 150 - 300 ton 0.57 kWperTon with 0.37 kWperTon IPLV: Biz Prescriptive								
2772	Jan 1, 2016		137.36	per ton	0.159	400.7	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.57 kWperTon	with 0.43 kWperTo	on IPLV: Biz Pr	escriptive			
2773	Jan 1, 2016		113.26	per ton	0.148	343.7	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.57 kWperTon	with 0.45 kWperTo	on IPLV: Biz Pr	rescriptive			
2774	Jan 1, 2016		103.62	per ton	0.144	322.3	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.57 kWperTon	with 0.4 kWperTo	n IPLV: Biz Pre	scriptive			
714	Jan 1, 2016		125.31	per ton	0.154	373.3	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.57 kWperTon	with 0.51 kWperTo	on IPLV: Biz Pr	escriptive			
2775	Jan 1, 2016		79.52	per ton	0.134	266.3	per ton	20
Wtr-Cool screw o	Wtr-Cool screw chiller 150 - 300 ton 0.65 kWperTon with 0.39 kWperTon IPLV: Biz Prescriptive							
2776	Jan 1, 2016		118.38	per ton	0.1	310	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool screw o	chiller 150 - 300 to	n 0.65 kWperTon	with 0.42 kWperTo	on IPLV: Biz Pr	escriptive			
2777	Jan 1, 2016		104.83	per ton	0.095	283.7	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.65 kWperTon	with 0.45 kWperTo	on IPLV: Biz Pr	escriptive			
715	Jan 1, 2016		91.27	per ton	0.089	252.9	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.65 kWperTon	with 0.48 kWperTo	on IPLV: Biz Pr	escriptive			
2778	Jan 1, 2016		77.72	per ton	0.083	219.3	per ton	20
Wtr-Cool screw c	chiller 150 - 300 to	n 0.65 kWperTon	with 0.51 kWperTo	on IPLV: Biz Pr	rescriptive			
2779	Jan 1, 2016		66.87	per ton	0.078	194.8	per ton	20
Wtr-Cool screw c	chiller 150 - 300 to	n 0.65 kWperTon	with 0.57 kWperTo	on IPLV: Biz Pr	escriptive			
2780	Jan 1, 2016		39.76	per ton	0.067	131.8	per ton	20
Wtr-Cool screw o	chiller 150 - 300 to	n 0.72 kWperTon	with 0.43 kWperTo	on IPLV: Biz Pr	rescriptive			
2781	Jan 1, 2016		87.36	per ton	0.036	201.3	per ton	20
Wtr-Cool screw c	Wtr-Cool screw chiller 150 - 300 ton 0.72 kWperTon with 0.47 kWperTon IPLV: Biz Prescriptive							
2782	Jan 1, 2016		72.3	per ton	0.031	170.8	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Wtr-Cool screw o	chiller 150 - 300 to	n 0.72 kWperTon	with 0.54 kWperTo	on IPLV: Biz Pr	escriptive					
2783	2783 Jan 1, 2016 42.17 per ton 0.017 95.4 per ton 20									
Wtr-Cool screw o	Wtr-Cool screw chiller 150 - 300 ton 0.72 kWperTon with 0.57 kWperTon IPLV: Biz Prescriptive									
2784	Jan 1, 2016		30.12	per ton	0.012	67.3	per ton	20		
Wtr-Cool screw o	chiller 150 - 300 to	n 0.72 kWperTon	with 0.5 kWperTo	n IPLV: Biz Pre	scriptive					
716	Jan 1, 2016		57.24	per ton	0.024	134.5	per ton	20		
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.31 kWperTo	on IPLV: Biz Pr	escriptive					
2757	Jan 1, 2016		114.05	per ton	0.145	380.168	per ton	20		
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.33 kWperTo	on IPLV: Biz Pr	escriptive					
2758	Jan 1, 2016		104.02	per ton	0.141	359.569	per ton	20		
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.36 kWperTo	on IPLV: Biz Pr	escriptive					
717	Jan 1, 2016		93.99	per ton	0.137	335.007	per ton	20		
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.38 kWperTo	on IPLV: Biz Pr	escriptive					
2759	Jan 1, 2016		83.96	per ton	0.132	308.622	per ton	20		
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.46 kWperTo	on IPLV: Biz Pr	escriptive					
2761	Jan 1, 2016		55.87	per ton	0.12	239.719	per ton	20		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool screw o	chiller over 300 ton	0.51 kWperTon v	with 0.4 kWperTor	ı IPLV: Biz Pre	scriptive			
2760	Jan 1, 2016		75.93	per ton	0.128	289.599	per ton	20
Wtr-Cool screw chiller over 300 ton 0.58 kWperTon with 0.35 kWperTon IPLV: Biz Prescriptive								
2762	Jan 1, 2016		93.39	per ton	0.089	277.692	per ton	20
Wtr-Cool screw o	Wtr-Cool screw chiller over 300 ton 0.58 kWperTon with 0.37 kWperTon IPLV: Biz Prescriptive							
2763	Jan 1, 2016		82.1	per ton	0.084	254.586	per ton	20
Wtr-Cool screw o	chiller over 300 ton	0.58 kWperTon v	with 0.43 kWperTo	on IPLV: Biz Pr	escriptive			
2764	Jan 1, 2016		59.53	per ton	0.074	197.441	per ton	20
Wtr-Cool screw o	chiller over 300 ton	0.58 kWperTon v	with 0.45 kWperTo	on IPLV: Biz Pr	escriptive			
2765	Jan 1, 2016		50.51	per ton	0.07	175.985	per ton	20
Wtr-Cool screw o	chiller over 300 ton	0.58 kWperTon v	with 0.4 kWperTor	ı IPLV: Biz Pre	scriptive			
718	Jan 1, 2016		70.82	per ton	0.079	227.053	per ton	20
Wtr-Cool screw o	Wtr-Cool screw chiller over 300 ton 0.58 kWperTon with 0.51 kWperTon IPLV: Biz Prescriptive							
2766	Jan 1, 2016		27.94	per ton	0.06	119.836	per ton	20

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life		
Wtr-Cool screw	chiller over 300 ton	0.64 kWperTon v	with 0.38 kWperTo	on IPLV: Biz Pr	escriptive					
2767	2767 Jan 1, 2016 72.72 per ton 0.032 176.176 per ton 20									
Wtr-Cool screw	Wtr-Cool screw chiller over 300 ton 0.64 kWperTon with 0.42 kWperTon IPLV: Biz Prescriptive									
2768	Jan 1, 2016		60.18	per ton	0.027	150.281	per ton	20		
Wtr-Cool screw	chiller over 300 ton	0.64 kWperTon v	with 0.45 kWperTo	on IPLV: Biz Pr	escriptive					
719	Jan 1, 2016		47.65	per ton	0.021	119.625	per ton	20		
Wtr-Cool screw	chiller over 300 ton	0.64 kWperTon v	with 0.48 kWperTo	on IPLV: Biz Pr	escriptive					
2769	Jan 1, 2016		35.11	per ton	0.015	86.563	per ton	20		
Wtr-Cool screw	chiller over 300 ton	0.64 kWperTon v	with 0.51 kWperTo	on IPLV: Biz Pr	escriptive					
2770	Jan 1, 2016		25.08	per ton	0.011	62.36	per ton	20		
Wtr-Cool screw	chiller under 150 to	on 0.63 kWperTon	with 0.38 kWper7	Ton IPLV: Biz P	rescriptive					
2743	Jan 1, 2016		193.99	per ton	0.4276	469.5	per ton	20		
Wtr-Cool screw	chiller under 150 to	on 0.63 kWperTon	with 0.44 kWperT	Ton IPLV: Biz P	rescriptive					
720	Jan 1, 2016		165.46	per ton	0.169	413.5	per ton	20		
Wtr-Cool screw	chiller under 150 to	on 0.63 kWperTon	with 0.47 kWperT	Ton IPLV: Biz P	rescriptive					
2745	Jan 1, 2016		151.2	per ton	0.3467	380.7	per ton	20		

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life	
Wtr-Cool screw o	chiller under 150 to	on 0.63 kWperTon	with 0.56 kWper	Ton IPLV: Biz P	rescriptive				
2747	Jan 1, 2016		111.25	per ton	0.269	295.4	per ton	20	
Wtr-Cool screw o	chiller under 150 to	on 0.63 kWperTon	with 0.5 kWperTo	on IPLV: Biz Pr	escriptive				
2746	Jan 1, 2016		139.78	per ton	0.3251	357.0	per ton	20	
Wtr-Cool screw o	chiller under 150 to	on 0.71 kWperTon	with 0.43 kWper	Ton IPLV: Biz P	rescriptive				
2748	Jan 1, 2016		148.71	per ton	0.3182	349.4	per ton	20	
Wtr-Cool screw o	chiller under 150 to	on 0.71 kWperTon	with 0.46 kWper	Ton IPLV: Biz P	rescriptive				
2749	Jan 1, 2016		132.66	per ton	0.2907	319.2	per ton	20	
Wtr-Cool screw o	chiller under 150 to	on 0.71 kWperTon	with 0.53 kWper	Ton IPLV: Biz P	rescriptive				
2750	Jan 1, 2016		100.56	per ton	0.2226	244.4	per ton	20	
Wtr-Cool screw o	chiller under 150 to	on 0.71 kWperTon	with 0.56 kWper	Ton IPLV: Biz P	rescriptive				
2751	Jan 1, 2016		87.72	per ton	0.1973	216.6	per ton	20	
Wtr-Cool screw o	Wtr-Cool screw chiller under 150 ton 0.71 kWperTon with 0.5 kWperTon IPLV: Biz Prescriptive								
721	Jan 1, 2016		116.61	per ton	0.097	283.2	per ton	20	

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Demand	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Wtr-Cool screw o	chiller under 150 to	on 0.71 kWperTon	with 0.63 kWperT	Ton IPLV: Biz P	rescriptive			
2752	Jan 1, 2016		55.63	per ton	0.1361	149.4	per ton	20
Wtr-Cool screw o	chiller under 150 to	on 0.79 kWperTon	with 0.47 kWper1	Ton IPLV: Biz P	rescriptive			
2753	Jan 1, 2016		103.43	per ton	0.2044	224.4	per ton	20
Wtr-Cool screw o	chiller under 150 to	on 0.79 kWperTon	with 0.51 kWperT	Ton IPLV: Biz P	rescriptive			
2754	Jan 1, 2016		85.59	per ton	0.1738	190.9	per ton	20
Wtr-Cool screw o	chiller under 150 to	on 0.79 kWperTon	with 0.55 kWper1	Ton IPLV: Biz P	rescriptive			
722	Jan 1, 2016		67.76	per ton	0.027	150.9	per ton	20
Wtr-Cool screw o	chiller under 150 to	on 0.79 kWperTon	with 0.59 kWper7	Ton IPLV: Biz P	rescriptive			
2755	Jan 1, 2016		49.93	per ton	0.0983	107.9	per ton	20
Wtr-Cool screw o	chiller under 150 to	on 0.79 kWperTon	with 0.62 kWperT	Ton IPLV: Biz P	rescriptive			
2756	Jan 1, 2016		35.66	per ton	0.0701	77.0	per ton	20

Business Standard Program Measures:

The Business Standard Program encourages customer participation through a simple and streamlined process. The program is designed to promote the installation of energy efficient technologies such as lighting, motors, HVAC, and refrigeration in nonresidential properties. Measures included within this program are common in multiple marketplaces and have deemed savings values associated with their energy performance. The listings of these measures are in the Prescriptive Measure Listing above. Applications are filled out and delivered to Ameren Missouri via contractors, customers, or through the Company's website. Ameren Missouri, through its contractor, multiply the measure quantities by the saving per measure in this TRM to determine the total energy and demand saved. Various measures may require a simple calculation to identify measure savings, but the measure level incentives will remain fixed regardless of individual project characteristics.

Small Business Direct Install Program Measures:

The Small Business Direct Install (SBDI) Program encourages small customer participation through an even more streamlined process. The program is designed to promote the installation of energy efficient technologies such as lighting, motors, HVAC, and refrigeration in nonresidential properties. Qualified contractors provide a walk-through energy audit and at the customer request can install the energy saving measures with a high percentage of the cost billed to the program implementation contractor. Energy and demand savings are determined by multiplying the measure quantities by the saving measure in this TRM similar to the Standard Program.

Custom, Retro-commissioning and New Construction Program Measure Analysis Methodology

The Business Custom, Retro-commissioning (RCx) and New Construction projects typically require substantial analytic rigor to identifying project savings and costs. The nature of these projects can vary dramatically.

Most commonly found Custom and New Construction measures can be grouped into 14 categories and can be found in, but not limited to, the Prescriptive Measure Listing above:

- Lighting (fixture upgrades, except for exit signs and controls)
- Lighting (Exit signs and controls)
- Packaged Air-Conditioners and Heat Pumps (includes RTUs, ASHPs, WSHPs, GSHPs)
- Chiller
- Cooling Tower

- Refrigeration System
- Motor Drive Installations (i.e. variable-frequency drives [VFDs])
- Compressed-Air Systems
- Controls and Energy Management Systems (EMS)
- Domestic Water Heating (various options)
- Pump, Fan, Piping, and Duct
- Process Upgrades
- All Other

Most commonly found RCx measures can be grouped into 4 categories and can be found in, but not limited to, the Prescriptive Measure Listing above:

- Lighting Improvements (fixture upgrades, except for exit signs and controls)
- Compressed-Air Systems
- Controls and Energy Management Systems (EMS)
- All Other

Some measures involve replacing an item of equipment with a similar, more-efficient model, while others entail enhancing the performance of existing equipment. For example, a measure may consist of modifying the programming of a control system and perhaps also adding one or more sensors and/or circuit-control devices, or it may involve modifying an existing pump or changing a piping system to reduce pressure drop, such that the motor driving the pump draws less power.

In the case of eligible motor upgrades and the installation of Variable Frequency Drive (VFD) drives on motors, this category will be credited with the savings irrespective of where the motor is located, unless the motor is part of a new item of equipment. For example, replacing the motor driving a fan on a cooling tower is a Motor measure, but replacing the entire cooling tower, which includes a new fan motor, is a Cooling Tower Measure.

A Technical Analysis Study (TAS) or energy savings estimate is required for all Custom and RCx projects. An energy savings estimate can be provided by the customer or a contractor. The Program engineering staff will review all TAS reports and energy savings estimates to ensure all assumptions are reasonable and that the study is based on sound engineering methodology. A TAS Report will contain complete documentation for the proposed project, and forms a vital element for the subsequent Impact Evaluation performed by the evaluation contractor. The TAS is also often used by the customer to get funding approval. More specifically, the TAS:

 Identifies the customer (organization), key customer representatives and their contact information, and the location of the facility that will host the proposed project.

- Describes the host facility (typically with a photograph and/or sketch showing) site layout or floor plan).
- Documents monthly electricity use, and identifies Ameren Missouri account number and meter number.
- Describes the baseline equipment and provides its electricity-use (with estimated load shape¹) and estimated annual O&M costs.
- Describes the new equipment to be added, together with key performance specifications and expected lifetime, or otherwise completes the description of the measure (i.e., Energy Management System (EMS) reprogramming and new control functions).
- Provides estimated electricity-use (and estimated load shape) for the retrofit condition.
- Provides the energy and demand savings calculations, 2 together with 1) the source of input parameter numbers, and 2) justification for each assumption made.
- Provides the cost to implement the project, together with a cost breakdown and, when possible, written quotations for major equipment item(s) and estimates of ongoing annual O&M costs.
- Provides the estimated financial incentive and estimated annual cost savings. together with the financial metric(s) requested by the customer (i.e., simple payback, IRR, ROI).

As it is noted above, some measures may involve modifying existing controls or energy management systems so they perform more functions and act more effectively to minimize electricity use while still producing the desired or needed service outputs as a function of time. Examples include the installation of Variable Air Volume (VAV) fans and sensors and the installation of a multistage efficient chiller, with each of these new systems controlled by an existing energy management system. This type of project will involve reprogramming of the EMS for the new control functions. It is most important that the TAS fully describe the new equipment recommended, the new ventilation and chiller controls strategies to be implemented, and the specific EMS control functions that require reprogramming.

After the TAS is submitted together with an application signed by the customer that references the TAS, an engineer on the Program staff will formally review it and independently check the savings calculations. The TAS will either be approved or returned to the customer with a written explanation of what modifications are needed.

Load shape expressed as monthly kWh and kW.
 Reductions in Greenhouse Gas emissions or other environmental data should be included when available.

When modifications are required, the revision number and date are noted on the cover, new signatures are affixed, and the TAS is resubmitted.

Measure savings calculation for the Energy Management System Pilot will be conducted under these Custom Program procedures.

After final approval for program requirements and cost effectiveness, the customer is authorized to proceed with implementing the project. Program staff will monitor progress and offer advice if this is needed and it is feasible for program staff to provide this assistance.

Calculating Custom, RCx and New Construction Energy and Demand Savings
The energy and demand savings equations used in these programs can be found in the on-line TRM.

Custom Program Measures

The Business Custom Incentive Program provides energy efficiency expertise, services, and financial incentives to encourage nonresidential customers to install energy efficient processes and/or equipment that lie outside the Standard program's pre-defined energy efficiency measures and/or guidelines savings. These custom projects are complex and always unique requiring detailed savings calculations to arrive at the appropriate custom incentive level.

The methodology for calculation of energy savings is described in the Custom, Retrocommissioning and New Construction Program Measure Analysis Methodology section.

The following is a listing of the Business Custom Measures extracted from iTRL.

Ameren Missouri Measure Listing for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Custom Measu	re: Biz Custom							
1169	Jan 2, 2013		variable based on parameters		variable based on parameters	variable based on parameters		

Retro-commissioning Program Measures

The Business Retro-Commissioning Program will deliver energy savings by helping facilities benchmark existing system performance levels, identify operating system performance optimization improvements, and where applicable, provide financial incentives to assist with the implementation of the recommended efficiency improvements.

The measures are associated with efficiency opportunities with existing mechanical, electrical and thermal systems in non-residential buildings by providing options for retrofitting equipment that is inefficient and outdated. This program also assists occupants in improving their operation and maintenance practices via compressed air, Building Automation System (BAS), lighting and process system upgrades.

The methodology for calculation of energy savings is described in the Custom, Retrocommissioning and New Construction Program Measure Analysis Methodology section.

The program is listed separately because incentive levels could be different.

The following is a listing of the Business Retro-Commissioning Measures extracted from iTRL.

Ameren Missouri Retro-Commissioning Measures for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
Retro commiss	ioning: Biz RCx							
1191	Jan 2, 2013		variable based on parameters		variable based on parameters	variable based on parameters		

New Construction Program Measures

The primary goal of this Program is to capture energy savings available in new building construction, major renovations, or tenant build-outs to existing business facilities.

It is important to offer the building community multiple options for their specific projects. The program will accommodate any phase of construction where Program incentives can drive incremental cost effective energy efficiency improvements.

The Program offers financial incentives to encourage building owners/developers and their design/construction team to exceed standard building practices to achieve efficiency, above and beyond, the current building energy code requirements. There are four types of energy efficiency incentives that New Construction Projects can receive through participation in this program.

- Whole Building Performance Incentives provide cash incentives to encourage holistic energy efficient building design and construction.
- **Standard Incentives** are available for common, proven energy efficiency measures. These measures have been evaluated and the energy savings/value have been pre-determined.
- **Installed Interior Lighting Incentives** are based upon the efficiency of the installed interior lighting system relative to the baseline lighting power density as defined within ASHARAE 90.1.
- **Custom Incentives** are available for all other energy efficiency measures which are determined to be cost-effective and meet all standards required by the Business Program.

These projects typically require substantial analytic rigor to identifying project savings based on local codes and standards and builder's normal practices and costs.

The methodology for calculation of energy savings is described in the Custom, Retrocommissioning and New Construction Program Measure Analysis Methodology section.

The following is a listing of all the Business New Construction Measures extracted from iTRL.

Ameren Missouri New Construction Measure for MEEIA Cycle 2016-18

Measure Reference No.	Start Date	End Date	Incremental Cost	Cost Unit	Gross Annual Demand Reduction (kW)	Gross Annual Electric Savings (kWh)	Savings Unit	Measure Life
New Construct	tion: Biz New Co	onstruction						
3000	Jan 2, 2013		variable based on parameters		variable based on parameters	variable based on parameters		