

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Education	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.03	4	\$0.00	90%	100%	\$0.00	0.00	0
Education	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	29379.91	10	\$536.49	100%	67%	\$0.00	27.44	0
Education	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	6855.31	15	\$1,685.00	95%	95%	\$0.03	2.82	0
Education	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	4504.92	15	\$1,685.00	95%	95%	\$0.05	1.86	0
Education	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	9793.30	10	#####	95%	65%	\$0.34	0.26	0
Education	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	9793.30	10	#####	95%	65%	\$0.34	0.26	0
Education	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	48966.52	15	#####	25%	62%	\$0.07	1.43	0
Education	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	65288.69	15	\$11,890.94	25%	95%	\$0.03	3.81	0
Education	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	65288.69	15	\$11,890.94	75%	95%	\$0.03	3.81	0
Education	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	17236.21	15	\$12,192.86	25%	99%	\$0.10	0.98	0
Education	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	17236.21	15	\$6,502.86	25%	99%	\$0.05	1.84	0
Education	Space Heat	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	22.90	15	#####	90%	100%	\$2,771.27	0.00	0
Education	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	29379.91	7	#####	95%	85%	\$0.38	0.23	0
Education	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	7613.30	20	#####	75%	99%	\$7.44	0.01	0
Education	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	7613.30	20	#####	75%	99%	\$7.44	0.01	0
Education	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	31338.57	7	\$13,217.06	95%	75%	\$0.10	0.89	0



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Education	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	45199.86	15	\$4,225.62	10%	66%	\$0.01	7.42	0
Education	Space Heat	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	74615.64	15	\$2,600.38	10%	95%	\$0.00	19.91	0
Education	Space Heat	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	74615.64	15	\$2,600.38	50%	95%	\$0.00	19.91	0
Education	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	1419.76	5	\$187.81	100%	50%	\$0.04	2.19	178
Education	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	1419.76	5	\$187.81	100%	50%	\$0.04	2.19	4
Education	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	357.38	5	\$166.95	100%	50%	\$0.14	0.62	0
Education	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	357.38	5	\$166.95	100%	50%	\$0.14	0.62	0
Education	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.02	90%	100%	\$0.27	0.37	0
Education	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.02	90%	100%	\$0.27	0.37	0
Education	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	14297.32	5	\$2,080.91	5%	85%	\$0.04	1.99	152
Education	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	14297.32	5	\$2,080.91	5%	85%	\$0.04	1.99	4
Education	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	947.71	20	#####	10%	95%	\$6.69	0.02	0
Education	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21522.43	15	\$6,457.97	15%	95%	\$0.04	2.41	685
Education	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21522.43	15	\$6,457.97	15%	95%	\$0.04	2.41	19
Education	Ventilation and Circulation	Existing	Electronically Commutated	Electronically Commutated	Assumes 67% eff. .35 HP PSC motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	1178.66	18	\$6,484.12	75%	95%	\$0.71	0.15	0

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			Motors (ECM) on an Air Handler Unit	Motors (ECM) on an Air Handler Unit	operating 2000 hours per year is replaced with 85% eff. ECPM motor									
Education	Ventilation and Circulation	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	1178.66	18	\$6,484.12	75%	95%	\$0.71	0.15	0
Education	Ventilation and Circulation	Existing	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	149.46	13	\$3,050.87	65%	59%	\$3.12	0.03	0
Education	Ventilation and Circulation	New	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	149.46	13	\$3,050.87	65%	59%	\$3.12	0.03	0
Education	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	1955.87	15	\$15.51	95%	76%	\$0.00	91.16	353
Education	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	1955.87	15	\$15.51	95%	76%	\$0.00	91.16	9
Education	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	998.49	15	\$15.51	95%	76%	\$0.00	46.54	175
Education	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	998.49	15	\$15.51	95%	76%	\$0.00	46.54	4
Education	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	1532.94	15	\$15.51	95%	76%	\$0.00	71.45	273



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Education	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	1532.94	15	\$15.51	95%	76%	\$0.00	71.45	7
Education	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	994.34	15	\$15.51	95%	76%	\$0.00	46.35	173
Education	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	994.34	15	\$15.51	95%	76%	\$0.00	46.35	4
Education	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	1128.01	15	\$15.51	95%	76%	\$0.00	52.58	199
Education	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	1128.01	15	\$15.51	95%	76%	\$0.00	52.58	5
Education	Ventilation and Circulation	Existing	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	168.23	15	\$74.55	50%	85%	\$0.06	1.63	18
Education	Ventilation and Circulation	New	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	168.23	15	\$74.55	50%	85%	\$0.06	1.63	0
Education	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	10616.74	13	\$2,055.38	75%	98%	\$0.03	3.33	1,504
Education	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	3872.41	13	\$679.00	75%	98%	\$0.03	3.68	559
Education	Water Heat GT 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	33.05	12	\$43.07	75%	95%	\$0.21	0.47	0

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Education	Water Heat GT 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	33.05	12	\$43.07	75%	95%	\$0.21	0.47	0
Education	Water Heat GT 55 Gal	Existing	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	33.05	12	\$43.07	75%	78%	\$0.21	0.47	0
Education	Water Heat GT 55 Gal	New	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	33.05	12	\$43.07	75%	78%	\$0.21	0.47	0
Education	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	5324.36	25	\$5,303.14	5%	100%	\$0.11	0.88	0
Education	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	2324.34	25	\$5,303.14	25%	100%	\$0.26	0.38	0
Education	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	62.70	11	\$71.76	100%	34%	\$0.19	0.50	0
Education	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	62.70	11	\$71.76	100%	34%	\$0.19	0.50	0
Education	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	123.53	11	\$174.28	100%	95%	\$0.24	0.41	0
Education	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4	Federal Standard 2016 Clothes	Per Residential Clothes Washer	123.53	11	\$174.28	100%	95%	\$0.24	0.41	0



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			(Electric Water Heating)	and WF 4.5 (Electric DHW & Dryer)	Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)									
Education	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	63.66	11	\$102.52	100%	95%	\$0.27	0.36	0
Education	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	63.66	11	\$102.52	100%	95%	\$0.27	0.36	0
Education	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.50	10	\$8.75	100%	25%	\$0.15	0.64	0
Education	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.50	10	\$8.75	100%	55%	\$0.15	0.64	0
Education	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	13390.77	14	\$6,045.45	50%	95%	\$0.07	1.55	61
Education	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	5845.72	14	\$6,045.45	50%	95%	\$0.15	0.68	0
Education	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	800.83	8	\$747.73	50%	75%	\$0.20	0.47	0
Education	Water Heat GT 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	473.45	14	\$138.33	100%	52%	\$0.04	2.40	3
Education	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	133.11	15	\$224.27	75%	90%	\$0.24	0.44	0

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Education	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	13029.02	7	\$401.55	95%	83%	\$0.01	12.88	207
Education	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	5687.80	7	\$401.55	75%	83%	\$0.02	5.62	4
Education	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	9529.08	7	\$318.18	95%	74%	\$0.01	11.88	0
Education	Water Heat GT 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	4159.90	7	\$318.18	75%	74%	\$0.02	5.19	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1500.76	12	\$0.00	95%	75%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1500.76	12	\$0.00	95%	75%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1059.36	12	\$0.00	95%	50%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1059.36	12	\$0.00	95%	50%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	617.96	12	\$0.00	95%	35%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	617.96	12	\$0.00	95%	35%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	706.24	12	\$31.41	95%	25%	\$0.01	13.91	3
Education	Water Heat GT 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Existing Low-flow Pre-Rinse Spray Valve	Per Pre-Rinse Spray Valve	2.36	5	\$3.16	95%	25%	\$0.40	0.22	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	21.37	5	\$2.26	95%	65%	\$0.03	2.81	0
Education	Water Heat GT 55 Gal	New	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	21.37	5	\$2.26	95%	65%	\$0.03	2.81	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	354.78	9	\$39.02	75%	85%	\$0.02	4.41	4
Education	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	354.78	9	\$39.02	75%	85%	\$0.02	4.41	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	266.09	9	\$29.26	75%	75%	\$0.02	4.41	0



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Education	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	266.09	9	\$29.26	75%	75%	\$0.02	4.41	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	177.39	9	\$19.51	75%	50%	\$0.02	4.41	0
Education	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	177.39	9	\$19.51	75%	50%	\$0.02	4.41	0
Education	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	177.39	9	\$19.51	75%	35%	\$0.02	4.41	1
Education	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	177.39	9	\$19.51	75%	35%	\$0.02	4.41	0
Education	Water Heat GT 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.08	15	\$0.00	100%	100%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.08	15	\$0.00	100%	100%	\$0.00	0.00	0
Education	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	971.08	12	\$3,802.03	75%	85%	\$0.63	0.16	0
Education	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	971.08	12	\$3,802.03	75%	85%	\$0.63	0.16	0
Education	Water Heat GT 55 Gal	Existing	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.02	10	\$0.01	90%	100%	\$0.09	1.01	27
Education	Water Heat GT 55 Gal	New	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.02	10	\$0.01	90%	100%	\$0.09	1.01	1
Education	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	3727.05	2	\$108.18	75%	94%	\$0.02	4.33	22



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Education	Water Heat LE 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	70.14	12	\$43.07	75%	95%	\$0.10	1.01	2
Education	Water Heat LE 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	70.14	12	\$43.07	75%	95%	\$0.10	1.01	0
Education	Water Heat LE 55 Gal	Existing	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	70.14	12	\$43.07	75%	78%	\$0.10	1.01	0
Education	Water Heat LE 55 Gal	New	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	70.14	12	\$43.07	75%	78%	\$0.10	1.01	0
Education	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	4839.12	25	\$5,303.14	5%	100%	\$0.12	0.80	0
Education	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	4819.95	25	\$5,303.14	25%	100%	\$0.13	0.79	0
Education	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	62.70	11	\$71.76	100%	34%	\$0.19	0.50	0
Education	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	62.70	11	\$71.76	100%	34%	\$0.19	0.50	0
Education	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF	Per Residential Clothes Washer	123.53	11	\$174.28	100%	95%	\$0.24	0.41	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					8.0 (Electric DHW & Dryer)									
Education	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	123.53	11	\$174.28	100%	95%	\$0.24	0.41	0
Education	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	63.66	11	\$102.52	100%	95%	\$0.27	0.36	0
Education	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	63.66	11	\$102.52	100%	95%	\$0.27	0.36	0
Education	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.50	10	\$8.75	100%	25%	\$0.15	0.64	0
Education	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.50	10	\$8.75	100%	55%	\$0.15	0.64	0
Education	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	12170.39	14	\$6,045.45	50%	95%	\$0.07	1.41	117
Education	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	12122.17	14	\$6,045.45	50%	95%	\$0.07	1.40	3
Education	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	727.85	8	\$747.73	50%	75%	\$0.22	0.43	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Education	Water Heat LE 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	473.45	14	\$138.33	100%	52%	\$0.04	2.40	7
Education	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	120.98	15	\$224.27	75%	90%	\$0.26	0.40	0
Education	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	11719.51	7	\$401.55	95%	83%	\$0.01	11.58	399
Education	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	11673.08	7	\$401.55	75%	83%	\$0.01	11.54	6
Education	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	8507.10	7	\$318.18	95%	74%	\$0.01	10.61	0
Education	Water Heat LE 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	8473.40	7	\$318.18	75%	74%	\$0.01	10.57	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	3184.48	12	\$0.00	95%	75%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	3184.48	12	\$0.00	95%	75%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	2247.87	12	\$0.00	95%	50%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	2247.87	12	\$0.00	95%	50%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1311.25	12	\$0.00	95%	35%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	1311.25	12	\$0.00	95%	35%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	1498.58	12	\$31.41	95%	25%	\$0.00	29.52	14
Education	Water Heat LE 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Existing Low-flow Pre-Rinse Spray Valve	Per Pre-Rinse Spray Valve	5.00	5	\$3.16	95%	25%	\$0.19	0.47	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	45.35	5	\$2.26	95%	65%	\$0.02	5.95	1
Education	Water Heat LE 55 Gal	New	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	45.35	5	\$2.26	95%	65%	\$0.02	5.95	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Education	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	752.81	9	\$39.02	75%	85%	\$0.01	9.37	19
Education	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	752.81	9	\$39.02	75%	85%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	564.61	9	\$29.26	75%	75%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	564.61	9	\$29.26	75%	75%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	376.41	9	\$19.51	75%	50%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	376.41	9	\$19.51	75%	50%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	376.41	9	\$19.51	75%	35%	\$0.01	9.37	4
Education	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	376.41	9	\$19.51	75%	35%	\$0.01	9.37	0
Education	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.34	15	\$0.00	100%	100%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.34	15	\$0.00	100%	100%	\$0.00	0.00	0
Education	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	2060.54	12	\$3,802.03	75%	85%	\$0.30	0.34	0
Education	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	2060.54	12	\$3,802.03	75%	85%	\$0.30	0.34	0
Education	Water Heat LE 55 Gal	Existing	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.28	10	\$0.12	90%	100%	\$0.08	1.22	327
Education	Water Heat LE 55 Gal	New	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.28	10	\$0.12	90%	100%	\$0.08	1.22	12
Education	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	3387.38	2	\$108.18	75%	94%	\$0.02	3.94	43

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.50	4	\$1.25	90%	100%	\$0.91	0.10	0
Government	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.52	4	\$1.25	90%	100%	\$0.87	0.10	0
Government	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.28	4	\$0.00	90%	100%	\$0.00	2,928.64	465
Government	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.28	4	\$0.00	90%	100%	\$0.00	2,928.64	14
Government	Computers	Existing	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	2520.25	5	\$560.06	90%	100%	\$0.07	1.30	975
Government	Computers	New	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	2520.25	5	\$560.06	90%	100%	\$0.07	1.30	24
Government	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	96.86	12	\$0.00	90%	100%	\$0.00	116,821.21	3
Government	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	96.86	12	\$0.00	90%	100%	\$0.00	116,821.21	0
Government	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	197.76	12	\$149.70	90%	100%	\$0.12	0.80	0
Government	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	197.76	12	\$149.70	90%	100%	\$0.12	0.80	0
Government	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	4353.53	10	\$91.89	90%	100%	\$0.00	30.96	0
Government	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	4499.81	15	#####	90%	100%	\$1.41	0.08	0
Government	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	53.61	20	\$3,206.89	90%	100%	\$7.39	0.02	0
Government	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	53.43	20	\$3,206.89	90%	100%	\$7.41	0.02	0
Government	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	22.50	15	\$1,685.00	90%	100%	\$10.59	0.01	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1128.81	10	\$5,952.43	90%	100%	\$0.95	0.12	0
Government	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	1124.95	10	\$5,952.43	90%	100%	\$0.95	0.12	0
Government	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	5644.04	15	\$4,024.33	90%	100%	\$0.10	1.29	0
Government	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	7525.39	15	\$2,012.17	90%	100%	\$0.04	3.43	0
Government	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	7499.68	15	\$2,012.17	90%	100%	\$0.04	3.42	0
Government	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	451.52	10	\$5,692.00	90%	100%	\$2.27	0.05	0
Government	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	1806.09	10	\$4,914.97	90%	100%	\$0.49	0.22	0
Government	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.68	20	\$1.73	90%	100%	\$0.31	0.39	0
Government	Cooling Chillers	New	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.68	20	\$1.73	90%	100%	\$0.31	0.39	0
Government	Cooling Chillers	Existing	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.23	20	\$0.58	90%	100%	\$0.31	0.39	0
Government	Cooling Chillers	New	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.23	20	\$0.58	90%	100%	\$0.31	0.39	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.51	20	\$1.29	90%	100%	\$0.31	0.39	0
Government	Cooling Chillers	New	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.51	20	\$1.29	90%	100%	\$0.31	0.39	0
Government	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	4515.23	15	#####	90%	100%	\$1.15	0.11	0
Government	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	70.33	8	\$901.08	90%	100%	\$2.69	0.04	0
Government	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	3374.86	7	\$8,354.09	90%	100%	\$0.57	0.20	0
Government	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	231.69	20	#####	90%	100%	\$41.38	0.00	0
Government	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	230.90	20	#####	90%	100%	\$41.52	0.00	0
Government	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	3812.86	30	\$159.70	90%	100%	\$0.00	25.93	0
Government	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	3799.84	30	\$159.70	90%	100%	\$0.00	25.84	0
Government	Cooling Chillers	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	2558.11	10	\$8,281.64	90%	100%	\$0.58	0.18	0
Government	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	3612.19	7	\$2,263.96	90%	100%	\$0.15	0.78	0
Government	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4063.71	18	#####	90%	100%	\$1.10	0.12	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4049.83	18	#####	90%	100%	\$1.10	0.12	0
Government	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	3417.63	13	\$1,877.70	90%	100%	\$0.08	1.35	0
Government	Cooling Chillers	New	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	3417.63	13	\$1,877.70	90%	100%	\$0.08	1.35	0
Government	Cooling Chillers	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	6450.33	15	\$2,154.69	90%	100%	\$0.05	2.74	0
Government	Cooling Chillers	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	7525.39	15	\$1,077.34	90%	100%	\$0.02	6.40	0
Government	Cooling Chillers	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	7499.68	15	\$1,077.34	90%	100%	\$0.02	6.38	0
Government	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1128.81	5	\$1,202.28	90%	100%	\$0.32	0.31	0
Government	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1124.95	5	\$1,202.28	90%	100%	\$0.32	0.31	0
Government	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	5909.57	10	\$91.89	90%	100%	\$0.00	38.21	1,099
Government	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	472.77	20	\$3,206.89	90%	100%	\$0.84	0.15	0
Government	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	458.16	20	\$3,206.89	90%	100%	\$0.86	0.14	0
Government	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	29.70	15	\$1,685.00	90%	100%	\$8.02	0.01	0
Government	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1532.27	10	\$5,952.43	90%	100%	\$0.70	0.15	0
Government	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	1484.92	10	\$5,952.43	90%	100%	\$0.72	0.15	0
Government	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	7661.33	15	\$4,024.33	90%	100%	\$0.07	1.59	256
Government	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	10215.11	15	\$2,012.17	90%	100%	\$0.03	4.23	713
Government	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	9899.49	15	\$2,012.17	90%	100%	\$0.03	4.10	46
Government	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	6129.07	15	\$9,515.50	90%	100%	\$0.22	0.54	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	2782.56	5	\$1,811.61	90%	100%	\$0.20	0.51	0
Government	Cooling DX	Existing	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.17	15	\$0.52	90%	100%	\$0.43	0.27	0
Government	Cooling DX	New	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.17	15	\$0.52	90%	100%	\$0.43	0.27	0
Government	Cooling DX	Existing	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.27	15	\$0.84	90%	100%	\$0.44	0.27	0
Government	Cooling DX	New	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.27	15	\$0.84	90%	100%	\$0.44	0.27	0
Government	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3187.11	15	\$2,088.52	90%	100%	\$0.09	1.27	709
Government	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3088.64	15	\$1,113.88	90%	100%	\$0.05	2.31	13
Government	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	567.32	15	\$6,470.03	90%	100%	\$1.61	0.07	0
Government	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	567.32	15	\$4,917.23	90%	100%	\$1.23	0.10	0
Government	Cooling DX	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	1.18	15	#####	90%	100%	#####	0.00	0
Government	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	4454.77	7	\$8,354.09	90%	100%	\$0.43	0.24	0
Government	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2043.02	20	#####	90%	100%	\$4.69	0.03	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1979.90	20	#####	90%	100%	\$4.84	0.03	0
Government	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	2782.56	10	\$1,860.57	90%	100%	\$0.12	0.89	0
Government	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5175.66	30	\$159.70	90%	100%	\$0.00	32.00	308
Government	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5015.74	30	\$159.70	90%	100%	\$0.00	31.01	34
Government	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	2558.11	10	\$8,281.64	90%	100%	\$0.58	0.18	0
Government	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4903.25	7	\$2,263.96	90%	100%	\$0.11	0.96	0
Government	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5516.16	18	#####	90%	100%	\$0.81	0.15	0
Government	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5345.72	18	#####	90%	100%	\$0.83	0.15	0
Government	Cooling DX	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	8755.81	15	\$2,154.69	90%	100%	\$0.03	3.39	98
Government	Cooling DX	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	10215.11	15	\$1,077.34	90%	100%	\$0.01	7.90	349
Government	Cooling DX	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	9899.49	15	\$1,077.34	90%	100%	\$0.02	7.66	43
Government	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1532.27	5	\$1,202.28	90%	100%	\$0.24	0.43	0
Government	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1484.92	5	\$1,202.28	90%	100%	\$0.24	0.41	0
Government	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	23
Government	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	1
Government	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.07	4	\$0.00	90%	100%	\$0.00	726.82	58

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.07	4	\$0.00	90%	100%	\$0.00	726.82	1
Government	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.03	3.13	1
Government	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.03	3.13	0
Government	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	9441.87	10	\$91.89	90%	100%	\$0.00	53.49	649
Government	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	417.90	20	\$3,206.89	90%	100%	\$0.95	0.11	0
Government	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	403.87	20	\$3,206.89	90%	100%	\$0.98	0.11	0
Government	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.27	15	\$0.17	90%	100%	\$0.09	1.15	0
Government	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.27	15	\$0.17	90%	100%	\$0.09	1.15	0
Government	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.51	15	\$0.34	90%	100%	\$0.09	1.10	267
Government	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.51	15	\$0.34	90%	100%	\$0.09	1.10	9
Government	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	984.23	15	\$1,685.00	90%	100%	\$0.24	0.42	0
Government	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	651.24	15	\$1,685.00	90%	100%	\$0.37	0.28	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2760.48	10	\$5,952.43	90%	100%	\$0.39	0.24	0
Government	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	2667.78	10	\$5,952.43	90%	100%	\$0.40	0.23	0
Government	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	13802.42	15	\$4,024.33	90%	100%	\$0.04	2.48	176
Government	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	18403.22	15	\$2,012.17	90%	100%	\$0.02	6.62	488
Government	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	17785.23	15	\$2,012.17	90%	100%	\$0.02	6.39	32
Government	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	5417.79	15	\$9,014.68	90%	100%	\$0.24	0.43	0
Government	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	2459.65	5	\$1,811.61	90%	100%	\$0.22	0.39	0
Government	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5291.87	15	\$2,088.52	90%	100%	\$0.06	1.83	448
Government	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5114.17	15	\$1,113.88	90%	100%	\$0.03	3.32	9
Government	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	501.48	15	\$6,470.03	90%	100%	\$1.82	0.06	0
Government	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	501.48	15	\$4,917.23	90%	100%	\$1.39	0.07	0
Government	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	8003.35	7	\$8,354.09	90%	100%	\$0.24	0.37	0
Government	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2898.98	20	#####	90%	100%	\$3.31	0.03	0
Government	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2801.63	20	#####	90%	100%	\$3.42	0.03	0
Government	Heat Pump	Existing	Ground Source Heat Pump Replacing Air Source Heat Pump	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source	0	2.06	15	\$37.23	90%	100%	\$2.56	0.04	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			> 240 kBtuh - Advanced Efficiency	Heat Pump > 240 kBtuh	Heat Pump > 240 kBtuh									
Government	Heat Pump	New	Ground Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh - Advanced Efficiency	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	2.06	15	\$37.23	90%	100%	\$2.56	0.04	0
Government	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	2459.65	10	\$1,762.65	90%	100%	\$0.13	0.73	0
Government	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	4575.02	30	\$159.70	90%	100%	\$0.00	24.44	102
Government	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	4421.39	30	\$159.70	90%	100%	\$0.00	23.62	11
Government	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	2558.11	10	\$8,281.64	90%	100%	\$0.58	0.16	0
Government	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	8833.55	7	\$2,263.96	90%	100%	\$0.06	1.52	696
Government	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4876.01	18	#####	90%	100%	\$0.91	0.12	0
Government	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4712.27	18	#####	90%	100%	\$0.95	0.11	0
Government	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	32794.08	15	#####	90%	100%	\$1.30	0.08	0
Government	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	31692.82	15	#####	90%	100%	\$1.35	0.08	0
Government	Heat Pump	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	15774.19	15	\$2,154.69	90%	100%	\$0.02	5.30	67
Government	Heat Pump	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	18403.22	15	\$1,077.34	90%	100%	\$0.01	12.36	239



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Heat Pump	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	17785.23	15	\$1,077.34	90%	100%	\$0.01	11.94	31
Government	Heat Pump	Existing	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	1.43	15	\$3.45	90%	100%	\$0.34	0.30	0
Government	Heat Pump	New	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	1.43	15	\$3.45	90%	100%	\$0.34	0.30	0
Government	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2760.48	5	\$1,202.28	90%	100%	\$0.13	0.67	0
Government	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2667.78	5	\$1,202.28	90%	100%	\$0.14	0.64	0
Government	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	484.54	10	\$100.00	90%	100%	\$0.04	2.51	60
Government	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	1356.70	8	\$225.00	90%	100%	\$0.03	2.60	106
Government	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	1356.70	8	\$225.00	90%	100%	\$0.03	2.60	4
Government	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	1162.89	8	\$363.17	90%	100%	\$0.07	1.38	18
Government	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	2441.37	10	\$100.00	90%	100%	\$0.01	13.01	0
Government	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	77.01	13	\$6.00	90%	100%	\$0.01	8.52	0
Government	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	4660.18	8	\$5,173.27	90%	100%	\$0.23	0.40	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	6591.71	10	\$1,131.84	90%	100%	\$0.03	3.10	640
Government	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.26	13	\$0.18	90%	100%	\$0.10	0.98	0
Government	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.25	13	\$0.75	90%	100%	\$0.46	0.22	0
Government	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	0	0.30	13	\$0.36	90%	100%	\$0.18	0.55	0
Government	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	0	0.08	13	\$0.13	90%	100%	\$0.26	0.39	0
Government	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	0	0.49	20	\$2.25	90%	100%	\$0.57	0.19	0
Government	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	5859.29	8	\$762.48	90%	100%	\$0.03	3.41	1,017
Government	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	5859.29	8	\$363.17	90%	100%	\$0.01	7.16	148
Government	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	64.69	10	\$100.00	90%	100%	\$0.28	0.34	0
Government	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	123.48	8	\$5,173.27	90%	100%	\$8.80	0.01	0
Government	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	174.65	10	\$1,131.84	90%	100%	\$1.17	0.08	0
Government	Lighting Interior HID	Existing	Lighting Interior - Efficient Metal	Efficient Metal Halide	Standard HID Baseline - represents a	0	0.01	15	\$0.00	90%	100%	\$0.07	1.51	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			Halide - Above Standard		mix of Mercury Vapor, High Pressure Sodium, Metal Halide									
Government	Lighting Interior HID	Existing	Lighting Interior - High Bay Fluorescent High Output - Above Standard	High Bay Fluorescent High Output (HO)	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.03	15	\$0.01	90%	100%	\$0.04	2.40	108
Government	Lighting Interior HID	Existing	Lighting Interior - High Bay LED - Above Standard	High Bay LED	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.06	20	\$0.01	90%	100%	\$0.03	3.86	9
Government	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.04	20	-\$0.01	90%	100%	-\$0.02	999.00	0
Government	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	155.25	8	\$762.48	90%	100%	\$1.03	0.09	0
Government	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	155.25	8	\$363.17	90%	100%	\$0.49	0.19	0
Government	Lighting Interior Other	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	26.76	10	\$100.00	90%	100%	\$0.67	0.14	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	38.02	10	\$9.50	90%	100%	\$0.04	2.13	3
Government	Lighting Interior Other	New	HE Lighting Fixtures/Design 10% better than code (New Construction)	HE Lighting Fixtures/Design 10% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.34	15	\$0.06	90%	100%	\$0.02	4.42	0
Government	Lighting Interior Other	New	HE Lighting Fixtures/Design 15% better than code (New Construction)	HE Lighting Fixtures/Design 15% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.51	15	\$0.08	90%	100%	\$0.02	4.87	0
Government	Lighting Interior Other	New	HE Lighting Fixtures/Design 30% better than code (New Construction)	HE Lighting Fixtures/Design 30% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	1.03	15	\$0.16	90%	100%	\$0.02	4.87	306
Government	Lighting Interior Other	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	51.08	8	\$5,173.27	90%	100%	\$21.26	0.00	0
Government	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	5461.70	8	\$5,173.27	90%	100%	\$0.20	0.47	0
Government	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	28.21	16	\$12.00	90%	100%	\$0.06	1.84	15
Government	Lighting Interior Other	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	72.25	10	\$1,131.84	90%	100%	\$2.82	0.03	0
Government	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	7725.44	10	\$1,131.84	90%	100%	\$0.03	3.64	50
Government	Lighting Interior Other	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	64.23	8	\$762.48	90%	100%	\$2.49	0.04	0
Government	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	6867.06	8	\$762.48	90%	100%	\$0.02	4.00	4
Government	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	73.58	30	\$7.50	90%	100%	\$0.01	8.63	58



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	73.58	30	\$7.50	90%	100%	\$0.01	8.63	1
Government	Lighting Interior Other	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	64.23	8	\$363.17	90%	100%	\$1.19	0.08	0
Government	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	325.26	10	\$100.00	90%	100%	\$0.06	1.73	11
Government	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	620.86	8	\$5,173.27	90%	100%	\$1.75	0.05	0
Government	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	878.19	10	\$1,131.84	90%	100%	\$0.23	0.41	0
Government	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	0	0.21	5	\$0.00	90%	100%	\$0.01	14.12	428
Government	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	0	0.17	2	\$0.00	90%	100%	\$0.01	8.00	0
Government	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	0	0.22	12	\$0.03	90%	100%	\$0.03	3.74	866
Government	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	780.61	8	\$762.48	90%	100%	\$0.21	0.45	0
Government	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	780.61	8	\$363.17	90%	100%	\$0.10	0.95	0
Government	Other Plug Load	Existing	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	90%	100%	\$0.01	7.52	21
Government	Other Plug Load	New	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	90%	100%	\$0.01	7.52	1

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Government	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Government	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	14.74	4	\$1.46	90%	100%	\$0.04	2.39	4
Government	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	14.74	4	\$1.46	90%	100%	\$0.04	2.39	0
Government	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	925.98	10	\$0.00	90%	100%	\$0.00	0.00	0
Government	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	925.98	10	\$0.00	90%	100%	\$0.00	0.00	0
Government	Other Plug Load	Existing	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.20	5	\$0.84	90%	100%	\$1.24	0.07	0
Government	Other Plug Load	New	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.20	5	\$0.84	90%	100%	\$1.24	0.07	0
Government	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	578.72	5	\$98.01	90%	100%	\$0.05	1.71	181
Government	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	578.72	5	\$98.01	90%	100%	\$0.05	1.71	5
Government	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.01	6	\$0.00	90%	100%	\$0.00	1,593.40	2
Government	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.01	6	\$0.00	90%	100%	\$0.00	1,593.40	0
Government	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.08	5	\$0.00	90%	100%	\$0.00	4,457.26	26
Government	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.08	5	\$0.00	90%	100%	\$0.00	4,457.26	0
Government	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Government	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Government	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	141



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	8
Government	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.10	1.02	0
Government	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.10	1.02	0
Government	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	6783.12	15	\$4,024.33	90%	100%	\$0.08	1.57	33
Government	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	9044.17	15	\$2,012.17	90%	100%	\$0.03	4.20	91
Government	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	9026.97	15	\$2,012.17	90%	100%	\$0.03	4.19	7
Government	Room Cooling	Existing	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.09	12	\$0.03	90%	100%	\$0.05	2.31	6
Government	Room Cooling	New	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.09	12	\$0.03	90%	100%	\$0.05	2.31	0
Government	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.49	4	\$1.25	90%	100%	\$0.93	0.09	0
Government	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.49	4	\$1.25	90%	100%	\$0.93	0.09	0
Government	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.14	4	\$0.00	90%	100%	\$0.00	0.00	0
Government	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.14	4	\$0.00	90%	100%	\$0.00	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	4914.65	10	\$91.89	90%	100%	\$0.00	28.50	79
Government	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1146.75	15	\$1,685.00	90%	100%	\$0.21	0.50	0
Government	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	753.58	15	\$1,685.00	90%	100%	\$0.32	0.33	0
Government	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1638.22	10	\$5,952.43	90%	100%	\$0.65	0.15	0
Government	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	1638.22	10	\$5,952.43	90%	100%	\$0.65	0.15	0
Government	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	8191.08	15	\$4,024.33	90%	100%	\$0.07	1.50	25
Government	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	10921.44	15	\$2,012.17	90%	100%	\$0.03	4.01	69
Government	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	10921.44	15	\$2,012.17	90%	100%	\$0.03	4.01	5
Government	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2883.26	15	\$2,088.52	90%	100%	\$0.10	1.02	58
Government	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2883.26	15	\$1,113.88	90%	100%	\$0.05	1.91	1
Government	Space Heat	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	4.13	15	#####	90%	100%	\$4,925.16	0.00	0
Government	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	4914.65	7	\$8,354.09	90%	100%	\$0.39	0.23	0
Government	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1273.55	20	#####	90%	100%	\$7.53	0.01	0
Government	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1273.55	20	#####	90%	100%	\$7.53	0.01	0
Government	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	5242.29	7	\$2,263.96	90%	100%	\$0.10	0.92	0
Government	Space Heat	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	9361.24	15	\$2,154.69	90%	100%	\$0.03	3.21	10



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Space Heat	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	10921.44	15	\$1,077.34	90%	100%	\$0.01	7.48	34
Government	Space Heat	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	10921.44	15	\$1,077.34	90%	100%	\$0.01	7.48	5
Government	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	271.96	5	\$35.98	90%	100%	\$0.04	2.19	175
Government	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	271.96	5	\$35.98	90%	100%	\$0.04	2.19	4
Government	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	68.46	5	\$31.98	90%	100%	\$0.14	0.62	0
Government	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	68.46	5	\$31.98	90%	100%	\$0.14	0.62	0
Government	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.02	90%	100%	\$0.27	0.37	0
Government	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.02	90%	100%	\$0.27	0.37	0
Government	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2449.00	5	\$356.44	90%	100%	\$0.04	1.99	536
Government	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2449.00	5	\$356.44	90%	100%	\$0.04	1.99	13
Government	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	104.96	20	\$8,793.77	90%	100%	\$10.35	0.01	0
Government	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	2383.57	15	\$2,071.34	90%	100%	\$0.12	0.83	0
Government	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	2383.57	15	\$2,071.34	90%	100%	\$0.12	0.83	0
Government	Ventilation and Circulation	Existing	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is	Per Air Handler Recirculating Fan Motor (1 HP or less)	303.56	18	\$2,079.73	90%	100%	\$0.89	0.12	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					replaced with 85% eff. ECPM motor									
Government	Ventilation and Circulation	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	303.56	18	\$2,079.73	90%	100%	\$0.89	0.12	0
Government	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	216.61	15	\$2.66	90%	100%	\$0.00	58.94	201
Government	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	216.61	15	\$2.66	90%	100%	\$0.00	58.94	5
Government	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	110.58	15	\$2.66	90%	100%	\$0.00	30.09	100
Government	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	110.58	15	\$2.66	90%	100%	\$0.00	30.09	2
Government	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	169.77	15	\$2.66	90%	100%	\$0.00	46.20	155
Government	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	169.77	15	\$2.66	90%	100%	\$0.00	46.20	4
Government	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	110.12	15	\$2.66	90%	100%	\$0.00	29.97	99



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	110.12	15	\$2.66	90%	100%	\$0.00	29.97	2
Government	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	124.93	15	\$2.66	90%	100%	\$0.00	33.99	113
Government	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	124.93	15	\$2.66	90%	100%	\$0.00	33.99	3
Government	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	6044.21	13	\$1,408.27	90%	100%	\$0.04	2.77	4,486
Government	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	1621.81	13	\$465.23	90%	100%	\$0.04	2.25	874
Government	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	580.96	25	\$833.35	90%	100%	\$0.16	0.61	0
Government	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	253.62	25	\$833.35	90%	100%	\$0.37	0.27	0
Government	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.74	11	\$12.29	90%	100%	\$0.19	0.50	0
Government	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.74	11	\$12.29	90%	100%	\$0.19	0.50	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	21.16	11	\$29.85	90%	100%	\$0.24	0.41	0
Government	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	21.16	11	\$29.85	90%	100%	\$0.24	0.41	0
Government	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.90	11	\$17.56	90%	100%	\$0.27	0.36	0
Government	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.90	11	\$17.56	90%	100%	\$0.27	0.36	0
Government	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.63	10	\$8.86	90%	100%	\$0.15	0.64	0
Government	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.63	10	\$8.86	90%	100%	\$0.15	0.64	0
Government	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	1461.12	14	\$950.00	90%	100%	\$0.10	1.08	11
Government	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	637.85	14	\$950.00	90%	100%	\$0.22	0.47	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	87.38	8	\$117.50	90%	100%	\$0.28	0.33	0
Government	Water Heat GT 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	74.40	14	\$21.74	90%	100%	\$0.04	2.39	1
Government	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	14.52	15	\$224.27	90%	100%	\$2.18	0.05	0
Government	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	1421.65	7	\$63.10	90%	100%	\$0.01	8.92	37
Government	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	620.62	7	\$63.10	90%	100%	\$0.02	3.90	1
Government	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	1039.76	7	\$50.00	90%	100%	\$0.01	8.24	0
Government	Water Heat GT 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	453.90	7	\$50.00	90%	100%	\$0.03	3.60	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	367.46	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	367.46	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	259.38	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	259.38	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	151.31	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	151.31	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	172.92	12	\$5.38	90%	100%	\$0.00	19.86	1
Government	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	86.87	9	\$1.34	90%	100%	\$0.00	31.49	2
Government	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	86.87	9	\$1.34	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	65.15	9	\$1.00	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	65.15	9	\$1.00	90%	100%	\$0.00	31.49	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	43.43	9	\$0.67	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	43.43	9	\$0.67	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	43.43	9	\$0.67	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	43.43	9	\$0.67	90%	100%	\$0.00	31.49	0
Government	Water Heat GT 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.05	15	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.05	15	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	237.77	12	\$651.25	90%	100%	\$0.44	0.23	0
Government	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	237.77	12	\$651.25	90%	100%	\$0.44	0.23	0
Government	Water Heat GT 55 Gal	Existing	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.02	10	\$0.01	90%	100%	\$0.14	0.70	0
Government	Water Heat GT 55 Gal	New	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.02	10	\$0.01	90%	100%	\$0.14	0.70	0
Government	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	406.67	2	\$17.00	90%	100%	\$0.03	3.00	4
Government	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	528.02	25	\$833.35	90%	100%	\$0.18	0.55	0
Government	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	525.93	25	\$833.35	90%	100%	\$0.18	0.55	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.74	11	\$12.29	90%	100%	\$0.19	0.50	0
Government	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.74	11	\$12.29	90%	100%	\$0.19	0.50	0
Government	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	21.16	11	\$29.85	90%	100%	\$0.24	0.41	0
Government	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	21.16	11	\$29.85	90%	100%	\$0.24	0.41	0
Government	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.90	11	\$17.56	90%	100%	\$0.27	0.36	0
Government	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	10.90	11	\$17.56	90%	100%	\$0.27	0.36	0
Government	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers	ENERGY STAR Dishwasher - 295	Federal Standard 2014	Per Residential Dishwasher	10.63	10	\$8.86	90%	100%	\$0.15	0.64	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			(Electric Water Heating)	kWh/yr and 4.25 gal/cycle	Dishwasher - 307 kWh/yr and 5.0 gal/cycle									
Government	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.63	10	\$8.86	90%	100%	\$0.15	0.64	0
Government	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	1327.96	14	\$950.00	90%	100%	\$0.10	0.98	0
Government	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	1322.70	14	\$950.00	90%	100%	\$0.11	0.97	0
Government	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	79.42	8	\$117.50	90%	100%	\$0.31	0.30	0
Government	Water Heat LE 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	74.40	14	\$21.74	90%	100%	\$0.04	2.39	17
Government	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	13.20	15	\$224.27	90%	100%	\$2.40	0.04	0
Government	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	1278.76	7	\$63.10	90%	100%	\$0.01	8.03	615
Government	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	1273.70	7	\$63.10	90%	100%	\$0.01	8.00	13
Government	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	928.25	7	\$50.00	90%	100%	\$0.01	7.35	0
Government	Water Heat LE 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	924.57	7	\$50.00	90%	100%	\$0.01	7.32	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	779.71	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	779.71	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	550.39	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	550.39	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	321.06	12	\$0.00	90%	100%	\$0.00	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Government	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	321.06	12	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	366.92	12	\$5.38	90%	100%	\$0.00	42.14	54
Government	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	184.33	9	\$1.34	90%	100%	\$0.00	66.82	72
Government	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	184.33	9	\$1.34	90%	100%	\$0.00	66.82	2
Government	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	138.24	9	\$1.00	90%	100%	\$0.00	66.82	0
Government	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	138.24	9	\$1.00	90%	100%	\$0.00	66.82	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	92.16	9	\$0.67	90%	100%	\$0.00	66.82	0
Government	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	92.16	9	\$0.67	90%	100%	\$0.00	66.82	0
Government	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	92.16	9	\$0.67	90%	100%	\$0.00	66.82	15
Government	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	92.16	9	\$0.67	90%	100%	\$0.00	66.82	0
Government	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.22	15	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.22	15	\$0.00	90%	100%	\$0.00	0.00	0
Government	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	504.52	12	\$651.25	90%	100%	\$0.21	0.48	0
Government	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	504.52	12	\$651.25	90%	100%	\$0.21	0.48	0
Government	Water Heat LE 55 Gal	Existing	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.18	10	\$0.11	90%	100%	\$0.11	0.85	0
Government	Water Heat LE 55 Gal	New	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water	0	0.18	10	\$0.11	90%	100%	\$0.11	0.85	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					Heater LE 55 Gal - EF 0.95									
Government	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	369.61	2	\$17.00	90%	100%	\$0.03	2.73	68
Healthcare	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.91	4	\$3.24	95%	86%	\$1.29	0.07	0
Healthcare	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.94	4	\$3.24	95%	86%	\$1.25	0.07	0
Healthcare	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.19	4	\$0.00	90%	100%	\$0.00	2,928.64	104
Healthcare	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.19	4	\$0.00	90%	100%	\$0.00	2,928.64	3
Healthcare	Computers	Existing	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	4561.27	5	\$1,013.62	50%	80%	\$0.07	1.30	219
Healthcare	Computers	New	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	4561.27	5	\$1,013.62	50%	80%	\$0.07	1.30	5
Healthcare	Cooking	Existing	Commercial Hot Food Holding Cabinets (Energy Star)	ENERGY STAR Hot Food Holding Cabinet	Standard Hot Food Holding Cabinet	Per Hot Food Holding Cabinet	43.25	12	\$0.00	90%	100%	\$0.00	104,456.53	1
Healthcare	Cooking	New	Commercial Hot Food Holding Cabinets (Energy Star)	ENERGY STAR Hot Food Holding Cabinet	Standard Hot Food Holding Cabinet	Per Hot Food Holding Cabinet	43.25	12	\$0.00	90%	100%	\$0.00	104,456.53	0
Healthcare	Cooking	Existing	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	265.32	12	\$5.00	90%	100%	\$0.00	32.04	2
Healthcare	Cooking	New	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	265.32	12	\$5.00	90%	100%	\$0.00	32.04	0
Healthcare	Cooking	Existing	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	159.19	12	\$0.00	90%	100%	\$0.00	384,459.63	21
Healthcare	Cooking	New	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	159.19	12	\$0.00	90%	100%	\$0.00	384,459.63	1



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	48.43	12	\$0.00	20%	55%	\$0.00	116,956.83	0
Healthcare	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	48.43	12	\$0.00	20%	55%	\$0.00	116,956.83	0
Healthcare	Cooking	Existing	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	23.79	12	\$5.25	90%	100%	\$0.04	2.74	0
Healthcare	Cooking	New	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	23.79	12	\$5.25	90%	100%	\$0.04	2.74	0
Healthcare	Cooking	Existing	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	23.86	12	\$0.00	90%	100%	\$0.00	115,262.05	3
Healthcare	Cooking	New	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	23.86	12	\$0.00	90%	100%	\$0.00	115,262.05	0
Healthcare	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	144.46	12	\$74.85	35%	95%	\$0.08	1.17	8
Healthcare	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	144.46	12	\$74.85	35%	95%	\$0.08	1.17	0
Healthcare	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	6084.11	10	\$237.31	100%	63%	\$0.01	15.96	18
Healthcare	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	10311.11	15	#####	60%	100%	\$1.59	0.07	0
Healthcare	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	74.93	20	\$7,793.55	95%	95%	\$12.85	0.01	0
Healthcare	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	74.67	20	\$7,793.55	95%	95%	\$12.89	0.01	0
Healthcare	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	51.56	15	\$1,685.00	95%	95%	\$4.62	0.03	0
Healthcare	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2586.61	10	\$6,539.38	95%	93%	\$0.45	0.25	0
Healthcare	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	2577.78	10	\$6,539.38	95%	93%	\$0.46	0.25	0
Healthcare	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	12933.07	15	\$9,780.14	25%	62%	\$0.11	1.16	5



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	17244.10	15	\$4,890.07	25%	95%	\$0.04	3.09	14
Healthcare	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	17185.18	15	\$4,890.07	75%	95%	\$0.04	3.08	1
Healthcare	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	1034.65	10	\$14,699.19	95%	81%	\$2.56	0.04	0
Healthcare	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	4138.58	10	\$3,996.52	25%	24%	\$0.17	0.59	0
Healthcare	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.61	20	\$0.55	90%	100%	\$0.11	1.05	41
Healthcare	Cooling Chillers	New	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.61	20	\$0.55	90%	100%	\$0.11	1.05	1
Healthcare	Cooling Chillers	Existing	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.20	20	\$0.18	90%	100%	\$0.11	1.05	0
Healthcare	Cooling Chillers	New	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.20	20	\$0.18	90%	100%	\$0.11	1.05	0
Healthcare	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.45	20	\$0.41	90%	100%	\$0.11	1.05	0
Healthcare	Cooling Chillers	New	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.45	20	\$0.41	90%	100%	\$0.11	1.05	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	10346.46	15	#####	95%	75%	\$0.41	0.30	0
Healthcare	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	161.15	8	\$732.69	10%	90%	\$0.95	0.10	0
Healthcare	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	7733.33	7	#####	75%	85%	\$0.65	0.17	0
Healthcare	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	530.91	20	#####	75%	99%	\$43.88	0.00	0
Healthcare	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	529.10	20	#####	75%	99%	\$44.03	0.00	0
Healthcare	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	8737.01	30	\$309.67	20%	84%	\$0.00	29.31	9
Healthcare	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	8707.16	30	\$309.67	80%	84%	\$0.00	29.21	1
Healthcare	Cooling Chillers	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	16814.55	10	\$9,098.27	90%	100%	\$0.10	1.05	3
Healthcare	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	8277.17	7	\$5,846.51	75%	75%	\$0.16	0.66	0
Healthcare	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	9311.81	18	#####	1%	98%	\$0.53	0.25	0
Healthcare	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	9280.00	18	#####	1%	98%	\$0.53	0.25	0
Healthcare	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD (assuming 50 HP average)	27983.13	13	\$4,849.02	75%	98%	\$0.03	4.09	101
Healthcare	Cooling Chillers	New	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	27983.13	13	\$4,849.02	90%	100%	\$0.03	4.09	2

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Cooling Chillers	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	11938.22	15	\$3,020.49	10%	66%	\$0.04	3.46	2
Healthcare	Cooling Chillers	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	19707.54	15	\$1,858.77	10%	95%	\$0.01	9.28	12
Healthcare	Cooling Chillers	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	19640.20	15	\$1,858.77	50%	95%	\$0.01	9.25	1
Healthcare	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2586.61	5	\$2,331.29	50%	95%	\$0.27	0.35	0
Healthcare	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2577.78	5	\$2,331.29	50%	95%	\$0.27	0.35	0
Healthcare	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	8258.68	10	\$237.31	100%	63%	\$0.01	19.69	214
Healthcare	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	660.69	20	\$7,793.55	95%	95%	\$1.46	0.08	0
Healthcare	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	640.28	20	\$7,793.55	95%	95%	\$1.50	0.08	0
Healthcare	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	68.05	15	\$1,685.00	95%	95%	\$3.50	0.03	0
Healthcare	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	3511.12	10	\$6,539.38	95%	93%	\$0.34	0.30	0
Healthcare	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	3402.64	10	\$6,539.38	95%	93%	\$0.35	0.29	0
Healthcare	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	17555.60	15	\$9,780.14	25%	62%	\$0.08	1.43	87
Healthcare	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	23407.47	15	\$4,890.07	25%	95%	\$0.03	3.81	240
Healthcare	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	22684.24	15	\$4,890.07	75%	95%	\$0.03	3.69	15
Healthcare	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	14044.48	15	#####	95%	95%	\$0.11	1.07	572
Healthcare	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	3888.66	5	\$1,990.25	95%	45%	\$0.15	0.62	0
Healthcare	Cooling DX	Existing	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX	0	0.15	15	\$0.22	90%	100%	\$0.21	0.54	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					Package 240 to 760 kBtuh									
Healthcare	Cooling DX	New	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.15	15	\$0.22	90%	100%	\$0.21	0.54	0
Healthcare	Cooling DX	Existing	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.24	15	\$0.36	90%	100%	\$0.21	0.53	0
Healthcare	Cooling DX	New	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.24	15	\$0.36	90%	100%	\$0.21	0.53	0
Healthcare	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	7303.13	15	\$5,393.46	5%	99%	\$0.10	1.08	16
Healthcare	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	7077.48	15	\$2,876.51	5%	99%	\$0.06	1.96	0
Healthcare	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	792.83	15	\$7,108.02	95%	75%	\$1.27	0.09	0
Healthcare	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	792.83	15	\$5,402.10	45%	80%	\$0.96	0.12	0
Healthcare	Cooling DX	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	2.70	15	#####	90%	100%	\$8,295.25	0.00	0
Healthcare	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	10207.91	7	#####	95%	85%	\$0.49	0.20	0
Healthcare	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	4681.49	20	#####	75%	99%	\$4.98	0.02	0
Healthcare	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	4536.85	20	#####	75%	99%	\$5.14	0.02	0
Healthcare	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	3888.66	10	\$2,044.04	95%	24%	\$0.09	1.08	77

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	11859.78	30	\$309.67	20%	84%	\$0.00	36.17	111
Healthcare	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	11493.35	30	\$309.67	80%	84%	\$0.00	35.05	11
Healthcare	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	16814.55	10	\$9,098.27	10%	45%	\$0.10	1.05	28
Healthcare	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	11235.59	7	\$5,846.51	95%	75%	\$0.12	0.81	0
Healthcare	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	12640.03	18	#####	1%	98%	\$0.39	0.30	0
Healthcare	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	12249.49	18	#####	1%	98%	\$0.40	0.29	0
Healthcare	Cooling DX	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	16205.17	15	\$3,020.49	10%	66%	\$0.03	4.27	29
Healthcare	Cooling DX	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	26751.39	15	\$1,858.77	10%	95%	\$0.01	11.46	136
Healthcare	Cooling DX	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	25924.84	15	\$1,858.77	50%	95%	\$0.01	11.10	16
Healthcare	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	3511.12	5	\$2,331.29	50%	95%	\$0.20	0.48	0
Healthcare	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	3402.64	5	\$2,331.29	50%	95%	\$0.21	0.47	0
Healthcare	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	8
Healthcare	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	0
Healthcare	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.05	4	\$0.00	90%	100%	\$0.00	726.82	13
Healthcare	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.05	4	\$0.00	90%	100%	\$0.00	726.82	0
Healthcare	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.04	3.13	0
Healthcare	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.04	3.13	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	11324.43	10	\$237.31	100%	63%	\$0.00	25.66	251
Healthcare	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	614.34	20	\$7,793.55	95%	95%	\$1.57	0.07	0
Healthcare	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	597.81	20	\$7,793.55	95%	95%	\$1.61	0.07	0
Healthcare	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.19	15	\$0.07	90%	100%	\$0.05	1.96	0
Healthcare	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.19	15	\$0.07	90%	100%	\$0.05	1.96	0
Healthcare	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.36	15	\$0.14	90%	100%	\$0.06	1.87	163
Healthcare	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.36	15	\$0.14	90%	100%	\$0.06	1.87	6
Healthcare	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	850.54	15	\$1,685.00	95%	95%	\$0.28	0.38	0
Healthcare	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	607.42	15	\$1,685.00	95%	95%	\$0.39	0.27	0
Healthcare	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	4479.84	10	\$6,539.38	95%	93%	\$0.26	0.37	0
Healthcare	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	4359.29	10	\$6,539.38	95%	93%	\$0.27	0.36	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	22399.20	15	\$9,780.14	25%	62%	\$0.06	1.72	95
Healthcare	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	29865.61	15	\$4,890.07	25%	95%	\$0.02	4.58	261
Healthcare	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	29061.93	15	\$4,890.07	75%	95%	\$0.02	4.46	16
Healthcare	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	13059.16	15	\$9,903.59	95%	95%	\$0.11	0.99	0
Healthcare	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	3615.84	5	\$1,990.25	95%	45%	\$0.17	0.55	0
Healthcare	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	8929.25	15	\$5,393.46	5%	99%	\$0.09	1.24	17
Healthcare	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	8688.97	15	\$2,876.51	5%	99%	\$0.05	2.26	0
Healthcare	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	737.21	15	\$7,108.02	95%	75%	\$1.36	0.08	0
Healthcare	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	737.21	15	\$5,402.10	45%	80%	\$1.04	0.10	0
Healthcare	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	13077.87	7	#####	95%	85%	\$0.38	0.24	0
Healthcare	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6954.02	20	#####	75%	99%	\$3.35	0.03	0
Healthcare	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6766.89	20	#####	75%	99%	\$3.44	0.03	0
Healthcare	Heat Pump	Existing	Ground Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh - Advanced Efficiency	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	1.50	15	\$15.84	90%	100%	\$1.50	0.07	0
Healthcare	Heat Pump	New	Ground Source Heat Pump Replacing Air	Advanced Efficiency - 16.2 EER 4.0 COP -	Standard Efficiency - 9.5 EER, 3.2 COP -	0	1.50	15	\$15.84	90%	100%	\$1.50	0.07	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			Source Heat Pump > 240 kBtuh - Advanced Efficiency	Ground Source Heat Pump > 240 kBtuh	Air Source Heat Pump > 240 kBtuh									
Healthcare	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	3615.84	10	\$1,936.46	95%	24%	\$0.10	1.00	61
Healthcare	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	11027.73	30	\$309.67	20%	84%	\$0.00	31.53	88
Healthcare	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	10730.98	30	\$309.67	80%	84%	\$0.00	30.68	9
Healthcare	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	16814.55	10	\$9,098.27	10%	45%	\$0.10	0.99	0
Healthcare	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	14335.49	7	\$5,846.51	95%	75%	\$0.09	0.99	0
Healthcare	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	11753.24	18	#####	1%	98%	\$0.42	0.27	0
Healthcare	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	11436.97	18	#####	1%	98%	\$0.43	0.26	0
Healthcare	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	53219.75	15	#####	50%	95%	\$2.07	0.05	0
Healthcare	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	51787.62	15	#####	95%	95%	\$2.13	0.05	0
Healthcare	Heat Pump	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	20676.19	15	\$3,020.49	10%	66%	\$0.02	5.13	32
Healthcare	Heat Pump	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	34132.12	15	\$1,858.77	10%	95%	\$0.01	13.77	148
Healthcare	Heat Pump	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	33213.64	15	\$1,858.77	50%	95%	\$0.01	13.40	18



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Heat Pump	Existing	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.88	15	\$1.47	90%	100%	\$0.24	0.45	0
Healthcare	Heat Pump	New	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.88	15	\$1.47	90%	100%	\$0.24	0.45	0
Healthcare	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	4479.84	5	\$2,331.29	50%	95%	\$0.16	0.58	0
Healthcare	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	4359.29	5	\$2,331.29	50%	95%	\$0.16	0.56	0
Healthcare	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	1251.28	10	\$100.00	85%	45%	\$0.01	6.47	19
Healthcare	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	3503.59	8	\$225.00	50%	45%	\$0.01	6.71	34
Healthcare	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	3503.59	8	\$225.00	50%	75%	\$0.01	6.71	1
Healthcare	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	3003.08	8	\$385.91	10%	100%	\$0.03	3.35	6
Healthcare	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	8421.42	10	\$100.00	85%	45%	\$0.00	44.27	0
Healthcare	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	155.46	13	\$6.00	0%	85%	\$0.01	16.97	0
Healthcare	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	8707.10	8	\$9,832.27	65%	100%	\$0.24	0.39	0
Healthcare	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	22737.84	10	\$2,750.66	10%	98%	\$0.02	4.35	241



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.33	13	\$0.15	90%	100%	\$0.07	1.44	305
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.33	13	\$0.63	90%	100%	\$0.29	0.35	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	0	0.38	13	\$0.33	90%	100%	\$0.13	0.75	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	0	0.10	13	\$0.11	90%	100%	\$0.17	0.59	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	0	0.62	20	\$1.94	90%	100%	\$0.39	0.28	0
Healthcare	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	20211.41	8	\$1,969.04	90%	98%	\$0.02	4.49	382
Healthcare	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	20211.41	8	\$385.91	10%	99%	\$0.00	22.92	66
Healthcare	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	69.67	10	\$100.00	85%	45%	\$0.26	0.37	0
Healthcare	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	72.03	8	\$9,832.27	65%	100%	\$28.66	0.00	0
Healthcare	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	188.10	10	\$2,750.66	10%	98%	\$2.63	0.04	0
Healthcare	Lighting Interior HID	Existing	Lighting Interior - Efficient Metal	Efficient Metal Halide	Standard HID Baseline - represents a	0	0.00	15	\$0.00	90%	100%	\$0.05	2.25	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			Halide - Above Standard		mix of Mercury Vapor, High Pressure Sodium, Metal Halide									
Healthcare	Lighting Interior HID	Existing	Lighting Interior - High Bay Fluorescent High Output - Above Standard	High Bay Fluorescent High Output (HO)	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.01	15	\$0.00	90%	100%	\$0.03	3.59	14
Healthcare	Lighting Interior HID	Existing	Lighting Interior - High Bay LED - Above Standard	High Bay LED	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.02	20	\$0.00	90%	100%	\$0.02	5.77	1
Healthcare	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.02	20	\$0.00	90%	100%	-\$0.01	999.00	0
Healthcare	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	167.20	8	\$1,969.04	90%	98%	\$2.47	0.04	0
Healthcare	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	167.20	8	\$385.91	10%	99%	\$0.48	0.19	0
Healthcare	Lighting Interior Other	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	451.28	10	\$100.00	90%	100%	\$0.04	2.37	6
Healthcare	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent,	Exit Sign Retrofit: Compact Fluorescent,	Incandescent Exit Sign	Per Exit Sign	456.22	10	\$114.00	95%	25%	\$0.04	2.10	4



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			replacing incandescent	replacing incandescent										
Healthcare	Lighting Interior Other	New	HE Lighting Fixtures/Design 10% better than code (New Construction)	HE Lighting Fixtures/Design 10% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.52	15	\$0.11	100%	100%	\$0.03	3.56	0
Healthcare	Lighting Interior Other	New	HE Lighting Fixtures/Design 15% better than code (New Construction)	HE Lighting Fixtures/Design 15% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.78	15	\$0.16	100%	100%	\$0.03	3.56	0
Healthcare	Lighting Interior Other	New	HE Lighting Fixtures/Design 30% better than code (New Construction)	HE Lighting Fixtures/Design 30% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	1.55	15	\$0.32	100%	100%	\$0.03	3.56	148
Healthcare	Lighting Interior Other	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	466.59	8	\$9,832.27	90%	100%	\$4.42	0.02	0
Healthcare	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	11558.80	8	\$9,832.27	65%	100%	\$0.18	0.51	0
Healthcare	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	338.49	16	\$144.00	95%	50%	\$0.06	1.81	22
Healthcare	Lighting Interior Other	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	1218.46	10	\$2,750.66	90%	100%	\$0.41	0.23	0
Healthcare	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	30184.81	10	\$2,750.66	30%	98%	\$0.02	5.77	24
Healthcare	Lighting Interior Other	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	1083.08	8	\$1,969.04	90%	100%	\$0.38	0.24	0
Healthcare	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	26830.95	8	\$1,969.04	90%	98%	\$0.02	5.96	2
Healthcare	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	883.01	30	\$90.00	75%	95%	\$0.01	8.52	86

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	883.01	30	\$90.00	75%	95%	\$0.01	8.52	2
Healthcare	Lighting Interior Other	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	1083.08	8	\$385.91	90%	100%	\$0.07	1.23	3
Healthcare	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	1169.83	10	\$100.00	85%	45%	\$0.02	6.15	8
Healthcare	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	1209.52	8	\$9,832.27	65%	100%	\$1.71	0.05	0
Healthcare	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	3158.55	10	\$2,750.66	10%	98%	\$0.16	0.60	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	0	0.51	5	\$0.01	90%	100%	\$0.00	21.29	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	0	0.41	2	\$0.00	90%	100%	\$0.01	12.07	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	0	0.54	12	\$0.05	90%	100%	\$0.02	5.64	313
Healthcare	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	2807.60	8	\$1,969.04	90%	98%	\$0.15	0.62	0
Healthcare	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	2807.60	8	\$385.91	10%	99%	\$0.03	3.18	5
Healthcare	Other Plug Load	Existing	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	75%	75%	\$0.01	7.52	3
Healthcare	Other Plug Load	New	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	75%	75%	\$0.01	7.52	0
Healthcare	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	75%	90%	\$6.49	0.02	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	100%	90%	\$6.49	0.02	0
Healthcare	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	40.18	4	\$3.99	100%	20%	\$0.04	2.39	1
Healthcare	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	40.18	4	\$3.99	100%	20%	\$0.04	2.39	0
Healthcare	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	983.96	10	\$0.00	95%	20%	\$0.00	0.00	0
Healthcare	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	983.96	10	\$0.00	95%	20%	\$0.00	0.00	0
Healthcare	Other Plug Load	Existing	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.53	5	\$2.16	95%	20%	\$1.24	0.07	0
Healthcare	Other Plug Load	New	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.53	5	\$2.16	95%	20%	\$1.24	0.07	0
Healthcare	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	1047.40	5	\$177.38	95%	95%	\$0.05	1.71	41
Healthcare	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	1047.40	5	\$177.38	95%	95%	\$0.05	1.71	1
Healthcare	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.01	6	\$0.00	90%	100%	\$0.00	1,593.40	1
Healthcare	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.01	6	\$0.00	90%	100%	\$0.00	1,593.40	0
Healthcare	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.06	5	\$0.00	90%	100%	\$0.00	4,457.26	6
Healthcare	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.06	5	\$0.00	90%	100%	\$0.00	4,457.26	0
Healthcare	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	669.18	12	\$45.81	90%	100%	\$0.01	8.78	40
Healthcare	Refrigeration	New	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	669.18	12	\$45.81	90%	100%	\$0.01	8.78	1
Healthcare	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	1231.72	12	\$45.81	90%	100%	\$0.01	16.16	83

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Refrigeration	New	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	1231.72	12	\$45.81	90%	100%	\$0.01	16.16	2
Healthcare	Refrigeration	Existing	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	128.11	8	\$20.80	90%	100%	\$0.03	2.64	16
Healthcare	Refrigeration	New	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	128.11	8	\$20.80	90%	100%	\$0.03	2.64	0
Healthcare	Refrigeration	Existing	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	309.15	8	\$20.80	90%	100%	\$0.01	6.36	37
Healthcare	Refrigeration	New	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	309.15	8	\$20.80	90%	100%	\$0.01	6.36	1
Healthcare	Refrigeration	Existing	Commercial Solid Door Refrigerator & Freezer (Energy Star)	Commercial Solid Door Refrigerator & Freezer (Energy Star)	Standard Solid Door Refrigerator & Freezer	Per Solid Door Commercial Refrigerator/Freezer Energy Star	2.01	12	\$0.63	90%	100%	\$0.05	1.93	0
Healthcare	Refrigeration	New	Commercial Solid Door Refrigerator & Freezer (Energy Star)	Commercial Solid Door Refrigerator & Freezer (Energy Star)	Standard Solid Door Refrigerator & Freezer	Per Solid Door Commercial Refrigerator/Freezer Energy Star	2.01	12	\$0.63	90%	100%	\$0.05	1.93	0
Healthcare	Refrigeration	Existing	Compressor VSD retrofit	Compressor VSD retrofit	Base Refrigeration System - Grocery	Per Refrigerator/Freezer Compressor Motor HP	71.49	15	\$40.73	90%	100%	\$0.08	1.26	3
Healthcare	Refrigeration	Existing	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	49.73	10	\$293.28	90%	100%	\$1.06	0.09	0
Healthcare	Refrigeration	New	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	49.73	10	\$293.28	90%	100%	\$1.06	0.09	0
Healthcare	Refrigeration	Existing	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	12.43	10	\$293.28	90%	100%	\$4.25	0.02	0
Healthcare	Refrigeration	New	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	12.43	10	\$293.28	90%	100%	\$4.25	0.02	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Refrigeration	Existing	Door Gasket - Cooler	Door Gasket - Cooler	Existing Gasket	Per linear foot of gasket on walk-in or reach-in cooler	47.99	4	\$10.66	90%	100%	\$0.08	1.06	7
Healthcare	Refrigeration	Existing	Door Gasket - Freezer	Door Gasket - Freezer	Existing Gasket	Per linear foot of gasket on walk-in or reach-in freezer	167.97	4	\$10.66	90%	100%	\$0.02	3.72	23
Healthcare	Refrigeration	Existing	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	204.71	15	\$131.72	90%	100%	\$0.09	1.12	24
Healthcare	Refrigeration	New	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	204.71	15	\$131.72	90%	100%	\$0.09	1.12	1
Healthcare	Refrigeration	Existing	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	42.41	15	\$56.77	90%	100%	\$0.19	0.54	0
Healthcare	Refrigeration	New	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	42.41	15	\$56.77	90%	100%	\$0.19	0.54	0
Healthcare	Refrigeration	Existing	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	168.77	15	\$16.00	90%	100%	\$0.01	7.59	0
Healthcare	Refrigeration	New	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	168.77	15	\$16.00	90%	100%	\$0.01	7.59	0
Healthcare	Refrigeration	Existing	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	53.66	15	\$24.82	90%	100%	\$0.07	1.56	4
Healthcare	Refrigeration	New	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	53.66	15	\$24.82	90%	100%	\$0.07	1.56	0
Healthcare	Refrigeration	Existing	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	15.81	10	\$35.20	90%	100%	\$0.40	0.23	0
Healthcare	Refrigeration	New	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	15.81	10	\$35.20	90%	100%	\$0.40	0.23	0
Healthcare	Refrigeration	Existing	High R-Value Glass Doors	High R-Value Glass Doors	Standard Glass Door	Per low-temperature (below 0°F) glass display case door	49.02	15	\$35.14	90%	100%	\$0.10	1.00	3
Healthcare	Refrigeration	New	High R-Value Glass Doors	High R-Value Glass Doors	Standard Glass Door	Per low-temperature (below 0°F) glass display case door	49.02	15	\$35.14	90%	100%	\$0.10	1.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Refrigeration	Existing	Insulation for bare suction lines	Insulation for bare suction lines	No Insulation	Per linear feet of walk-in cooler/freezer suction line	73.24	11	\$39.15	90%	100%	\$0.09	1.04	2
Healthcare	Refrigeration	Existing	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	228.42	8	\$174.06	90%	100%	\$0.16	0.56	0
Healthcare	Refrigeration	New	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	228.42	8	\$174.06	90%	100%	\$0.16	0.56	0
Healthcare	Refrigeration	Existing	No-heat glass doors	No-heat glass doors	Standard low-temp reach-in	Per low-temperature (below 0°F) glass display case door	49.02	15	\$35.14	90%	100%	\$0.10	1.00	0
Healthcare	Refrigeration	New	No-heat glass doors	No-heat glass doors	Standard low-temp reach-in	Per low-temperature (below 0°F) glass display case door	49.02	15	\$35.14	90%	100%	\$0.10	1.00	0
Healthcare	Refrigeration	Existing	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	912.65	15	\$489.92	90%	100%	\$0.08	1.34	119
Healthcare	Refrigeration	New	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	912.65	15	\$489.92	90%	100%	\$0.08	1.34	3
Healthcare	Refrigeration	Existing	Reach-in PSC to ECM Evaporator Fan Motor	Reach-in PSC to ECM Evaporator Fan Motor	Reach-in PSC Motor	Per Evaporator Fan Motor	78.53	15	\$163.59	90%	100%	\$0.29	0.35	0
Healthcare	Refrigeration	New	Reach-in PSC to ECM Evaporator Fan Motor	Reach-in PSC to ECM Evaporator Fan Motor	Reach-in PSC Motor	Per Evaporator Fan Motor	78.53	15	\$163.59	90%	100%	\$0.29	0.35	0
Healthcare	Refrigeration	Existing	Reach-in Shaded Pole to ECM Evaporator Fan Motor	Reach-in Shaded Pole to ECM Evaporator Fan Motor	Reach-in Shaded Pole Motor	Per Evaporator Fan Motor	310.12	15	\$163.59	90%	100%	\$0.07	1.36	23
Healthcare	Refrigeration	New	Reach-in Shaded Pole to ECM Evaporator Fan Motor	Reach-in Shaded Pole to ECM Evaporator Fan Motor	Reach-in Shaded Pole Motor	Per Evaporator Fan Motor	310.12	15	\$163.59	90%	100%	\$0.07	1.36	0
Healthcare	Refrigeration	Existing	Reach-in Shaded Pole to PSC Evaporator Fan Motor	Reach-in Shaded Pole to PSC Evaporator Fan Motor	Reach-in Shaded Pole Motor	Per Evaporator Fan Motor	231.58	15	\$163.59	90%	100%	\$0.10	1.02	17
Healthcare	Refrigeration	New	Reach-in Shaded Pole to PSC Evaporator Fan Motor	Reach-in Shaded Pole to PSC Evaporator Fan Motor	Reach-in Shaded Pole Motor	Per Evaporator Fan Motor	231.58	15	\$163.59	90%	100%	\$0.10	1.02	0
Healthcare	Refrigeration	Existing	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration	Per 1000 Building Sqft	271.43	3	\$2,765.85	90%	100%	\$4.76	0.02	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					System - Grocery									
Healthcare	Refrigeration	New	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per 1000 Building Sqft	271.43	3	\$2,765.85	90%	100%	\$4.76	0.02	0
Healthcare	Refrigeration	Existing	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	210.13	4	\$21.28	90%	100%	\$0.04	2.33	25
Healthcare	Refrigeration	New	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	322.45	4	\$21.28	90%	100%	\$0.02	3.58	1
Healthcare	Refrigeration	Existing	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	110.11	15	\$66.66	90%	100%	\$0.09	1.19	6
Healthcare	Refrigeration	New	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	110.11	15	\$66.66	90%	100%	\$0.09	1.19	0
Healthcare	Refrigeration	Existing	Walk-in Shaded Pole to ECM	Walk-in Shaded Pole to ECM	Walk-in Shaded Pole Motor	Per walk-in cooler or freezer motor	294.62	15	\$66.66	90%	100%	\$0.03	3.18	17
Healthcare	Refrigeration	New	Walk-in Shaded Pole to ECM	Walk-in Shaded Pole to ECM	Walk-in Shaded Pole Motor	Per walk-in cooler or freezer motor	294.62	15	\$66.66	90%	100%	\$0.03	3.18	1
Healthcare	Refrigeration	Existing	eCube	eCube	No eCube	Per Walk-in	325.81	9	\$106.38	90%	100%	\$0.06	1.44	47
Healthcare	Refrigeration	New	eCube	eCube	No eCube	Per Walk-in	325.81	9	\$106.38	90%	100%	\$0.06	1.44	1
Healthcare	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.10	1.02	0
Healthcare	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.10	1.02	0
Healthcare	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	33
Healthcare	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	2
Healthcare	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.00	12	\$0.00	90%	100%	\$0.10	1.02	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.00	12	\$0.00	90%	100%	\$0.10	1.02	0
Healthcare	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	15543.23	15	\$9,780.14	25%	62%	\$0.09	1.42	6
Healthcare	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	20724.30	15	\$4,890.07	25%	95%	\$0.03	3.78	16
Healthcare	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	20684.91	15	\$4,890.07	75%	95%	\$0.03	3.77	1
Healthcare	Room Cooling	Existing	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.08	12	\$0.01	90%	100%	\$0.02	4.60	1
Healthcare	Room Cooling	New	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.08	12	\$0.01	90%	100%	\$0.02	4.60	0
Healthcare	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.23	4	\$3.24	95%	86%	\$5.14	0.02	0
Healthcare	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.23	4	\$3.24	95%	86%	\$5.16	0.02	0
Healthcare	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.03	4	\$0.00	90%	100%	\$0.00	0.00	0
Healthcare	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.03	4	\$0.00	90%	100%	\$0.00	0.00	0
Healthcare	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	4037.46	10	\$237.31	100%	63%	\$0.01	8.68	0
Healthcare	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	942.07	15	\$1,685.00	95%	95%	\$0.25	0.39	0
Healthcare	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	619.08	15	\$1,685.00	95%	95%	\$0.38	0.26	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1345.82	10	\$6,539.38	95%	93%	\$0.87	0.11	0
Healthcare	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	1345.82	10	\$6,539.38	95%	93%	\$0.87	0.11	0
Healthcare	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	6729.10	15	\$9,780.14	25%	62%	\$0.21	0.48	0
Healthcare	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8972.14	15	\$4,890.07	25%	95%	\$0.08	1.29	0
Healthcare	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8972.14	15	\$4,890.07	75%	95%	\$0.08	1.29	0
Healthcare	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2368.64	15	\$5,393.46	5%	99%	\$0.32	0.31	0
Healthcare	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2368.64	15	\$2,876.51	5%	99%	\$0.17	0.58	0
Healthcare	Space Heat	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	2.35	15	#####	90%	100%	\$9,532.11	0.00	0
Healthcare	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	4037.46	7	#####	95%	85%	\$1.24	0.07	0
Healthcare	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2880.90	20	#####	75%	99%	\$8.09	0.01	0
Healthcare	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2880.90	20	#####	75%	99%	\$8.09	0.01	0
Healthcare	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4306.63	7	\$5,846.51	95%	75%	\$0.31	0.28	0
Healthcare	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	6211.48	15	\$3,020.49	10%	66%	\$0.07	1.45	0
Healthcare	Space Heat	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	10253.87	15	\$1,858.77	10%	95%	\$0.03	3.88	0
Healthcare	Space Heat	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	10253.87	15	\$1,858.77	50%	95%	\$0.03	3.88	0
Healthcare	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	361.64	5	\$47.84	100%	50%	\$0.04	2.19	29

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	361.64	5	\$47.84	100%	50%	\$0.04	2.19	1
Healthcare	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	91.03	5	\$42.52	100%	50%	\$0.14	0.62	0
Healthcare	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	91.03	5	\$42.52	100%	50%	\$0.14	0.62	0
Healthcare	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.00	14	\$0.01	90%	100%	\$0.27	0.37	0
Healthcare	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.00	14	\$0.01	90%	100%	\$0.27	0.37	0
Healthcare	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	6324.36	5	\$920.48	20%	85%	\$0.04	1.99	171
Healthcare	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	6324.36	5	\$920.48	20%	85%	\$0.04	1.99	4
Healthcare	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	938.81	20	#####	10%	95%	\$2.99	0.04	0
Healthcare	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21320.32	15	\$2,275.59	15%	95%	\$0.02	6.77	466
Healthcare	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21320.32	15	\$2,275.59	15%	95%	\$0.02	6.77	12
Healthcare	Ventilation and Circulation	Existing	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	526.43	18	\$2,284.80	75%	95%	\$0.56	0.19	0
Healthcare	Ventilation and Circulation	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with	Per Air Handler Recirculating Fan Motor (1 HP or less)	526.43	18	\$2,284.80	75%	95%	\$0.56	0.19	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					85% eff. ECPM motor									
Healthcare	Ventilation and Circulation	Existing	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	148.06	13	\$3,050.87	65%	59%	\$3.15	0.03	0
Healthcare	Ventilation and Circulation	New	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	148.06	13	\$3,050.87	65%	59%	\$3.15	0.03	0
Healthcare	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	1937.51	15	\$6.86	95%	76%	\$0.00	204.16	222
Healthcare	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	1937.51	15	\$6.86	95%	76%	\$0.00	204.16	6
Healthcare	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	989.11	15	\$6.86	95%	76%	\$0.00	104.22	110
Healthcare	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	989.11	15	\$6.86	95%	76%	\$0.00	104.22	3
Healthcare	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	1518.54	15	\$6.86	95%	76%	\$0.00	160.01	172
Healthcare	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	1518.54	15	\$6.86	95%	76%	\$0.00	160.01	4
Healthcare	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	985.00	15	\$6.86	95%	76%	\$0.00	103.79	109

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	985.00	15	\$6.86	95%	76%	\$0.00	103.79	3
Healthcare	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	1117.42	15	\$6.86	95%	76%	\$0.00	117.74	126
Healthcare	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	1117.42	15	\$6.86	95%	76%	\$0.00	117.74	3
Healthcare	Ventilation and Circulation	Existing	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	112.15	15	\$49.70	90%	100%	\$0.06	1.63	8
Healthcare	Ventilation and Circulation	New	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	112.15	15	\$49.70	90%	100%	\$0.06	1.63	0
Healthcare	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	32923.04	13	\$3,636.76	75%	98%	\$0.02	5.84	2,779
Healthcare	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	11402.59	13	\$1,201.42	75%	98%	\$0.02	6.12	1,021
Healthcare	Water Heat GT 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	22.04	12	\$28.71	90%	100%	\$0.21	0.46	0
Healthcare	Water Heat GT 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	22.04	12	\$28.71	90%	100%	\$0.21	0.46	0
Healthcare	Water Heat GT 55 Gal	Existing	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	22.04	12	\$28.71	90%	100%	\$0.21	0.46	0
Healthcare	Water Heat GT 55 Gal	New	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher	Standard High Temp	Per Commercial Dishwasher	22.04	12	\$28.71	90%	100%	\$0.21	0.46	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
				(Includes Extra Chemical Cost) - (ENERGY STAR)	Commercial Dishwasher									
Healthcare	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	6230.15	25	\$11,212.35	5%	100%	\$0.20	0.47	0
Healthcare	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	2719.76	25	\$11,212.35	25%	100%	\$0.47	0.21	0
Healthcare	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	27.74	11	\$31.74	100%	34%	\$0.19	0.49	0
Healthcare	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	27.74	11	\$31.74	100%	34%	\$0.19	0.49	0
Healthcare	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	54.64	11	\$77.09	100%	95%	\$0.24	0.40	0
Healthcare	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	54.64	11	\$77.09	100%	95%	\$0.24	0.40	0
Healthcare	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	28.16	11	\$45.35	100%	95%	\$0.27	0.35	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	28.16	11	\$45.35	100%	95%	\$0.27	0.35	0
Healthcare	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	11.29	10	\$9.41	100%	25%	\$0.15	0.62	0
Healthcare	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	11.29	10	\$9.41	100%	55%	\$0.15	0.62	0
Healthcare	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	15668.83	14	\$12,781.82	50%	95%	\$0.12	0.84	0
Healthcare	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	6840.20	14	\$12,781.82	50%	95%	\$0.27	0.37	0
Healthcare	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	937.07	8	\$1,580.91	50%	75%	\$0.35	0.25	0
Healthcare	Water Heat GT 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	1001.02	14	\$292.47	100%	58%	\$0.04	2.34	8
Healthcare	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	155.75	15	\$224.27	75%	90%	\$0.20	0.50	0
Healthcare	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	15245.53	7	\$848.98	95%	92%	\$0.01	6.93	263
Healthcare	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	6655.41	7	\$848.98	75%	92%	\$0.03	3.02	5
Healthcare	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	11150.17	7	\$672.73	95%	83%	\$0.01	6.39	0
Healthcare	Water Heat GT 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	4867.59	7	\$672.73	75%	83%	\$0.03	2.79	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	450.23	12	\$0.00	95%	75%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	450.23	12	\$0.00	95%	75%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	317.81	12	\$0.00	95%	50%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	317.81	12	\$0.00	95%	50%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	185.39	12	\$0.00	95%	35%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	185.39	12	\$0.00	95%	35%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	211.87	12	\$6.95	95%	25%	\$0.01	18.39	1
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Existing Low-flow Pre-Rinse Spray Valve	Per Pre-Rinse Spray Valve	1.57	5	\$2.11	90%	100%	\$0.40	0.22	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	14.25	5	\$1.51	90%	100%	\$0.03	2.74	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	14.25	5	\$1.51	90%	100%	\$0.03	2.74	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	\$4.31	75%	85%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	\$4.31	75%	85%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	\$3.24	75%	75%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	\$3.24	75%	75%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	\$2.16	75%	50%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	\$2.16	75%	50%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	\$2.16	75%	35%	\$0.02	3.87	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	\$2.16	75%	35%	\$0.02	3.87	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Water Heat GT 55 Gal	Existing	Ozone commercial laundry system	Ozone commercial laundry system	Standard Commercial Laundry System	Per Ozonating Clothes Washer	18846.20	10	\$675.51	90%	100%	\$0.01	14.41	3
Healthcare	Water Heat GT 55 Gal	New	Ozone commercial laundry system	Ozone commercial laundry system	Standard Commercial Laundry System	Per Ozonating Clothes Washer	8227.28	10	\$675.51	90%	100%	\$0.01	6.29	0
Healthcare	Water Heat GT 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.22	15	\$0.00	100%	100%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.22	15	\$0.00	100%	100%	\$0.00	0.00	0
Healthcare	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	291.32	12	\$840.90	75%	85%	\$0.46	0.21	0
Healthcare	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	291.32	12	\$840.90	75%	85%	\$0.46	0.21	0
Healthcare	Water Heat GT 55 Gal	Existing	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.07	10	\$0.06	90%	100%	\$0.17	0.55	0
Healthcare	Water Heat GT 55 Gal	New	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.07	10	\$0.06	90%	100%	\$0.17	0.55	0
Healthcare	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	4361.10	2	\$228.73	75%	94%	\$0.04	2.35	29
Healthcare	Water Heat LE 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	46.76	12	\$28.71	90%	100%	\$0.10	0.98	0
Healthcare	Water Heat LE 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp	Per Commercial Dishwasher	46.76	12	\$28.71	90%	100%	\$0.10	0.98	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					Commercial Dishwasher									
Healthcare	Water Heat LE 55 Gal	Existing	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	46.76	12	\$28.71	90%	100%	\$0.10	0.98	0
Healthcare	Water Heat LE 55 Gal	New	Dishwashing - Commercial - Low Temp	Low-Temp Commercial Dishwasher (Includes Extra Chemical Cost) - (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	46.76	12	\$28.71	90%	100%	\$0.10	0.98	0
Healthcare	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	5662.36	25	\$11,212.35	5%	100%	\$0.23	0.43	0
Healthcare	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	5639.93	25	\$11,212.35	25%	100%	\$0.23	0.43	0
Healthcare	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	27.74	11	\$31.74	100%	34%	\$0.19	0.49	0
Healthcare	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	27.74	11	\$31.74	100%	34%	\$0.19	0.49	0
Healthcare	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	54.64	11	\$77.09	100%	95%	\$0.24	0.40	0
Healthcare	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4	Federal Standard 2016 Clothes	Per Residential Clothes Washer	54.64	11	\$77.09	100%	95%	\$0.24	0.40	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			(Electric Water Heating)	and WF 4.5 (Electric DHW & Dryer)	Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)									
Healthcare	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	28.16	11	\$45.35	100%	95%	\$0.27	0.35	0
Healthcare	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	28.16	11	\$45.35	100%	95%	\$0.27	0.35	0
Healthcare	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	11.29	10	\$9.41	100%	25%	\$0.15	0.62	0
Healthcare	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	11.29	10	\$9.41	100%	55%	\$0.15	0.62	0
Healthcare	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	14240.83	14	\$12,781.82	50%	95%	\$0.13	0.76	0
Healthcare	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	14184.41	14	\$12,781.82	50%	95%	\$0.13	0.76	0
Healthcare	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	851.67	8	\$1,580.91	50%	75%	\$0.39	0.23	0
Healthcare	Water Heat LE 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	1001.02	14	\$292.47	100%	58%	\$0.04	2.34	29
Healthcare	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	141.56	15	\$224.27	75%	90%	\$0.22	0.46	0
Healthcare	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	13713.24	7	\$848.98	95%	92%	\$0.01	6.23	774



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	13658.92	7	\$848.98	75%	92%	\$0.01	6.21	15
Healthcare	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	9954.34	7	\$672.73	95%	83%	\$0.02	5.71	0
Healthcare	Water Heat LE 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	9914.90	7	\$672.73	75%	83%	\$0.02	5.69	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	955.34	12	\$0.00	95%	75%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	955.34	12	\$0.00	95%	75%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	674.36	12	\$0.00	95%	50%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	674.36	12	\$0.00	95%	50%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	393.38	12	\$0.00	95%	35%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	393.38	12	\$0.00	95%	35%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	449.57	12	\$6.95	95%	25%	\$0.00	39.02	7
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)	Existing Low-flow Pre-Rinse Spray Valve	Per Pre-Rinse Spray Valve	3.34	5	\$2.11	90%	100%	\$0.19	0.46	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	30.23	5	\$1.51	90%	100%	\$0.02	5.81	2
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM	Per Pre-Rinse Spray Valve	30.23	5	\$1.51	90%	100%	\$0.02	5.81	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	\$4.31	75%	85%	\$0.01	8.22	3
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	\$4.31	75%	85%	\$0.01	8.22	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	\$3.24	75%	75%	\$0.01	8.22	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	\$3.24	75%	75%	\$0.01	8.22	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	\$2.16	75%	50%	\$0.01	8.22	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	\$2.16	75%	50%	\$0.01	8.22	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	\$2.16	75%	35%	\$0.01	8.22	1
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	\$2.16	75%	35%	\$0.01	8.22	0
Healthcare	Water Heat LE 55 Gal	Existing	Ozone commercial laundry system	Ozone commercial laundry system	Standard Commercial Laundry System	Per Ozonating Clothes Washer	17128.63	10	\$675.51	90%	100%	\$0.01	13.09	8
Healthcare	Water Heat LE 55 Gal	New	Ozone commercial laundry system	Ozone commercial laundry system	Standard Commercial Laundry System	Per Ozonating Clothes Washer	17060.77	10	\$675.51	90%	100%	\$0.01	13.04	0
Healthcare	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.89	15	\$0.00	100%	100%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.89	15	\$0.00	100%	100%	\$0.00	0.00	0
Healthcare	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	618.16	12	\$840.90	75%	85%	\$0.22	0.44	0
Healthcare	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	618.16	12	\$840.90	75%	85%	\$0.22	0.44	0
Healthcare	Water Heat LE 55 Gal	Existing	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.74	10	\$0.58	90%	100%	\$0.14	0.66	0
Healthcare	Water Heat LE 55 Gal	New	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.74	10	\$0.58	90%	100%	\$0.14	0.66	0
Healthcare	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	3963.65	2	\$228.73	75%	94%	\$0.04	2.14	84
Institutional - Other	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal	Per Building	0.24	4	\$4.40	90%	100%	\$6.64	0.01	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					computer, desktop									
Institutional - Other	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.25	4	\$4.40	90%	100%	\$6.40	0.01	0
Institutional - Other	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.04	4	\$0.00	90%	100%	\$0.00	2,928.64	10
Institutional - Other	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.04	4	\$0.00	90%	100%	\$0.00	2,928.64	0
Institutional - Other	Computers	Existing	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	1210.82	5	\$269.07	90%	100%	\$0.07	1.30	20
Institutional - Other	Computers	New	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	1210.82	5	\$269.07	90%	100%	\$0.07	1.30	0
Institutional - Other	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	24.21	12	\$0.00	90%	100%	\$0.00	115,795.72	0
Institutional - Other	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	24.21	12	\$0.00	90%	100%	\$0.00	115,795.72	0
Institutional - Other	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	49.44	12	\$37.43	90%	100%	\$0.12	0.79	0
Institutional - Other	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	49.44	12	\$37.43	90%	100%	\$0.12	0.79	0
Institutional - Other	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	7841.76	10	\$323.01	90%	100%	\$0.01	0.00	0
Institutional - Other	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	6042.09	15	#####	90%	100%	\$3.69	0.00	0
Institutional - Other	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	96.57	20	\$11,002.62	90%	100%	\$14.07	0.00	0
Institutional - Other	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	96.24	20	\$11,002.62	90%	100%	\$14.12	0.00	0
Institutional - Other	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	30.21	15	\$1,685.00	90%	100%	\$7.89	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1515.70	10	\$7,992.59	90%	100%	\$0.95	0.00	0
Institutional - Other	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	1510.52	10	\$7,992.59	90%	100%	\$0.95	0.00	0
Institutional - Other	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	7578.50	15	\$13,807.21	90%	100%	\$0.26	0.00	0
Institutional - Other	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	10104.67	15	\$6,903.60	90%	100%	\$0.10	0.00	0
Institutional - Other	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	10070.14	15	\$6,903.60	90%	100%	\$0.10	0.00	0
Institutional - Other	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	606.28	10	#####	90%	100%	\$5.94	0.00	0
Institutional - Other	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	2425.12	10	\$6,599.55	90%	100%	\$0.49	0.00	0
Institutional - Other	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.26	20	\$0.66	90%	100%	\$0.31	0.00	0
Institutional - Other	Cooling Chillers	New	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.26	20	\$0.66	90%	100%	\$0.31	0.00	0
Institutional - Other	Cooling Chillers	Existing	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.09	20	\$0.22	90%	100%	\$0.31	0.00	0
Institutional - Other	Cooling Chillers	New	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.09	20	\$0.22	90%	100%	\$0.31	0.00	0
Institutional - Other	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) -	0	0.19	20	\$0.49	90%	100%	\$0.31	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					Chillers < 150 tons (screw)									
Institutional - Other	Cooling Chillers	New	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.19	20	\$0.49	90%	100%	\$0.31	0.00	0
Institutional - Other	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	6062.80	15	#####	90%	100%	\$1.15	0.00	0
Institutional - Other	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	94.43	8	\$1,209.92	90%	100%	\$2.69	0.00	0
Institutional - Other	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	4531.56	7	#####	90%	100%	\$1.50	0.00	0
Institutional - Other	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	311.10	20	#####	90%	100%	\$105.72	0.00	0
Institutional - Other	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	310.04	20	#####	90%	100%	\$106.08	0.00	0
Institutional - Other	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5119.70	30	\$241.65	90%	100%	\$0.01	0.00	0
Institutional - Other	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5102.21	30	\$241.65	90%	100%	\$0.01	0.00	0
Institutional - Other	Cooling Chillers	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	14061.33	10	\$11,120.12	90%	100%	\$0.14	0.00	0
Institutional - Other	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4850.24	7	\$7,957.72	90%	100%	\$0.38	0.00	0
Institutional - Other	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5456.52	18	#####	90%	100%	\$1.10	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5437.88	18	#####	90%	100%	\$1.10	0.00	0
Institutional - Other	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	23321.59	13	\$6,600.03	90%	100%	\$0.04	0.00	0
Institutional - Other	Cooling Chillers	New	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	23321.59	13	\$6,600.03	90%	100%	\$0.04	0.00	0
Institutional - Other	Cooling Chillers	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	8661.14	15	\$4,985.28	90%	100%	\$0.08	0.00	0
Institutional - Other	Cooling Chillers	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	10104.67	15	\$2,492.64	90%	100%	\$0.03	0.00	0
Institutional - Other	Cooling Chillers	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	10070.14	15	\$2,492.64	90%	100%	\$0.03	0.00	0
Institutional - Other	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1515.70	5	\$1,819.19	90%	100%	\$0.36	0.00	0
Institutional - Other	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1510.52	5	\$1,819.19	90%	100%	\$0.36	0.00	0
Institutional - Other	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	10644.56	10	\$323.01	90%	100%	\$0.01	0.00	0
Institutional - Other	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	851.56	20	\$11,002.62	90%	100%	\$1.60	0.00	0
Institutional - Other	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	825.25	20	\$11,002.62	90%	100%	\$1.65	0.00	0
Institutional - Other	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	39.88	15	\$1,685.00	90%	100%	\$5.97	0.00	0
Institutional - Other	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2057.44	10	\$7,992.59	90%	100%	\$0.70	0.00	0
Institutional - Other	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	1993.87	10	\$7,992.59	90%	100%	\$0.72	0.00	0
Institutional - Other	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	10287.20	15	\$13,807.21	90%	100%	\$0.19	0.00	0
Institutional - Other	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	13716.27	15	\$6,903.60	90%	100%	\$0.07	0.00	0
Institutional - Other	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	13292.47	15	\$6,903.60	90%	100%	\$0.07	0.00	0
Institutional - Other	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	8229.76	15	#####	90%	100%	\$0.22	0.00	0
Institutional - Other	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged	Per Building	5012.07	5	\$2,432.53	90%	100%	\$0.15	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					System, EER=10.3, 10 tons									
Institutional - Other	Cooling DX	Existing	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.07	15	\$0.20	90%	100%	\$0.43	0.00	0
Institutional - Other	Cooling DX	New	DX Package 240 to 760 kBtuh - High Efficiency	High Efficiency - 10.5 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.07	15	\$0.20	90%	100%	\$0.43	0.00	0
Institutional - Other	Cooling DX	Existing	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.10	15	\$0.32	90%	100%	\$0.44	0.00	0
Institutional - Other	Cooling DX	New	DX Package 240 to 760 kBtuh - Premium Efficiency	Premium Efficiency - 10.8 EER - DX Package 240 to 760 kBtuh	Standard Efficiency - 10.0 EER - DX Package 240 to 760 kBtuh	0	0.10	15	\$0.32	90%	100%	\$0.44	0.00	0
Institutional - Other	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	4279.48	15	\$7,341.07	90%	100%	\$0.24	0.00	0
Institutional - Other	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	4147.25	15	\$3,915.24	90%	100%	\$0.13	0.00	0
Institutional - Other	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	1021.88	15	\$8,687.60	90%	100%	\$1.20	0.00	0
Institutional - Other	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	1021.88	15	\$6,602.57	90%	100%	\$0.91	0.00	0
Institutional - Other	Cooling DX	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	1.58	15	#####	90%	100%	#####	0.00	0
Institutional - Other	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	5981.61	7	#####	90%	100%	\$1.14	0.00	0
Institutional - Other	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2743.25	20	#####	90%	100%	\$11.99	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2658.49	20	#####	90%	100%	\$12.37	0.00	0
Institutional - Other	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	5012.07	10	\$2,498.27	90%	100%	\$0.09	0.00	0
Institutional - Other	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6949.58	30	\$241.65	90%	100%	\$0.00	0.00	0
Institutional - Other	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6734.85	30	\$241.65	90%	100%	\$0.00	0.00	0
Institutional - Other	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	14061.33	10	\$11,120.12	90%	100%	\$0.14	0.00	0
Institutional - Other	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	6583.81	7	\$7,957.72	90%	100%	\$0.28	0.00	0
Institutional - Other	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	7406.79	18	#####	90%	100%	\$0.81	0.00	0
Institutional - Other	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	7177.94	18	#####	90%	100%	\$0.83	0.00	0
Institutional - Other	Cooling DX	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	11756.80	15	\$4,985.28	90%	100%	\$0.06	0.00	0
Institutional - Other	Cooling DX	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	13716.27	15	\$2,492.64	90%	100%	\$0.03	0.00	0
Institutional - Other	Cooling DX	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	13292.47	15	\$2,492.64	90%	100%	\$0.03	0.00	0
Institutional - Other	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2057.44	5	\$1,819.19	90%	100%	\$0.27	0.00	0
Institutional - Other	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1993.87	5	\$1,819.19	90%	100%	\$0.28	0.00	0
Institutional - Other	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	1
Institutional - Other	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	0
Institutional - Other	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.01	4	\$0.00	90%	100%	\$0.00	726.82	1



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.01	4	\$0.00	90%	100%	\$0.00	726.82	0
Institutional - Other	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.04	3.13	0
Institutional - Other	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.04	3.13	0
Institutional - Other	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	13025.49	10	\$323.01	90%	100%	\$0.00	0.00	0
Institutional - Other	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	775.20	20	\$11,002.62	90%	100%	\$1.75	0.00	0
Institutional - Other	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	752.20	20	\$11,002.62	90%	100%	\$1.81	0.00	0
Institutional - Other	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.09	15	\$0.06	90%	100%	\$0.10	0.00	0
Institutional - Other	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - High Efficiency	High Efficiency - 10.0 EER, 3.3 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.09	15	\$0.06	90%	100%	\$0.10	0.00	0
Institutional - Other	Heat Pump	Existing	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.17	15	\$0.13	90%	100%	\$0.11	0.00	0
Institutional - Other	Heat Pump	New	Air Source Heat Pump > 240 kBtuh - Premium Efficiency	Premium Efficiency - 10.5 EER, 3.4 COP - Air Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.17	15	\$0.13	90%	100%	\$0.11	0.00	0
Institutional - Other	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	778.28	15	\$1,685.00	90%	100%	\$0.31	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	532.62	15	\$1,685.00	90%	100%	\$0.45	0.00	0
Institutional - Other	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2984.77	10	\$7,992.59	90%	100%	\$0.48	0.00	0
Institutional - Other	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	2896.23	10	\$7,992.59	90%	100%	\$0.50	0.00	0
Institutional - Other	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	14923.86	15	\$13,807.21	90%	100%	\$0.13	0.00	0
Institutional - Other	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	19898.47	15	\$6,903.60	90%	100%	\$0.05	0.00	0
Institutional - Other	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	19308.19	15	\$6,903.60	90%	100%	\$0.05	0.00	0
Institutional - Other	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	7491.75	15	\$12,104.40	90%	100%	\$0.23	0.00	0
Institutional - Other	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	4562.60	5	\$2,432.53	90%	100%	\$0.16	0.00	0
Institutional - Other	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5852.54	15	\$7,341.07	90%	100%	\$0.18	0.00	0
Institutional - Other	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5678.92	15	\$3,915.24	90%	100%	\$0.10	0.00	0
Institutional - Other	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	930.24	15	\$8,687.60	90%	100%	\$1.32	0.00	0
Institutional - Other	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	930.24	15	\$6,602.57	90%	100%	\$1.00	0.00	0
Institutional - Other	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	8688.68	7	#####	90%	100%	\$0.78	0.00	0
Institutional - Other	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	3273.04	20	#####	90%	100%	\$10.05	0.00	0
Institutional - Other	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	3175.95	20	#####	90%	100%	\$10.36	0.00	0
Institutional - Other	Heat Pump	Existing	Ground Source Heat Pump Replacing Air	Advanced Efficiency - 16.2 EER 4.0 COP -	Standard Efficiency - 9.5 EER, 3.2 COP -	0	0.69	15	\$14.22	90%	100%	\$2.91	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			Source Heat Pump > 240 kBtuh - Advanced Efficiency	Ground Source Heat Pump > 240 kBtuh	Air Source Heat Pump > 240 kBtuh									
Institutional - Other	Heat Pump	New	Ground Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh - Advanced Efficiency	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source Heat Pump > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.69	15	\$14.22	90%	100%	\$2.91	0.00	0
Institutional - Other	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	4562.60	10	\$2,366.78	90%	100%	\$0.09	0.00	0
Institutional - Other	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6326.36	30	\$241.65	90%	100%	\$0.00	0.00	0
Institutional - Other	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6138.69	30	\$241.65	90%	100%	\$0.00	0.00	0
Institutional - Other	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	14061.33	10	\$11,120.12	90%	100%	\$0.14	0.00	0
Institutional - Other	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	9551.27	7	\$7,957.72	90%	100%	\$0.19	0.00	0
Institutional - Other	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	6742.57	18	#####	90%	100%	\$0.89	0.00	0
Institutional - Other	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	6542.56	18	#####	90%	100%	\$0.92	0.00	0
Institutional - Other	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	35458.57	15	#####	90%	100%	\$4.23	0.00	0
Institutional - Other	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	34406.70	15	#####	90%	100%	\$4.36	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Heat Pump	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	17055.83	15	\$4,985.28	90%	100%	\$0.04	0.00	0
Institutional - Other	Heat Pump	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	19898.47	15	\$2,492.64	90%	100%	\$0.02	0.00	0
Institutional - Other	Heat Pump	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	19308.19	15	\$2,492.64	90%	100%	\$0.02	0.00	0
Institutional - Other	Heat Pump	Existing	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.43	15	\$1.32	90%	100%	\$0.43	0.00	0
Institutional - Other	Heat Pump	New	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - > 240 kBtuh	Standard Efficiency - 9.5 EER, 3.2 COP - Air Source Heat Pump > 240 kBtuh	0	0.43	15	\$1.32	90%	100%	\$0.43	0.00	0
Institutional - Other	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2984.77	5	\$1,819.19	90%	100%	\$0.18	0.00	0
Institutional - Other	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2896.23	5	\$1,819.19	90%	100%	\$0.19	0.00	0
Institutional - Other	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	1703.13	10	\$100.00	90%	100%	\$0.01	8.81	9
Institutional - Other	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	4768.76	8	\$228.96	90%	100%	\$0.01	8.97	16
Institutional - Other	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	4768.76	8	\$228.96	90%	100%	\$0.01	8.97	1
Institutional - Other	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	4087.51	8	\$372.07	90%	100%	\$0.02	4.73	3
Institutional - Other	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	5249.69	10	\$100.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	77.01	13	\$6.00	90%	100%	\$0.01	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	4129.54	8	\$11,673.09	90%	100%	\$0.59	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	14174.15	10	\$3,883.28	90%	100%	\$0.05	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.15	13	\$0.18	90%	100%	\$0.18	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.15	13	\$0.64	90%	100%	\$0.64	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	0	0.20	13	\$0.36	90%	100%	\$0.28	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	0	0.06	13	\$0.15	90%	100%	\$0.41	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	0	0.31	20	\$1.93	90%	100%	\$0.77	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	12599.25	8	\$2,680.08	90%	100%	\$0.04	0.00	0
Institutional - Other	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	12599.25	8	\$372.07	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	178.95	10	\$100.00	90%	100%	\$0.10	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	140.77	8	\$11,673.09	90%	100%	\$17.41	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	483.16	10	\$3,883.28	90%	100%	\$1.45	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Lighting Interior - Efficient Metal Halide - Above Standard	Efficient Metal Halide	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.01	15	\$0.01	90%	100%	\$0.09	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Lighting Interior - High Bay Fluorescent High Output - Above Standard	High Bay Fluorescent High Output (HO)	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.03	15	\$0.01	90%	100%	\$0.06	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Lighting Interior - High Bay LED - Above Standard	High Bay LED	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.04	20	\$0.01	90%	100%	\$0.04	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.03	20	-\$0.01	90%	100%	-\$0.03	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	429.48	8	\$2,680.08	90%	100%	\$1.31	0.00	0
Institutional - Other	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	429.48	8	\$372.07	90%	100%	\$0.18	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Lighting Interior Other	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	161.00	10	\$100.00	90%	100%	\$0.11	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	152.07	10	\$38.00	90%	100%	\$0.04	0.00	0
Institutional - Other	Lighting Interior Other	New	HE Lighting Fixtures/Design 10% better than code (New Construction)	HE Lighting Fixtures/Design 10% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.26	15	\$0.14	90%	100%	\$0.08	0.00	0
Institutional - Other	Lighting Interior Other	New	HE Lighting Fixtures/Design 15% better than code (New Construction)	HE Lighting Fixtures/Design 15% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.39	15	\$0.16	90%	100%	\$0.06	0.00	0
Institutional - Other	Lighting Interior Other	New	HE Lighting Fixtures/Design 30% better than code (New Construction)	HE Lighting Fixtures/Design 30% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.77	15	\$0.31	90%	100%	\$0.06	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	126.65	8	\$11,673.09	90%	100%	\$19.35	0.00	0
Institutional - Other	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	5929.44	8	\$11,673.09	90%	100%	\$0.41	0.00	0
Institutional - Other	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	112.83	16	\$48.00	90%	100%	\$0.06	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	434.70	10	\$3,883.28	90%	100%	\$1.61	0.00	0
Institutional - Other	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	20352.09	10	\$3,883.28	90%	100%	\$0.03	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	386.40	8	\$2,680.08	90%	100%	\$1.46	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	18090.75	8	\$2,680.08	90%	100%	\$0.03	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	294.34	30	\$30.00	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	294.34	30	\$30.00	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior Other	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	386.40	8	\$372.07	90%	100%	\$0.20	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	1482.85	10	\$100.00	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	1166.45	8	\$11,673.09	90%	100%	\$2.10	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	4003.69	10	\$3,883.28	90%	100%	\$0.17	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	0	0.28	5	\$0.01	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	0	0.23	2	\$0.00	90%	100%	\$0.01	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	0	0.30	12	\$0.05	90%	100%	\$0.04	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	3558.83	8	\$2,680.08	90%	100%	\$0.16	0.00	0
Institutional - Other	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	3558.83	8	\$372.07	90%	100%	\$0.02	0.00	0
Institutional - Other	Other Plug Load	Existing	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	5.82	15	\$0.56	90%	100%	\$0.01	7.52	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Other Plug Load	New	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	5.82	15	\$0.56	90%	100%	\$0.01	7.52	0
Institutional - Other	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Institutional - Other	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Institutional - Other	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	8.08	4	\$0.80	90%	100%	\$0.04	2.39	0
Institutional - Other	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	8.08	4	\$0.80	90%	100%	\$0.04	2.39	0
Institutional - Other	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	948.66	10	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	948.66	10	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Other Plug Load	Existing	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.72	5	\$2.94	90%	100%	\$1.24	0.07	0
Institutional - Other	Other Plug Load	New	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.72	5	\$2.94	90%	100%	\$1.24	0.07	0
Institutional - Other	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	278.04	5	\$47.09	90%	100%	\$0.05	1.71	4
Institutional - Other	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	278.04	5	\$47.09	90%	100%	\$0.05	1.71	0
Institutional - Other	Other Plug Load	Existing	VFD on Process	VFD on Process	Standard Motor	Per Process Motor VFD	6087.82	15	\$11,000.00	90%	100%	\$0.26	0.40	0
Institutional - Other	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.00	6	\$0.00	90%	100%	\$0.00	1,593.40	0
Institutional - Other	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.00	6	\$0.00	90%	100%	\$0.00	1,593.40	0
Institutional - Other	Pool Pump	Existing	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	0	0.02	10	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Pool Pump	New	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	0	0.02	10	\$0.00	90%	100%	\$0.00	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Pool Pump	Existing	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	0	0.04	10	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Pool Pump	New	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	0	0.04	10	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.01	5	\$0.00	90%	100%	\$0.00	4,457.26	1
Institutional - Other	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.01	5	\$0.00	90%	100%	\$0.00	4,457.26	0
Institutional - Other	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Institutional - Other	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Institutional - Other	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.09	1.02	16
Institutional - Other	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.09	1.02	1
Institutional - Other	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.00	12	\$0.00	90%	100%	\$0.09	1.02	0
Institutional - Other	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.00	12	\$0.00	90%	100%	\$0.09	1.02	0
Institutional - Other	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	9108.00	15	\$13,807.21	90%	100%	\$0.21	0.00	0
Institutional - Other	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	12144.00	15	\$6,903.60	90%	100%	\$0.08	0.00	0
Institutional - Other	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	12120.91	15	\$6,903.60	90%	100%	\$0.08	0.00	0
Institutional - Other	Room Cooling	Existing	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.03	12	\$0.01	90%	100%	\$0.05	0.00	0
Institutional - Other	Room Cooling	New	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER	Federal Standard 2014 Room AC -	0	0.03	12	\$0.01	90%	100%	\$0.05	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
				11.2/11.3 (8,000-13,999 Btuh)	CEER/EER 10.9/11.0 (8,000-13,999 Btuh)									
Institutional - Other	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.39	4	\$4.40	90%	100%	\$4.08	0.02	0
Institutional - Other	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.39	4	\$4.40	90%	100%	\$4.10	0.02	0
Institutional - Other	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.03	4	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.03	4	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	3773.70	10	\$323.01	90%	100%	\$0.02	0.00	0
Institutional - Other	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	880.53	15	\$1,685.00	90%	100%	\$0.27	0.00	0
Institutional - Other	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	578.63	15	\$1,685.00	90%	100%	\$0.41	0.00	0
Institutional - Other	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1257.90	10	\$7,992.59	90%	100%	\$1.14	0.00	0
Institutional - Other	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	1257.90	10	\$7,992.59	90%	100%	\$1.14	0.00	0
Institutional - Other	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	6289.50	15	\$13,807.21	90%	100%	\$0.31	0.00	0
Institutional - Other	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8386.00	15	\$6,903.60	90%	100%	\$0.12	0.00	0
Institutional - Other	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8386.00	15	\$6,903.60	90%	100%	\$0.12	0.00	0
Institutional - Other	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2213.90	15	\$7,341.07	90%	100%	\$0.47	0.00	0
Institutional - Other	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2213.90	15	\$3,915.24	90%	100%	\$0.25	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Space Heat	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	5.55	15	#####	90%	100%	\$4,925.16	0.00	0
Institutional - Other	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	3773.70	7	#####	90%	100%	\$1.80	0.00	0
Institutional - Other	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	877.71	20	#####	90%	100%	\$37.47	0.00	0
Institutional - Other	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	877.71	20	#####	90%	100%	\$37.47	0.00	0
Institutional - Other	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4025.28	7	\$7,957.72	90%	100%	\$0.46	0.00	0
Institutional - Other	Space Heat	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	7188.00	15	\$4,985.28	90%	100%	\$0.10	0.00	0
Institutional - Other	Space Heat	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8386.00	15	\$2,492.64	90%	100%	\$0.04	0.00	0
Institutional - Other	Space Heat	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8386.00	15	\$2,492.64	90%	100%	\$0.04	0.00	0
Institutional - Other	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	550.30	5	\$72.80	90%	100%	\$0.04	2.19	15
Institutional - Other	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	550.30	5	\$72.80	90%	100%	\$0.04	2.19	0
Institutional - Other	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	138.52	5	\$64.71	90%	100%	\$0.14	0.62	0
Institutional - Other	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	138.52	5	\$64.71	90%	100%	\$0.14	0.62	0
Institutional - Other	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.01	90%	100%	\$0.27	0.37	0
Institutional - Other	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	0	0.01	14	\$0.01	90%	100%	\$0.27	0.37	0
Institutional - Other	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	8608.13	5	\$1,252.88	90%	100%	\$0.04	1.99	20



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	8608.13	5	\$1,252.88	90%	100%	\$0.04	1.99	1
Institutional - Other	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	427.20	20	#####	90%	100%	\$8.94	0.01	0
Institutional - Other	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	9701.69	15	\$2,781.28	90%	100%	\$0.04	2.52	45
Institutional - Other	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	9701.69	15	\$2,781.28	90%	100%	\$0.04	2.52	2
Institutional - Other	Ventilation and Circulation	Existing	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	710.80	18	\$2,792.54	90%	100%	\$0.51	0.21	0
Institutional - Other	Ventilation and Circulation	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	710.80	18	\$2,792.54	90%	100%	\$0.51	0.21	0
Institutional - Other	Ventilation and Circulation	Existing	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	67.37	13	\$3,050.87	90%	100%	\$6.93	0.01	0
Institutional - Other	Ventilation and Circulation	New	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	67.37	13	\$3,050.87	90%	100%	\$6.93	0.01	0
Institutional - Other	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	881.65	15	\$9.34	90%	100%	\$0.00	68.25	35
Institutional - Other	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor	Per Building	881.65	15	\$9.34	90%	100%	\$0.00	68.25	1

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					1-15 HP, 1200-3600 RPM									
Institutional - Other	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	450.09	15	\$9.34	90%	100%	\$0.00	34.84	17
Institutional - Other	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	450.09	15	\$9.34	90%	100%	\$0.00	34.84	0
Institutional - Other	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	691.00	15	\$9.34	90%	100%	\$0.00	53.49	27
Institutional - Other	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	691.00	15	\$9.34	90%	100%	\$0.00	53.49	1
Institutional - Other	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	448.22	15	\$9.34	90%	100%	\$0.00	34.70	17
Institutional - Other	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	448.22	15	\$9.34	90%	100%	\$0.00	34.70	0
Institutional - Other	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	508.47	15	\$9.34	90%	100%	\$0.00	39.36	20
Institutional - Other	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	508.47	15	\$9.34	90%	100%	\$0.00	39.36	0
Institutional - Other	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	28293.99	13	\$4,950.02	90%	100%	\$0.03	3.69	902



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	9301.23	13	\$1,635.26	90%	100%	\$0.03	3.67	203
Institutional - Other	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	222.10	25	\$4,090.99	90%	100%	\$2.10	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	96.96	25	\$4,090.99	90%	100%	\$4.80	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	37.75	11	\$43.21	90%	100%	\$0.19	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	37.75	11	\$43.21	90%	100%	\$0.19	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	74.37	11	\$104.93	90%	100%	\$0.24	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	74.37	11	\$104.93	90%	100%	\$0.24	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0	Per Residential Clothes Washer	38.33	11	\$61.72	90%	100%	\$0.27	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					(Electric DHW & Dryer)									
Institutional - Other	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	38.33	11	\$61.72	90%	100%	\$0.27	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.89	10	\$9.07	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.89	10	\$9.07	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	558.58	14	\$4,663.64	90%	100%	\$1.23	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	243.85	14	\$4,663.64	90%	100%	\$2.81	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	33.41	8	\$576.82	90%	100%	\$3.62	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	365.24	14	\$106.71	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	5.55	15	\$224.27	90%	100%	\$5.71	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	543.49	7	\$309.76	90%	100%	\$0.13	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	237.26	7	\$309.76	90%	100%	\$0.30	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	397.49	7	\$245.45	90%	100%	\$0.14	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	173.53	7	\$245.45	90%	100%	\$0.33	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	150.08	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	150.08	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	105.94	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	105.94	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	61.80	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	61.80	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	70.62	12	\$18.91	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	\$7.83	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	\$7.83	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	\$5.87	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	\$5.87	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	\$3.92	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	\$3.92	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	\$3.92	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	\$3.92	90%	100%	\$0.04	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.01	15	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.01	15	\$0.00	90%	100%	\$0.00	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	97.11	12	\$2,289.12	90%	100%	\$3.78	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	97.11	12	\$2,289.12	90%	100%	\$3.78	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	10	\$0.02	90%	100%	\$1.74	0.00	0
Institutional - Other	Water Heat GT 55 Gal	New	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	10	\$0.02	90%	100%	\$1.74	0.00	0
Institutional - Other	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	155.47	2	\$83.45	90%	100%	\$0.36	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	201.86	25	\$4,090.99	90%	100%	\$2.31	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	201.06	25	\$4,090.99	90%	100%	\$2.31	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	37.75	11	\$43.21	90%	100%	\$0.19	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	37.75	11	\$43.21	90%	100%	\$0.19	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	74.37	11	\$104.93	90%	100%	\$0.24	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	74.37	11	\$104.93	90%	100%	\$0.24	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	38.33	11	\$61.72	90%	100%	\$0.27	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	38.33	11	\$61.72	90%	100%	\$0.27	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.89	10	\$9.07	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	10.89	10	\$9.07	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	507.67	14	\$4,663.64	90%	100%	\$1.35	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	505.66	14	\$4,663.64	90%	100%	\$1.35	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	30.36	8	\$576.82	90%	100%	\$3.99	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	365.24	14	\$106.71	90%	100%	\$0.04	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	5.05	15	\$224.27	90%	100%	\$6.28	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	488.87	7	\$309.76	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	486.93	7	\$309.76	90%	100%	\$0.15	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	354.86	7	\$245.45	90%	100%	\$0.16	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	353.46	7	\$245.45	90%	100%	\$0.16	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	318.45	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	318.45	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	224.79	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	224.79	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	131.13	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	131.13	12	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	149.86	12	\$18.91	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	\$7.83	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	\$7.83	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	\$5.87	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	\$5.87	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	\$3.92	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	\$3.92	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	\$3.92	90%	100%	\$0.02	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	\$3.92	90%	100%	\$0.02	0.00	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Institutional - Other	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	15	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	15	\$0.00	90%	100%	\$0.00	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	206.05	12	\$2,289.12	90%	100%	\$1.78	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	206.05	12	\$2,289.12	90%	100%	\$1.78	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	10	\$0.16	90%	100%	\$1.44	0.00	0
Institutional - Other	Water Heat LE 55 Gal	New	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	10	\$0.16	90%	100%	\$1.44	0.00	0
Institutional - Other	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	141.30	2	\$83.45	90%	100%	\$0.40	0.00	0
Religious	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.09	4	\$2.15	90%	100%	\$9.15	0.01	0
Religious	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.09	4	\$2.15	90%	100%	\$8.82	0.01	0
Religious	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.03	4	\$0.00	90%	100%	\$0.00	2,928.64	84
Religious	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	0	0.03	4	\$0.00	90%	100%	\$0.00	2,928.64	3
Religious	Computers	Existing	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	428.45	5	\$95.21	90%	100%	\$0.07	1.30	177

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Computers	New	Network PC Power Management	Network PC Power Management	No Network PC Power Management System	Per PC Workstation Managed by Network PC Power Management	428.45	5	\$95.21	90%	100%	\$0.07	1.30	4
Religious	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	24.21	12	\$0.00	90%	100%	\$0.00	115,795.72	1
Religious	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	24.21	12	\$0.00	90%	100%	\$0.00	115,795.72	0
Religious	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	39.55	12	\$37.43	90%	100%	\$0.15	0.63	0
Religious	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	39.55	12	\$37.43	90%	100%	\$0.15	0.63	0
Religious	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	1443.38	10	\$157.52	90%	100%	\$0.02	5.98	44
Religious	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	1112.13	15	#####	90%	100%	\$9.78	0.01	0
Religious	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	17.78	20	\$6,491.73	90%	100%	\$45.10	0.00	0
Religious	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	17.71	20	\$6,491.73	90%	100%	\$45.26	0.00	0
Religious	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	5.56	15	\$1,685.00	90%	100%	\$42.85	0.00	0
Religious	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	1394.92	15	\$8,146.49	90%	100%	\$0.83	0.16	0
Religious	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	1859.90	15	\$4,073.24	90%	100%	\$0.31	0.42	0
Religious	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	1853.54	15	\$4,073.24	90%	100%	\$0.31	0.42	0
Religious	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	111.59	10	\$9,756.84	90%	100%	\$15.73	0.01	0
Religious	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	446.38	10	\$1,214.73	90%	100%	\$0.49	0.22	0
Religious	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) -	Standard Efficiency - 0.775 kW/ton	0	0.10	20	\$0.25	90%	100%	\$0.31	0.39	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
				Chillers < 150 tons (screw)	(full load) - Chillers < 150 tons (screw)									
Religious	Cooling Chillers	New	Chillers < 150 tons (screw) - Advanced Efficiency	Advanced Efficiency - 0.58 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.10	20	\$0.25	90%	100%	\$0.31	0.39	0
Religious	Cooling Chillers	Existing	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.03	20	\$0.08	90%	100%	\$0.31	0.39	0
Religious	Cooling Chillers	New	Chillers < 150 tons (screw) - High Efficiency	High Efficiency - 0.71 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.03	20	\$0.08	90%	100%	\$0.31	0.39	0
Religious	Cooling Chillers	Existing	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.07	20	\$0.19	90%	100%	\$0.31	0.39	0
Religious	Cooling Chillers	New	Chillers < 150 tons (screw) - Premium Efficiency	Premium Efficiency - 0.63 kW/ton (full load) - Chillers < 150 tons (screw)	Standard Efficiency - 0.775 kW/ton (full load) - Chillers < 150 tons (screw)	0	0.07	20	\$0.19	90%	100%	\$0.31	0.39	0
Religious	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	1115.94	15	\$9,110.50	90%	100%	\$1.15	0.11	0
Religious	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	834.09	7	#####	90%	100%	\$3.98	0.03	0
Religious	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	57.26	20	#####	90%	100%	\$338.89	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	57.07	20	#####	90%	100%	\$340.05	0.00	0
Religious	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	942.35	30	\$323.29	90%	100%	\$0.04	3.17	9
Religious	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	939.13	30	\$323.29	90%	100%	\$0.04	3.16	1
Religious	Cooling Chillers	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	1252.84	10	\$2,102.12	90%	100%	\$0.30	0.35	0
Religious	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	892.75	7	\$3,880.72	90%	100%	\$1.01	0.11	0
Religious	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1004.34	18	\$8,758.85	90%	100%	\$1.13	0.12	0
Religious	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1000.91	18	\$8,758.85	90%	100%	\$1.13	0.12	0
Religious	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	473.36	13	\$160.93	90%	100%	\$0.05	2.19	16
Religious	Cooling Chillers	New	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	473.36	13	\$160.93	90%	100%	\$0.05	2.19	1
Religious	Cooling Chillers	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	1594.20	15	\$4,361.75	90%	100%	\$0.39	0.34	0
Religious	Cooling Chillers	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	1859.90	15	\$2,180.87	90%	100%	\$0.17	0.78	0
Religious	Cooling Chillers	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	1853.54	15	\$2,180.87	90%	100%	\$0.17	0.78	0
Religious	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	278.98	5	\$2,433.79	90%	100%	\$2.63	0.04	0
Religious	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	278.03	5	\$2,433.79	90%	100%	\$2.64	0.04	0
Religious	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	1886.44	10	\$157.52	90%	100%	\$0.02	7.10	262
Religious	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	150.92	20	\$6,491.73	90%	100%	\$5.31	0.02	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	136.21	20	\$6,491.73	90%	100%	\$5.89	0.02	0
Religious	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	6.58	15	\$1,685.00	90%	100%	\$36.20	0.00	0
Religious	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	1823.11	15	\$8,146.49	90%	100%	\$0.63	0.19	0
Religious	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	2430.81	15	\$4,073.24	90%	100%	\$0.24	0.50	0
Religious	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	2194.01	15	\$4,073.24	90%	100%	\$0.26	0.45	0
Religious	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	1458.49	15	\$2,351.75	90%	100%	\$0.23	0.52	0
Religious	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	888.24	5	\$459.84	90%	100%	\$0.16	0.65	0
Religious	Cooling DX	Existing	DX Package 65 to 135 kBtuh - High Efficiency	High Efficiency - 11.5 EER - DX Package 65 to 135 kBtuh	Standard Efficiency - 11.2 EER - DX Package 65 to 135 kBtuh	0	0.01	15	\$0.01	90%	100%	\$0.17	0.67	0
Religious	Cooling DX	New	DX Package 65 to 135 kBtuh - High Efficiency	High Efficiency - 11.5 EER - DX Package 65 to 135 kBtuh	Standard Efficiency - 11.2 EER - DX Package 65 to 135 kBtuh	0	0.01	15	\$0.01	90%	100%	\$0.17	0.67	0
Religious	Cooling DX	Existing	DX Package 65 to 135 kBtuh - Premium Efficiency	Premium Efficiency - 12.0 EER - DX Package 65 to 135 kBtuh	Standard Efficiency - 11.2 EER - DX Package 65 to 135 kBtuh	0	0.03	15	\$0.04	90%	100%	\$0.18	0.65	0
Religious	Cooling DX	New	DX Package 65 to 135 kBtuh - Premium Efficiency	Premium Efficiency - 12.0 EER - DX Package 65 to 135 kBtuh	Standard Efficiency - 11.2 EER - DX Package 65 to 135 kBtuh	0	0.03	15	\$0.04	90%	100%	\$0.18	0.65	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	758.41	15	\$3,580.00	90%	100%	\$0.67	0.18	0
Religious	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	684.53	15	\$1,909.33	90%	100%	\$0.39	0.30	0
Religious	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	181.10	15	\$1,642.28	90%	100%	\$1.28	0.09	0
Religious	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	181.10	15	\$1,248.14	90%	100%	\$0.97	0.12	0
Religious	Cooling DX	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	0.31	15	#####	90%	100%	#####	0.00	0
Religious	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	987.31	7	#####	90%	100%	\$3.36	0.03	0
Religious	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	486.16	20	#####	90%	100%	\$39.92	0.00	0
Religious	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	438.80	20	#####	90%	100%	\$44.22	0.00	0
Religious	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	888.24	10	\$459.84	90%	100%	\$0.09	1.15	100
Religious	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1231.61	30	\$323.29	90%	100%	\$0.03	3.77	53
Religious	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1111.63	30	\$323.29	90%	100%	\$0.03	3.40	6
Religious	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	1252.84	10	\$2,102.12	90%	100%	\$0.30	0.35	0
Religious	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	1166.79	7	\$3,880.72	90%	100%	\$0.77	0.13	0
Religious	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1312.64	18	\$8,758.85	90%	100%	\$0.86	0.14	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1184.77	18	\$8,758.85	90%	100%	\$0.96	0.13	0
Religious	Cooling DX	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	2083.56	15	\$4,361.75	90%	100%	\$0.30	0.40	0
Religious	Cooling DX	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	2430.81	15	\$2,180.87	90%	100%	\$0.13	0.93	0
Religious	Cooling DX	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	2194.01	15	\$2,180.87	90%	100%	\$0.14	0.84	0
Religious	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	364.62	5	\$2,433.79	90%	100%	\$2.01	0.05	0
Religious	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	329.10	5	\$2,433.79	90%	100%	\$2.23	0.05	0
Religious	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	25
Religious	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	0	0.00	4	\$0.00	90%	100%	\$0.00	370.90	1
Religious	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.01	4	\$0.00	90%	100%	\$0.00	726.82	10
Religious	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	0	0.01	4	\$0.00	90%	100%	\$0.00	726.82	0
Religious	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.03	3.13	2
Religious	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	0	0.00	12	\$0.00	90%	100%	\$0.03	3.13	0
Religious	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	4562.58	10	\$157.52	90%	100%	\$0.01	15.59	97
Religious	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	127.25	20	\$6,491.73	90%	100%	\$6.30	0.02	0
Religious	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	119.66	20	\$6,491.73	90%	100%	\$6.70	0.02	0
Religious	Heat Pump	Existing	Air Source Heat Pump 65 to 135 kBtuh - High Efficiency	High Efficiency - 11.5 EER, 3.4 COP - Air Source Heat Pump 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.06	15	\$0.09	90%	100%	\$0.23	0.46	0
Religious	Heat Pump	New	Air Source Heat Pump 65 to 135	High Efficiency - 11.5 EER, 3.4 COP - Air Source Heat	Standard Efficiency - 11.0 EER, 3.3	0	0.06	15	\$0.09	90%	100%	\$0.23	0.46	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			kBtuh - High Efficiency	Pump 65 to 135 kBtuh	COP - Air Source Heat Pump 65 to 135 kBtuh									
Religious	Heat Pump	Existing	Air Source Heat Pump 65 to 135 kBtuh - Premium Efficiency	Premium Efficiency - 12.0 EER, 3.8 COP - Air Source Heat Pump 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.20	15	\$0.19	90%	100%	\$0.13	0.82	0
Religious	Heat Pump	New	Air Source Heat Pump 65 to 135 kBtuh - Premium Efficiency	Premium Efficiency - 12.0 EER, 3.8 COP - Air Source Heat Pump 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.20	15	\$0.19	90%	100%	\$0.13	0.82	0
Religious	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	693.46	15	\$1,685.00	90%	100%	\$0.34	0.31	0
Religious	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	434.29	15	\$1,685.00	90%	100%	\$0.55	0.19	0
Religious	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	6490.49	15	\$8,146.49	90%	100%	\$0.18	0.60	0
Religious	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8653.99	15	\$4,073.24	90%	100%	\$0.07	1.59	71
Religious	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8137.62	15	\$4,073.24	90%	100%	\$0.07	1.49	5
Religious	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	1229.77	15	\$2,351.75	90%	100%	\$0.27	0.39	0
Religious	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	748.95	5	\$459.84	90%	100%	\$0.19	0.49	0
Religious	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2383.04	15	\$3,580.00	90%	100%	\$0.21	0.50	0
Religious	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2240.84	15	\$1,909.33	90%	100%	\$0.12	0.88	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	152.70	15	\$1,642.28	90%	100%	\$1.52	0.07	0
Religious	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	152.70	15	\$1,248.14	90%	100%	\$1.16	0.09	0
Religious	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	3661.93	7	#####	90%	100%	\$0.91	0.10	0
Religious	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1101.16	20	#####	90%	100%	\$17.62	0.01	0
Religious	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1035.46	20	#####	90%	100%	\$18.74	0.01	0
Religious	Heat Pump	Existing	Ground Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh - Advanced Efficiency	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source Heat Pump 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.37	15	\$5.51	90%	100%	\$2.11	0.05	0
Religious	Heat Pump	New	Ground Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh - Advanced Efficiency	Advanced Efficiency - 16.2 EER 4.0 COP - Ground Source Heat Pump 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.37	15	\$5.51	90%	100%	\$2.11	0.05	0
Religious	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	748.95	10	\$459.84	90%	100%	\$0.11	0.88	0
Religious	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1038.47	30	\$323.29	90%	100%	\$0.03	2.83	7
Religious	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	976.51	30	\$323.29	90%	100%	\$0.04	2.66	1
Religious	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	1252.84	10	\$2,102.12	90%	100%	\$0.30	0.32	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4153.92	7	\$3,880.72	90%	100%	\$0.22	0.43	0
Religious	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1106.79	18	\$8,758.85	90%	100%	\$1.02	0.11	0
Religious	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1040.75	18	\$8,758.85	90%	100%	\$1.09	0.10	0
Religious	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	15421.19	15	#####	90%	100%	\$4.75	0.02	0
Religious	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	14501.04	15	#####	90%	100%	\$5.05	0.02	0
Religious	Heat Pump	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	7417.71	15	\$4,361.75	90%	100%	\$0.08	1.27	10
Religious	Heat Pump	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8653.99	15	\$2,180.87	90%	100%	\$0.04	2.97	35
Religious	Heat Pump	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8137.62	15	\$2,180.87	90%	100%	\$0.04	2.79	5
Religious	Heat Pump	Existing	Water Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.31	15	\$0.37	90%	100%	\$0.17	0.62	0
Religious	Heat Pump	New	Water Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh	Water Source Heat Pump - 12 EER, 4.2 COP - 65 to 135 kBtuh	Standard Efficiency - 11.0 EER, 3.3 COP - Air Source Heat Pump 65 to 135 kBtuh	0	0.31	15	\$0.37	90%	100%	\$0.17	0.62	0
Religious	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1298.10	5	\$2,433.79	90%	100%	\$0.57	0.16	0
Religious	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1220.64	5	\$2,433.79	90%	100%	\$0.60	0.15	0
Religious	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	830.56	10	\$100.00	90%	100%	\$0.02	4.30	110



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	2325.57	8	\$225.00	90%	100%	\$0.02	4.45	193
Religious	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	2325.57	8	\$225.00	90%	100%	\$0.02	4.45	8
Religious	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	1993.34	8	\$307.53	90%	100%	\$0.03	2.79	33
Religious	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	1970.24	10	\$100.00	90%	100%	\$0.01	10.40	0
Religious	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	54.30	13	\$6.00	90%	100%	\$0.02	5.95	0
Religious	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	2339.24	8	\$6,993.63	90%	100%	\$0.63	0.15	0
Religious	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	5319.65	10	\$2,291.20	90%	100%	\$0.08	1.23	498
Religious	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.10	13	\$0.13	90%	100%	\$0.20	0.50	0
Religious	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	0	0.11	13	\$0.52	90%	100%	\$0.71	0.14	0
Religious	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	0	0.13	13	\$0.26	90%	100%	\$0.31	0.32	0
Religious	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	0	0.03	13	\$0.10	90%	100%	\$0.47	0.21	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	0	0.21	20	\$1.74	90%	100%	\$1.03	0.10	0
Religious	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	4728.57	8	\$1,306.99	90%	100%	\$0.06	1.59	790
Religious	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	4728.57	8	\$307.53	90%	100%	\$0.01	6.76	115
Religious	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	83.08	10	\$100.00	90%	100%	\$0.22	0.44	0
Religious	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	98.64	8	\$6,993.63	90%	100%	\$14.88	0.01	0
Religious	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	224.31	10	\$2,291.20	90%	100%	\$1.84	0.05	0
Religious	Lighting Interior HID	Existing	Lighting Interior - Efficient Metal Halide - Above Standard	Efficient Metal Halide	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.01	15	\$0.00	90%	100%	\$0.10	1.03	0
Religious	Lighting Interior HID	Existing	Lighting Interior - High Bay Fluorescent High Output - Above Standard	High Bay Fluorescent High Output (HO)	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.03	15	\$0.01	90%	100%	\$0.07	1.42	145
Religious	Lighting Interior HID	Existing	Lighting Interior - High Bay LED - Above Standard	High Bay LED	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure	0	0.04	20	\$0.02	90%	100%	\$0.05	2.23	13



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					Sodium, Metal Halide									
Religious	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	0	0.03	20	-\$0.01	90%	100%	-\$0.05	999.00	0
Religious	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	199.39	8	\$1,306.99	90%	100%	\$1.38	0.07	0
Religious	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	199.39	8	\$307.53	90%	100%	\$0.32	0.28	0
Religious	Lighting Interior Other	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	26.59	10	\$100.00	90%	100%	\$0.68	0.14	0
Religious	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	38.02	10	\$9.50	90%	100%	\$0.04	2.11	3
Religious	Lighting Interior Other	New	HE Lighting Fixtures/Design 10% better than code (New Construction)	HE Lighting Fixtures/Design 10% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.18	15	\$0.04	90%	100%	\$0.03	3.09	0
Religious	Lighting Interior Other	New	HE Lighting Fixtures/Design 15% better than code (New Construction)	HE Lighting Fixtures/Design 15% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.27	15	\$0.06	90%	100%	\$0.03	3.36	0
Religious	Lighting Interior Other	New	HE Lighting Fixtures/Design 30% better than code (New Construction)	HE Lighting Fixtures/Design 30% better than code (New Construction)	Standard Lighting Power Density (LPD)	0	0.54	15	\$0.12	90%	100%	\$0.03	3.36	295
Religious	Lighting Interior Other	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	31.56	8	\$6,993.63	90%	100%	\$46.51	0.00	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	3077.35	8	\$6,993.63	90%	100%	\$0.48	0.19	0
Religious	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	28.21	16	\$12.00	90%	100%	\$0.06	1.82	16
Religious	Lighting Interior Other	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	71.78	10	\$2,291.20	90%	100%	\$5.74	0.02	0
Religious	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	6998.18	10	\$2,291.20	90%	100%	\$0.06	1.61	48
Religious	Lighting Interior Other	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	63.80	8	\$1,306.99	90%	100%	\$4.30	0.02	0
Religious	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	6220.61	8	\$1,306.99	90%	100%	\$0.04	2.09	4
Religious	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	73.58	30	\$7.50	90%	100%	\$0.01	8.55	61
Religious	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	73.58	30	\$7.50	90%	100%	\$0.01	8.55	1
Religious	Lighting Interior Other	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	63.80	8	\$307.53	90%	100%	\$1.01	0.09	0
Religious	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	369.84	10	\$100.00	90%	100%	\$0.05	1.95	11
Religious	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	439.11	8	\$6,993.63	90%	100%	\$3.34	0.03	0
Religious	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	998.57	10	\$2,291.20	90%	100%	\$0.41	0.23	0
Religious	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	0	0.11	5	\$0.00	90%	100%	\$0.01	7.33	207
Religious	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	0	0.09	2	\$0.00	90%	100%	\$0.02	4.16	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	0	0.12	12	\$0.03	90%	100%	\$0.05	1.95	1,067
Religious	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	887.62	8	\$1,306.99	90%	100%	\$0.31	0.30	0
Religious	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	887.62	8	\$307.53	90%	100%	\$0.07	1.27	6
Religious	Other Plug Load	Existing	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	90%	100%	\$0.01	7.52	22
Religious	Other Plug Load	New	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week	Standard Irrigation Pump	Per Commercial Irrigation Pump Motor	29.12	15	\$2.80	90%	100%	\$0.01	7.52	1
Religious	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Religious	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	#####	90%	100%	\$6.49	0.02	0
Religious	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	15.04	4	\$1.49	90%	100%	\$0.04	2.39	4
Religious	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	15.04	4	\$1.49	90%	100%	\$0.04	2.39	0
Religious	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	784.09	10	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	784.09	10	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Other Plug Load	Existing	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.35	5	\$1.43	90%	100%	\$1.24	0.07	0
Religious	Other Plug Load	New	Energy Star Battery Charging System (for small cordless products)	Energy Star Battery Charging System (for small cordless products)	Standard Battery Charger	Per Battery Charger	0.35	5	\$1.43	90%	100%	\$1.24	0.07	0
Religious	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	98.38	5	\$16.66	90%	100%	\$0.05	1.71	33



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	98.38	5	\$16.66	90%	100%	\$0.05	1.71	1
Religious	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.00	6	\$0.00	90%	100%	\$0.00	1,593.40	2
Religious	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	0	0.00	6	\$0.00	90%	100%	\$0.00	1,593.40	0
Religious	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.01	5	\$0.00	90%	100%	\$0.00	4,457.26	7
Religious	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	0	0.01	5	\$0.00	90%	100%	\$0.00	4,457.26	0
Religious	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Religious	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.01	90%	100%	\$0.10	1.02	0
Religious	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.02	12	\$0.01	90%	100%	\$0.09	1.02	299
Religious	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	0	0.02	12	\$0.01	90%	100%	\$0.09	1.02	18
Religious	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.09	1.02	0
Religious	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	0	0.01	12	\$0.00	90%	100%	\$0.09	1.02	0
Religious	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	1676.45	15	\$8,146.49	90%	100%	\$0.69	0.19	0
Religious	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	2235.26	15	\$4,073.24	90%	100%	\$0.26	0.51	0
Religious	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	2231.01	15	\$4,073.24	90%	100%	\$0.26	0.51	0
Religious	Room Cooling	Existing	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.01	12	\$0.00	90%	100%	\$0.05	2.31	9



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Room Cooling	New	ENERGY STAR Room Air Conditioner	ENERGY STAR Room AC - CEER/EER 11.2/11.3 (8,000-13,999 Btuh)	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	0	0.01	12	\$0.00	90%	100%	\$0.05	2.31	0
Religious	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.46	4	\$2.15	90%	100%	\$1.70	0.05	0
Religious	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.46	4	\$2.15	90%	100%	\$1.71	0.05	0
Religious	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.08	4	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	0	0.08	4	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	3770.31	10	\$157.52	90%	100%	\$0.01	12.40	11
Religious	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	879.74	15	\$1,685.00	90%	100%	\$0.27	0.37	0
Religious	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	578.11	15	\$1,685.00	90%	100%	\$0.41	0.25	0
Religious	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt of Ceiling Insulation	6283.86	15	\$8,146.49	90%	100%	\$0.18	0.55	0
Religious	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8378.48	15	\$4,073.24	90%	100%	\$0.07	1.47	10
Religious	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt of Ceiling Insulation	8378.48	15	\$4,073.24	90%	100%	\$0.07	1.47	1
Religious	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2211.92	15	\$3,580.00	90%	100%	\$0.23	0.44	0
Religious	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	2211.92	15	\$1,909.33	90%	100%	\$0.12	0.83	0

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Space Heat	Existing	Ductless Heat Pump	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Existing HVAC system	Per Ductless Heat Pump Cooling Ton	1.08	15	#####	90%	100%	\$4,925.16	0.00	0
Religious	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	3770.31	7	#####	90%	100%	\$0.88	0.10	0
Religious	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	876.92	20	#####	90%	100%	\$22.13	0.00	0
Religious	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	876.92	20	#####	90%	100%	\$22.13	0.00	0
Religious	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4021.67	7	\$3,880.72	90%	100%	\$0.22	0.40	0
Religious	Space Heat	Existing	Wall Insulation	R-14	Average Existing Insulation	Per SqFt of Wall Insulation	7181.55	15	\$4,361.75	90%	100%	\$0.09	1.18	1
Religious	Space Heat	Existing	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8378.48	15	\$2,180.87	90%	100%	\$0.04	2.75	5
Religious	Space Heat	New	Wall Insulation	R-21	R-14	Per SqFt of Wall Insulation	8378.48	15	\$2,180.87	90%	100%	\$0.04	2.75	1
Religious	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	27.22	20	#####	90%	100%	\$68.38	0.00	0
Religious	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	618.22	15	\$525.77	90%	100%	\$0.12	0.85	0
Religious	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	618.22	15	\$525.77	90%	100%	\$0.12	0.85	0
Religious	Ventilation and Circulation	Existing	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is replaced with 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	168.03	18	\$527.90	90%	100%	\$0.41	0.26	0
Religious	Ventilation and Circulation	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per	Per Air Handler Recirculating Fan Motor (1 HP or less)	168.03	18	\$527.90	90%	100%	\$0.41	0.26	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					year is replaced with 85% eff. ECPM motor									
Religious	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	56.18	15	\$4.55	90%	100%	\$0.01	8.92	55
Religious	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Standard (NEMA) Motor 1-15 HP, 1200-3600 RPM	Per Building	56.18	15	\$4.55	90%	100%	\$0.01	8.92	1
Religious	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	28.68	15	\$4.55	90%	100%	\$0.02	4.55	28
Religious	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Standard (NEMA) Motor 125-200 HP, 1200-3600 RPM	Per Building	28.68	15	\$4.55	90%	100%	\$0.02	4.55	1
Religious	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	44.03	15	\$4.55	90%	100%	\$0.01	6.99	43
Religious	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Standard (NEMA) Motor 20-40 HP, 1200-3600 RPM	Per Building	44.03	15	\$4.55	90%	100%	\$0.01	6.99	1
Religious	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	28.56	15	\$4.55	90%	100%	\$0.02	4.53	27
Religious	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Standard (NEMA) Motor 250-500 HP, 1200-3600 RPM	Per Building	28.56	15	\$4.55	90%	100%	\$0.02	4.53	1

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Ventilation and Circulation	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	32.40	15	\$4.55	90%	100%	\$0.02	5.14	31
Religious	Ventilation and Circulation	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Standard (NEMA) Motor 50-100 HP, 1200-3600 RPM	Per Building	32.40	15	\$4.55	90%	100%	\$0.02	5.14	1
Religious	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	646.89	13	\$120.70	90%	100%	\$0.03	3.46	511
Religious	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	204.74	13	\$39.87	90%	100%	\$0.03	3.31	144
Religious	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	93.16	25	\$1,363.66	90%	100%	\$1.67	0.06	0
Religious	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	40.67	25	\$1,363.66	90%	100%	\$3.81	0.03	0
Religious	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.41	11	\$21.07	90%	100%	\$0.19	0.50	0
Religious	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.41	11	\$21.07	90%	100%	\$0.19	0.50	0
Religious	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	36.27	11	\$51.17	90%	100%	\$0.24	0.41	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	36.27	11	\$51.17	90%	100%	\$0.24	0.41	0
Religious	Water Heat GT 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.69	11	\$30.10	90%	100%	\$0.27	0.36	0
Religious	Water Heat GT 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.69	11	\$30.10	90%	100%	\$0.27	0.36	0
Religious	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	4.50	10	\$3.75	90%	100%	\$0.15	0.64	0
Religious	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	4.50	10	\$3.75	90%	100%	\$0.15	0.64	0
Religious	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	234.30	14	\$1,554.55	90%	100%	\$0.97	0.11	0
Religious	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	102.28	14	\$1,554.55	90%	100%	\$2.23	0.05	0
Religious	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	14.01	8	\$192.27	90%	100%	\$2.88	0.03	0
Religious	Water Heat GT 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	121.75	14	\$35.57	90%	100%	\$0.04	2.40	7

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	2.33	15	\$224.27	90%	100%	\$13.62	0.01	0
Religious	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	227.97	7	\$103.25	90%	100%	\$0.10	0.87	0
Religious	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	99.52	7	\$103.25	90%	100%	\$0.24	0.38	0
Religious	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	166.73	7	\$81.82	90%	100%	\$0.11	0.81	0
Religious	Water Heat GT 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	72.78	7	\$81.82	90%	100%	\$0.26	0.35	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	60.03	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	60.03	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	42.37	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	42.37	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	24.72	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	24.72	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	28.25	12	\$9.22	90%	100%	\$0.05	1.89	1
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	14.19	9	\$2.29	90%	100%	\$0.03	2.99	1
Religious	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	14.19	9	\$2.29	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	10.64	9	\$1.72	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	10.64	9	\$1.72	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	7.10	9	\$1.15	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	7.10	9	\$1.15	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	7.10	9	\$1.15	90%	100%	\$0.03	2.99	0
Religious	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	7.10	9	\$1.15	90%	100%	\$0.03	2.99	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Water Heat GT 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	15	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	15	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	38.84	12	\$1,116.33	90%	100%	\$4.61	0.02	0
Religious	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	38.84	12	\$1,116.33	90%	100%	\$4.61	0.02	0
Religious	Water Heat GT 55 Gal	Existing	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	10	\$0.01	90%	100%	\$1.38	0.07	0
Religious	Water Heat GT 55 Gal	New	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater GT 55 Gal - EF 2.2	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	0	0.00	10	\$0.01	90%	100%	\$1.38	0.07	0
Religious	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	65.21	2	\$27.82	90%	100%	\$0.29	0.30	0
Religious	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	84.67	25	\$1,363.66	90%	100%	\$1.83	0.05	0
Religious	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	84.33	25	\$1,363.66	90%	100%	\$1.84	0.05	0
Religious	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF	Per Residential Clothes Washer	18.41	11	\$21.07	90%	100%	\$0.19	0.50	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
					8.0 (Electric DHW & Dryer)									
Religious	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.41	11	\$21.07	90%	100%	\$0.19	0.50	0
Religious	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	36.27	11	\$51.17	90%	100%	\$0.24	0.41	0
Religious	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2016 Clothes Washer - MEF 1.72 and WF 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	36.27	11	\$51.17	90%	100%	\$0.24	0.41	0
Religious	Water Heat LE 55 Gal	Existing	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.69	11	\$30.10	90%	100%	\$0.27	0.36	0
Religious	Water Heat LE 55 Gal	New	ENERGY STAR Clothes Washers (Electric Water Heating)	ENERGY STAR Most Efficient Clothes Washer - MEF 2.4 and WF 4.5 (Electric DHW & Dryer)	Federal Standard 2018 Clothes Washer - MEF 2.0 and WF 6.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	18.69	11	\$30.10	90%	100%	\$0.27	0.36	0
Religious	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Electric Water Heating)	ENERGY STAR Dishwasher - 295 kWh/yr and 4.25 gal/cycle	Federal Standard 2014 Dishwasher - 307 kWh/yr and 5.0 gal/cycle	Per Residential Dishwasher	4.50	10	\$3.75	90%	100%	\$0.15	0.64	0
Religious	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers	ENERGY STAR Dishwasher - 295	Federal Standard 2014 Dishwasher -	Per Residential Dishwasher	4.50	10	\$3.75	90%	100%	\$0.15	0.64	0



Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
			(Electric Water Heating)	kWh/yr and 4.25 gal/cycle	307 kWh/yr and 5.0 gal/cycle									
Religious	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	212.94	14	\$1,554.55	90%	100%	\$1.07	0.10	0
Religious	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	212.10	14	\$1,554.55	90%	100%	\$1.08	0.10	0
Religious	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	12.74	8	\$192.27	90%	100%	\$3.17	0.03	0
Religious	Water Heat LE 55 Gal	Existing	Hot Water (DHW) Pipe Insulation	Hot Water (DHW) Pipe Insulation	No insulation present	Per Linear Foot of Hot Water Pipe Insulation	121.75	14	\$35.57	90%	100%	\$0.04	2.40	24
Religious	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	2.12	15	\$224.27	90%	100%	\$14.98	0.01	0
Religious	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	205.05	7	\$103.25	90%	100%	\$0.12	0.79	0
Religious	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	204.24	7	\$103.25	90%	100%	\$0.12	0.78	0
Religious	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	148.85	7	\$81.82	90%	100%	\$0.13	0.72	0
Religious	Water Heat LE 55 Gal	New	Insulating Blanket (R=6.7)	Insulating Blanket (R=6.7)	No Insulating Blanket on Water Heater	Per Tank Wrap	148.26	7	\$81.82	90%	100%	\$0.13	0.72	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	127.38	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	127.38	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	89.91	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	89.91	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	52.45	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	52.45	12	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	59.94	12	\$9.22	90%	100%	\$0.02	4.02	4

Segment	End Use	Construction Vintage	Measure Name	Measure Description	Baseline Description	Unit Description	Savings per Unit (kWh)	Measure Life	Incremental Cost (\$)	Technical Feasibility	Incomplete Factor	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	30.11	9	\$2.29	90%	100%	\$0.01	6.35	5
Religious	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	30.11	9	\$2.29	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	22.58	9	\$1.72	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	22.58	9	\$1.72	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	15.06	9	\$1.15	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	15.06	9	\$1.15	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	15.06	9	\$1.15	90%	100%	\$0.01	6.35	1
Religious	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	15.06	9	\$1.15	90%	100%	\$0.01	6.35	0
Religious	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	15	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	15	\$0.00	90%	100%	\$0.00	0.00	0
Religious	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	82.42	12	\$1,116.33	90%	100%	\$2.17	0.05	0
Religious	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	82.42	12	\$1,116.33	90%	100%	\$2.17	0.05	0
Religious	Water Heat LE 55 Gal	Existing	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	10	\$0.11	90%	100%	\$1.15	0.08	0
Religious	Water Heat LE 55 Gal	New	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR	ENERGY STAR Heat Pump Water Heater LE 55 Gal - EF 2.2	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	0	0.02	10	\$0.11	90%	100%	\$1.15	0.08	0
Religious	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	59.27	2	\$27.82	90%	100%	\$0.32	0.27	0



## Industrial Measure Details

**Table 8. Industrial Measure Details**

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Chemical Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	1,133	15	\$1,908	73%	100%	\$0.24	0.41	0
Chemical Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	928	15	\$1,159	73%	100%	\$0.18	0.55	0
Chemical Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	556	15	\$444	73%	100%	\$0.11	0.86	0
Chemical Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	487	15	\$147	73%	100%	\$0.04	2.29	51
Chemical Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	1,143	15	\$220	73%	100%	\$0.03	3.58	121
Chemical Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	4,300	10	\$17,495	5%	100%	\$0.73	0.12	0
Chemical Manufacturing	Fans	Existing	Premium Fan	Per Industry	24,981	10	\$4,542	10%	100%	\$0.03	2.71	369
Chemical Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	1,398	10	\$299	21%	100%	\$0.04	2.30	41
Chemical Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	16,941	10	\$3,052	11%	100%	\$0.03	2.73	266
Chemical Manufacturing	HVAC	Existing	Clean Room: Change Filter Strategy	Per Industry	43,762	1	\$284	10%	100%	\$0.01	9.33	630
Chemical Manufacturing	HVAC	Existing	Clean Room: Chiller Optimize	Per Industry	16,217	10	\$1,321	28%	100%	\$0.01	6.05	662
Chemical Manufacturing	HVAC	Existing	Clean Room: Clean Room HVAC	Per Industry	9,847	20	\$1,594	30%	100%	\$0.02	5.20	425
Chemical Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	17,946	15	\$5,306	63%	75%	\$0.04	2.33	1,219
Chemical Manufacturing	HVAC	Existing	Improved Controls	Per Industry	22,852	10	\$2,340	33%	50%	\$0.02	4.81	537
Chemical Manufacturing	HVAC	Existing	Recommissioning	Per Industry	17,505	7	\$4,737	73%	50%	\$0.06	1.36	713
Chemical Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	1,052	11	\$450	100%	50%	\$0.07	1.25	76
Chemical Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	200	13	\$171	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Chemical Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	5,626	2	\$7	100%	50%	\$0.00	101.00	0
Chemical Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	6,143	7	\$997	100%	90%	\$0.04	2.27	0
Chemical Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	6,323	5	\$389	100%	90%	\$0.02	4.49	1,007



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Chemical Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	3,695	6	\$904	90%	75%	\$0.06	1.32	441
Chemical Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	2,929	11	\$22,902	80%	98%	\$1.32	0.07	0
Chemical Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	2,335	5	\$904	100%	50%	\$0.12	0.71	0
Chemical Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	5,726	11	\$492	100%	95%	\$0.01	6.22	962
Chemical Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	19,432	10	\$4,139	15%	70%	\$0.04	2.31	303
Chemical Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,541	15	\$4,281	74%	100%	\$0.24	0.41	0
Chemical Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	2,081	15	\$2,600	74%	100%	\$0.18	0.55	0
Chemical Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	1,248	15	\$997	74%	100%	\$0.11	0.86	0
Chemical Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	1,094	15	\$329	74%	100%	\$0.04	2.29	116
Chemical Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,564	15	\$493	74%	100%	\$0.03	3.58	273
Chemical Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	9,647	10	\$39,253	5%	100%	\$0.73	0.12	0
Chemical Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	8,091	10	\$571	49%	100%	\$0.01	6.98	575
Chemical Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	21,018	12	\$4,496	10%	100%	\$0.03	2.69	313
Chemical Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	3,137	10	\$671	21%	100%	\$0.04	2.30	94
Chemical Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	35,075	10	\$7,357	11%	100%	\$0.04	2.35	539
Chemical Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	20,192	11	\$3,980	22%	100%	\$0.03	2.71	639
Chemical Manufacturing	Other	Existing	Material Handling	Per Industry	2,023	10	\$945	52%	100%	\$0.08	1.05	152
Chemical Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	117	20	\$259	20%	100%	\$0.27	0.38	0
Chemical Manufacturing	Other	Existing	Transformers	Per Industry	606	30	\$60	9%	100%	\$0.01	10.62	8
Chemical Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	25,496	10	\$4,008	17%	100%	\$0.03	3.13	625
Chemical Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	87,485	10	\$13,245	38%	100%	\$0.03	3.25	4,754

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Chemical Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	8,394	10	\$593	54%	100%	\$0.01	6.98	651
Chemical Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	33,920	10	\$6,830	34%	100%	\$0.04	2.45	1,421
Chemical Manufacturing	Process Refrig and Cooling	Existing	Defrost Control System	Per Industry	15,152	15	\$1,277	30%	100%	\$0.01	8.17	654
Chemical Manufacturing	Process Refrig and Cooling	Existing	Evaporator Fan Controller	Per Industry	10,374	16	\$857	30%	100%	\$0.01	8.77	448
Chemical Manufacturing	Process Refrig and Cooling	Existing	Insulation for Bare Suction Lines	Per Industry	2,165	10	\$2,096	7%	100%	\$0.17	0.51	0
Chemical Manufacturing	Process Refrig and Cooling	Existing	Mechanical Subcoolers	Per Industry	675	15	\$237	60%	100%	\$0.05	1.96	58
Chemical Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	2,423	10	\$518	21%	100%	\$0.04	2.30	73
Chemical Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,474	15	\$4,169	76%	100%	\$0.24	0.41	0
Chemical Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	2,027	15	\$2,532	76%	100%	\$0.18	0.55	0
Chemical Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	1,215	15	\$970	76%	100%	\$0.11	0.86	0
Chemical Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	1,065	15	\$320	76%	100%	\$0.04	2.29	117
Chemical Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,496	15	\$480	76%	100%	\$0.03	3.58	273
Chemical Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	9,394	10	\$38,224	5%	100%	\$0.73	0.12	0
Chemical Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	33,014	12	\$8,486	16%	100%	\$0.04	2.24	733
Chemical Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	9,626	10	\$2,049	11%	100%	\$0.04	2.32	151
Electrical Equipment Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	174	15	\$293	74%	100%	\$0.24	0.41	0
Electrical Equipment Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	142	15	\$178	74%	100%	\$0.18	0.55	0
Electrical Equipment Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	85	15	\$68	74%	100%	\$0.11	0.87	0
Electrical Equipment Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	75	15	\$22	74%	100%	\$0.04	2.30	8
Electrical Equipment Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	175	15	\$34	74%	100%	\$0.03	3.60	19



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Electrical Equipment Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	659	10	\$2,683	5%	100%	\$0.73	0.12	0
Electrical Equipment Manufacturing	Fans	Existing	Premium Fan	Per Industry	3,831	10	\$697	10%	100%	\$0.03	2.72	57
Electrical Equipment Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	214	10	\$46	21%	100%	\$0.04	2.31	6
Electrical Equipment Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	2,598	10	\$468	11%	100%	\$0.03	2.75	41
Electrical Equipment Manufacturing	HVAC	Existing	Clean Room: Change Filter Strategy	Per Industry	26,577	1	\$172	10%	100%	\$0.01	9.36	383
Electrical Equipment Manufacturing	HVAC	Existing	Clean Room: Chiller Optimize	Per Industry	9,849	10	\$802	28%	100%	\$0.01	6.08	402
Electrical Equipment Manufacturing	HVAC	Existing	Clean Room: Clean Room HVAC	Per Industry	5,980	20	\$968	30%	100%	\$0.02	5.23	258
Electrical Equipment Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	10,899	15	\$3,222	75%	75%	\$0.04	2.34	750
Electrical Equipment Manufacturing	HVAC	Existing	Improved Controls	Per Industry	13,878	10	\$1,421	39%	50%	\$0.02	4.83	389
Electrical Equipment Manufacturing	HVAC	Existing	Recommissioning	Per Industry	10,631	7	\$2,877	86%	50%	\$0.06	1.37	661
Electrical Equipment Manufacturing	HVAC	Existing	Solidstate Chiller	Per Industry	59,799	10	\$30,409	20%	100%	\$0.09	0.97	0
Electrical Equipment Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	656	11	\$281	100%	50%	\$0.07	1.25	47
Electrical Equipment Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	125	13	\$107	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	3,506	2	\$4	100%	50%	\$0.00	101.51	0
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	3,828	7	\$622	100%	90%	\$0.04	2.28	0
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	3,941	5	\$242	100%	90%	\$0.02	4.51	627
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	2,303	6	\$564	90%	75%	\$0.06	1.33	275
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	1,825	11	\$14,272	80%	98%	\$1.32	0.07	0
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	1,455	5	\$564	100%	50%	\$0.12	0.72	0
Electrical Equipment Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	3,569	11	\$307	100%	95%	\$0.01	6.25	600
Electrical Equipment Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	12,110	10	\$2,579	15%	70%	\$0.04	2.32	189
Electrical Equipment Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	390	15	\$657	75%	100%	\$0.24	0.41	0



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Electrical Equipment Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	319	15	\$399	75%	100%	\$0.18	0.55	0
Electrical Equipment Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	191	15	\$153	75%	100%	\$0.11	0.87	0
Electrical Equipment Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	168	15	\$50	75%	100%	\$0.04	2.30	18
Electrical Equipment Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	393	15	\$76	75%	100%	\$0.03	3.60	42
Electrical Equipment Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	1,480	10	\$6,020	5%	100%	\$0.73	0.12	0
Electrical Equipment Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	1,241	10	\$88	50%	100%	\$0.01	7.01	89
Electrical Equipment Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	3,224	12	\$690	10%	100%	\$0.03	2.70	49
Electrical Equipment Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	481	10	\$103	21%	100%	\$0.04	2.31	15
Electrical Equipment Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	5,380	10	\$1,128	11%	100%	\$0.04	2.36	83
Electrical Equipment Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	15,134	11	\$2,983	22%	100%	\$0.03	2.72	479
Electrical Equipment Manufacturing	Other	Existing	Material Handling	Per Industry	1,516	10	\$709	53%	100%	\$0.08	1.06	115
Electrical Equipment Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	88	20	\$194	20%	100%	\$0.27	0.38	0
Electrical Equipment Manufacturing	Other	Existing	Transformers	Per Industry	454	30	\$45	9%	100%	\$0.01	10.67	6
Electrical Equipment Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	3,911	10	\$615	17%	100%	\$0.03	3.15	96
Electrical Equipment Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	13,418	10	\$2,031	35%	100%	\$0.03	3.27	667
Electrical Equipment Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	1,287	10	\$91	49%	100%	\$0.01	7.01	91
Electrical Equipment Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	5,203	10	\$1,047	34%	100%	\$0.04	2.46	221
Electrical Equipment Manufacturing	Process Other	Existing	Elec Chip Fab: Eliminate Exhaust	Per Industry	804	10	\$150	80%	100%	\$0.03	2.65	93
Electrical Equipment Manufacturing	Process Other	Existing	Elec Chip Fab: Exhaust Injector	Per Industry	16,078	10	\$7,240	35%	100%	\$0.08	1.10	810
Electrical Equipment Manufacturing	Process Other	Existing	Elec Chip Fab: Reduce Gas Pressure	Per Industry	1,608	10	\$0	50%	100%	\$0.00	0.00	0
Electrical Equipment Manufacturing	Process Refrig and Cooling	Existing	Floating Head Pressure Controller	Per Industry	2,939	15	\$230	30%	100%	\$0.01	8.84	127
Electrical Equipment Manufacturing	Process Refrig and Cooling	Existing	Floating Suction Pressure Controller	Per Industry	468	15	\$37	30%	100%	\$0.01	8.84	20



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Electrical Equipment Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	349	10	\$75	21%	100%	\$0.04	2.31	11
Electrical Equipment Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	380	15	\$639	73%	100%	\$0.24	0.41	0
Electrical Equipment Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	311	15	\$388	73%	100%	\$0.18	0.55	0
Electrical Equipment Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	186	15	\$149	73%	100%	\$0.11	0.87	0
Electrical Equipment Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	163	15	\$49	73%	100%	\$0.04	2.30	17
Electrical Equipment Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	383	15	\$74	73%	100%	\$0.03	3.60	40
Electrical Equipment Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	1,441	10	\$5,863	5%	100%	\$0.73	0.12	0
Electrical Equipment Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	5,063	12	\$1,302	15%	100%	\$0.04	2.25	108
Electrical Equipment Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	1,476	10	\$314	11%	100%	\$0.04	2.33	23
Fabricated Metal Products	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	215	15	\$362	76%	100%	\$0.24	0.41	0
Fabricated Metal Products	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	176	15	\$220	76%	100%	\$0.18	0.55	0
Fabricated Metal Products	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	105	15	\$84	76%	100%	\$0.11	0.86	0
Fabricated Metal Products	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	92	15	\$28	76%	100%	\$0.04	2.30	10
Fabricated Metal Products	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	217	15	\$42	76%	100%	\$0.03	3.59	24
Fabricated Metal Products	Fans	Existing	Motor Early Retirement	Per Industry	816	10	\$3,319	5%	100%	\$0.73	0.12	0
Fabricated Metal Products	Fans	Existing	Premium Fan	Per Industry	4,740	10	\$862	11%	100%	\$0.03	2.71	73
Fabricated Metal Products	Fans	Existing	Synchronous Belts	Per Industry	265	10	\$57	21%	100%	\$0.04	2.31	8
Fabricated Metal Products	Fans	Existing	Variable Speed Drive Control	Per Industry	3,214	10	\$579	11%	100%	\$0.03	2.74	53
Fabricated Metal Products	HVAC	Existing	Equipment Upgrades	Per Industry	6,617	15	\$1,956	65%	75%	\$0.04	2.34	462
Fabricated Metal Products	HVAC	Existing	Improved Controls	Per Industry	8,425	10	\$863	34%	50%	\$0.02	4.82	204

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Fabricated Metal Products	HVAC	Existing	Recommissioning	Per Industry	6,454	7	\$1,747	75%	50%	\$0.06	1.36	307
Fabricated Metal Products	Lighting	Existing	Exit Sign - LED	Per Industry	695	11	\$297	100%	50%	\$0.07	1.25	50
Fabricated Metal Products	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	132	13	\$113	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Fabricated Metal Products	Lighting	Existing	Lighting - CFL Packages	Per Industry	3,715	2	\$4	100%	50%	\$0.00	101.28	0
Fabricated Metal Products	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	4,057	7	\$659	100%	90%	\$0.04	2.27	0
Fabricated Metal Products	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	4,176	5	\$257	100%	90%	\$0.02	4.50	665
Fabricated Metal Products	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	2,440	6	\$597	90%	75%	\$0.06	1.32	291
Fabricated Metal Products	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	1,934	11	\$15,124	80%	98%	\$1.32	0.07	0
Fabricated Metal Products	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	1,542	5	\$597	100%	50%	\$0.12	0.71	0
Fabricated Metal Products	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	3,782	11	\$325	100%	95%	\$0.01	6.23	635
Fabricated Metal Products	Lighting	Existing	Lighting Controls	Per Industry	12,833	10	\$2,733	15%	70%	\$0.04	2.32	200
Fabricated Metal Products	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	612	15	\$1,031	76%	100%	\$0.24	0.41	0
Fabricated Metal Products	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	501	15	\$626	76%	100%	\$0.18	0.55	0
Fabricated Metal Products	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	300	15	\$240	76%	100%	\$0.11	0.86	0
Fabricated Metal Products	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	263	15	\$79	76%	100%	\$0.04	2.30	29
Fabricated Metal Products	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	617	15	\$119	76%	100%	\$0.03	3.59	67
Fabricated Metal Products	Motors Other	Existing	Motor Early Retirement	Per Industry	2,322	10	\$9,449	5%	100%	\$0.73	0.12	0
Fabricated Metal Products	Motors Other	Existing	Motor Management Plan	Per Industry	1,948	10	\$138	50%	100%	\$0.01	6.99	140
Fabricated Metal Products	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	5,060	12	\$1,082	10%	100%	\$0.03	2.69	76
Fabricated Metal Products	Motors Other	Existing	Synchronous Belts	Per Industry	755	10	\$162	21%	100%	\$0.04	2.31	23
Fabricated Metal Products	Motors Other	Existing	Variable Speed Drive Control	Per Industry	8,443	10	\$1,771	11%	100%	\$0.04	2.35	135
Fabricated Metal Products	Other	Existing	Integrated Plant Energy Management	Per Industry	18,969	11	\$3,739	22%	100%	\$0.03	2.72	600



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Fabricated Metal Products	Other	Existing	Material Handling	Per Industry	1,901	10	\$888	52%	100%	\$0.08	1.06	143
Fabricated Metal Products	Other	Existing	Power Quality-Improving Appliances	Per Industry	110	20	\$243	20%	100%	\$0.27	0.38	0
Fabricated Metal Products	Other	Existing	Transformers	Per Industry	569	30	\$57	9%	100%	\$0.01	10.64	8
Fabricated Metal Products	Process AirComp	Existing	Air Compressor Equipment	Per Industry	2,397	10	\$377	17%	100%	\$0.03	3.14	59
Fabricated Metal Products	Process AirComp	Existing	Air Compressor Optimization	Per Industry	8,224	10	\$1,245	36%	100%	\$0.03	3.26	416
Fabricated Metal Products	Process AirComp	Existing	Motor Management Plan	Per Industry	789	10	\$56	50%	100%	\$0.01	6.99	57
Fabricated Metal Products	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	3,189	10	\$642	34%	100%	\$0.04	2.45	135
Fabricated Metal Products	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	289	10	\$62	21%	100%	\$0.04	2.31	9
Fabricated Metal Products	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	389	15	\$655	75%	100%	\$0.24	0.41	0
Fabricated Metal Products	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	319	15	\$398	75%	100%	\$0.18	0.55	0
Fabricated Metal Products	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	191	15	\$153	75%	100%	\$0.11	0.86	0
Fabricated Metal Products	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	167	15	\$50	75%	100%	\$0.04	2.30	18
Fabricated Metal Products	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	392	15	\$75	75%	100%	\$0.03	3.59	42
Fabricated Metal Products	Pumps	Existing	Motor Early Retirement	Per Industry	1,477	10	\$6,009	5%	100%	\$0.73	0.12	0
Fabricated Metal Products	Pumps	Existing	Pump System Optimization	Per Industry	5,190	12	\$1,334	16%	100%	\$0.04	2.24	115
Fabricated Metal Products	Pumps	Existing	Variable Speed Drive Control	Per Industry	1,513	10	\$322	11%	100%	\$0.04	2.32	25
Food Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	518	15	\$872	75%	100%	\$0.24	0.41	0
Food Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	424	15	\$530	75%	100%	\$0.18	0.56	0
Food Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	254	15	\$203	75%	100%	\$0.11	0.87	0
Food Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	223	15	\$67	75%	100%	\$0.04	2.31	24

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Food Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	522	15	\$100	75%	100%	\$0.03	3.61	56
Food Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	1,966	10	\$8,000	5%	100%	\$0.73	0.12	0
Food Manufacturing	Fans	Existing	Premium Fan	Per Industry	11,423	10	\$2,077	11%	100%	\$0.03	2.73	173
Food Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	639	10	\$137	21%	100%	\$0.04	2.32	20
Food Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	7,746	10	\$1,396	11%	100%	\$0.03	2.76	125
Food Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	22,680	15	\$6,706	63%	75%	\$0.04	2.35	1,541
Food Manufacturing	HVAC	Existing	Improved Controls	Per Industry	28,880	10	\$2,957	33%	50%	\$0.02	4.85	679
Food Manufacturing	HVAC	Existing	Recommissioning	Per Industry	22,123	7	\$5,987	73%	50%	\$0.06	1.37	1,027
Food Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	2,047	11	\$876	100%	50%	\$0.07	1.26	147
Food Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	390	13	\$334	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Food Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	10,945	2	\$13	100%	50%	\$0.00	101.89	0
Food Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	11,950	7	\$1,940	100%	90%	\$0.04	2.28	0
Food Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	12,301	5	\$756	100%	90%	\$0.02	4.53	1,958
Food Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	7,188	6	\$1,759	90%	75%	\$0.06	1.33	858
Food Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	5,697	11	\$44,554	80%	98%	\$1.32	0.07	0
Food Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	4,542	5	\$1,759	100%	50%	\$0.12	0.72	0
Food Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	11,140	11	\$958	100%	95%	\$0.01	6.27	1,872
Food Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	37,804	10	\$8,052	15%	70%	\$0.04	2.33	589
Food Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,693	15	\$4,537	73%	100%	\$0.24	0.41	0
Food Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	2,206	15	\$2,755	73%	100%	\$0.18	0.56	0
Food Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	1,322	15	\$1,056	73%	100%	\$0.11	0.87	0
Food Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	1,159	15	\$348	73%	100%	\$0.04	2.31	122
Food Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,717	15	\$522	73%	100%	\$0.03	3.61	286
Food Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	10,223	10	\$41,598	5%	100%	\$0.73	0.12	0
Food Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	8,575	10	\$606	49%	100%	\$0.01	7.03	601
Food Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	22,274	12	\$4,765	10%	100%	\$0.03	2.71	328
Food Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	3,324	10	\$711	20%	100%	\$0.04	2.32	98



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Food Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	37,171	10	\$7,797	11%	100%	\$0.04	2.37	586
Food Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	41,173	11	\$8,117	22%	100%	\$0.03	2.73	1,302
Food Manufacturing	Other	Existing	Material Handling	Per Industry	4,125	10	\$1,928	52%	100%	\$0.08	1.06	307
Food Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	240	20	\$528	20%	100%	\$0.27	0.39	0
Food Manufacturing	Other	Existing	Transformers	Per Industry	1,235	30	\$123	9%	100%	\$0.01	10.71	17
Food Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	5,142	10	\$808	17%	100%	\$0.03	3.16	126
Food Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	17,644	10	\$2,671	35%	100%	\$0.03	3.28	876
Food Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	1,693	10	\$120	49%	100%	\$0.01	7.03	120
Food Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	6,841	10	\$1,377	34%	100%	\$0.04	2.47	290
Food Manufacturing	Process Refrig and Cooling	Existing	Defrost Control System	Per Industry	50,119	15	\$4,224	60%	100%	\$0.01	8.24	4,329
Food Manufacturing	Process Refrig and Cooling	Existing	Evaporator Fan Controller	Per Industry	34,314	16	\$2,833	60%	100%	\$0.01	8.84	2,771
Food Manufacturing	Process Refrig and Cooling	Existing	Floating Head Pressure Controller	Per Industry	67,434	15	\$5,280	60%	100%	\$0.01	8.87	5,825
Food Manufacturing	Process Refrig and Cooling	Existing	Floating Suction Pressure Controller	Per Industry	10,737	15	\$841	60%	100%	\$0.01	8.87	875
Food Manufacturing	Process Refrig and Cooling	Existing	Insulation for Bare Suction Lines	Per Industry	7,160	10	\$6,932	15%	100%	\$0.17	0.51	0
Food Manufacturing	Process Refrig and Cooling	Existing	Mechanical Subcoolers	Per Industry	2,231	15	\$783	30%	100%	\$0.05	1.98	96
Food Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	8,014	10	\$1,714	21%	100%	\$0.04	2.32	242
Food Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	1,132	15	\$1,908	74%	100%	\$0.24	0.41	0
Food Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	927	15	\$1,159	74%	100%	\$0.18	0.56	0
Food Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	556	15	\$444	74%	100%	\$0.11	0.87	0

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Food Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	487	15	\$147	74%	100%	\$0.04	2.31	52
Food Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	1,142	15	\$220	74%	100%	\$0.03	3.61	121
Food Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	4,299	10	\$17,493	5%	100%	\$0.73	0.12	0
Food Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	15,108	12	\$3,883	15%	100%	\$0.04	2.26	325
Food Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	4,405	10	\$937	11%	100%	\$0.04	2.33	71
Industrial Machinery	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	142	15	\$239	76%	100%	\$0.24	0.41	0
Industrial Machinery	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	116	15	\$145	76%	100%	\$0.18	0.56	0
Industrial Machinery	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	70	15	\$56	76%	100%	\$0.11	0.87	0
Industrial Machinery	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	61	15	\$18	76%	100%	\$0.04	2.31	7
Industrial Machinery	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	143	15	\$28	76%	100%	\$0.03	3.62	16
Industrial Machinery	Fans	Existing	Motor Early Retirement	Per Industry	539	10	\$2,194	5%	100%	\$0.73	0.12	0
Industrial Machinery	Fans	Existing	Premium Fan	Per Industry	3,133	10	\$570	11%	100%	\$0.03	2.73	48
Industrial Machinery	Fans	Existing	Synchronous Belts	Per Industry	175	10	\$38	21%	100%	\$0.04	2.32	5
Industrial Machinery	Fans	Existing	Variable Speed Drive Control	Per Industry	2,125	10	\$383	11%	100%	\$0.03	2.76	35
Industrial Machinery	HVAC	Existing	Equipment Upgrades	Per Industry	9,454	15	\$2,795	65%	75%	\$0.04	2.35	660
Industrial Machinery	HVAC	Existing	Improved Controls	Per Industry	12,038	10	\$1,233	34%	50%	\$0.02	4.86	291
Industrial Machinery	HVAC	Existing	Recommissioning	Per Industry	9,222	7	\$2,496	75%	50%	\$0.06	1.37	439
Industrial Machinery	Lighting	Existing	Exit Sign - LED	Per Industry	639	11	\$273	100%	50%	\$0.07	1.26	46
Industrial Machinery	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	122	13	\$104	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Industrial Machinery	Lighting	Existing	Lighting - CFL Packages	Per Industry	3,416	2	\$4	100%	50%	\$0.00	102.02	0
Industrial Machinery	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	3,730	7	\$606	100%	90%	\$0.04	2.29	0
Industrial Machinery	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	3,839	5	\$236	100%	90%	\$0.02	4.53	611
Industrial Machinery	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	2,243	6	\$549	90%	75%	\$0.06	1.33	268



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Industrial Machinery	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	1,778	11	\$13,906	80%	98%	\$1.32	0.07	0
Industrial Machinery	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	1,418	5	\$549	100%	50%	\$0.12	0.72	0
Industrial Machinery	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	3,477	11	\$299	100%	95%	\$0.01	6.28	584
Industrial Machinery	Lighting	Existing	Lighting Controls	Per Industry	11,799	10	\$2,513	15%	70%	\$0.04	2.33	184
Industrial Machinery	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	404	15	\$681	75%	100%	\$0.24	0.41	0
Industrial Machinery	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	331	15	\$414	75%	100%	\$0.18	0.56	0
Industrial Machinery	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	199	15	\$159	75%	100%	\$0.11	0.87	0
Industrial Machinery	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	174	15	\$52	75%	100%	\$0.04	2.31	19
Industrial Machinery	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	408	15	\$78	75%	100%	\$0.03	3.62	44
Industrial Machinery	Motors Other	Existing	Motor Early Retirement	Per Industry	1,535	10	\$6,246	5%	100%	\$0.73	0.12	0
Industrial Machinery	Motors Other	Existing	Motor Management Plan	Per Industry	1,288	10	\$91	50%	100%	\$0.01	7.04	93
Industrial Machinery	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	3,345	12	\$716	10%	100%	\$0.03	2.71	50
Industrial Machinery	Motors Other	Existing	Synchronous Belts	Per Industry	499	10	\$107	21%	100%	\$0.04	2.32	15
Industrial Machinery	Motors Other	Existing	Variable Speed Drive Control	Per Industry	5,582	10	\$1,171	11%	100%	\$0.04	2.37	89
Industrial Machinery	Other	Existing	Integrated Plant Energy Management	Per Industry	8,308	11	\$1,638	22%	100%	\$0.03	2.74	263
Industrial Machinery	Other	Existing	Material Handling	Per Industry	832	10	\$389	53%	100%	\$0.08	1.06	63
Industrial Machinery	Other	Existing	Power Quality-Improving Appliances	Per Industry	48	20	\$107	20%	100%	\$0.27	0.39	0
Industrial Machinery	Other	Existing	Transformers	Per Industry	249	30	\$25	9%	100%	\$0.01	10.72	3
Industrial Machinery	Process AirComp	Existing	Air Compressor Equipment	Per Industry	1,584	10	\$249	17%	100%	\$0.03	3.16	39
Industrial Machinery	Process AirComp	Existing	Air Compressor Optimization	Per Industry	5,436	10	\$823	36%	100%	\$0.03	3.28	275
Industrial Machinery	Process AirComp	Existing	Motor Management Plan	Per Industry	522	10	\$37	50%	100%	\$0.01	7.04	38
Industrial Machinery	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	2,108	10	\$424	34%	100%	\$0.04	2.47	89



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Industrial Machinery	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	171	10	\$37	21%	100%	\$0.04	2.32	5
Industrial Machinery	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	257	15	\$433	76%	100%	\$0.24	0.41	0
Industrial Machinery	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	211	15	\$263	76%	100%	\$0.18	0.56	0
Industrial Machinery	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	126	15	\$101	76%	100%	\$0.11	0.87	0
Industrial Machinery	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	111	15	\$33	76%	100%	\$0.04	2.31	12
Industrial Machinery	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	259	15	\$50	76%	100%	\$0.03	3.62	28
Industrial Machinery	Pumps	Existing	Motor Early Retirement	Per Industry	976	10	\$3,972	5%	100%	\$0.73	0.12	0
Industrial Machinery	Pumps	Existing	Pump System Optimization	Per Industry	3,431	12	\$882	16%	100%	\$0.04	2.26	76
Industrial Machinery	Pumps	Existing	Variable Speed Drive Control	Per Industry	1,000	10	\$213	11%	100%	\$0.04	2.34	16
Mining	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	503	15	\$847	75%	100%	\$0.24	0.41	0
Mining	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	412	15	\$514	75%	100%	\$0.18	0.55	0
Mining	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	247	15	\$197	75%	100%	\$0.11	0.86	0
Mining	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	216	15	\$65	75%	100%	\$0.04	2.29	23
Mining	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	507	15	\$98	75%	100%	\$0.03	3.58	55
Mining	Motors Other	Existing	Motor Early Retirement	Per Industry	1,908	10	\$7,766	5%	100%	\$0.73	0.12	0
Mining	Motors Other	Existing	Motor Management Plan	Per Industry	1,601	10	\$113	50%	100%	\$0.01	6.98	115
Mining	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	4,158	12	\$890	11%	100%	\$0.03	2.69	63
Mining	Motors Other	Existing	Synchronous Belts	Per Industry	621	10	\$133	21%	100%	\$0.04	2.30	19
Mining	Motors Other	Existing	Variable Speed Drive Control	Per Industry	6,939	10	\$1,456	11%	100%	\$0.04	2.35	109
Mining	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	6	15	\$11	75%	100%	\$0.24	0.41	0
Mining	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	5	15	\$6	75%	100%	\$0.18	0.55	0



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Mining	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	3	15	\$2	75%	100%	\$0.11	0.86	0
Mining	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	3	15	\$1	75%	100%	\$0.04	2.29	0
Mining	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	6	15	\$1	75%	100%	\$0.03	3.58	1
Mining	Pumps	Existing	Motor Early Retirement	Per Industry	24	10	\$97	5%	100%	\$0.73	0.12	0
Mining	Pumps	Existing	Pump System Optimization	Per Industry	84	12	\$22	16%	100%	\$0.04	2.24	2
Mining	Pumps	Existing	Variable Speed Drive Control	Per Industry	24	10	\$5	11%	100%	\$0.04	2.31	0
Miscellaneous Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	1,184	15	\$1,995	76%	100%	\$0.24	0.41	0
Miscellaneous Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	970	15	\$1,211	76%	100%	\$0.18	0.55	0
Miscellaneous Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	581	15	\$464	76%	100%	\$0.11	0.86	0
Miscellaneous Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	510	15	\$153	76%	100%	\$0.04	2.28	56
Miscellaneous Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	1,194	15	\$230	76%	100%	\$0.03	3.57	131
Miscellaneous Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	4,495	10	\$18,288	5%	100%	\$0.73	0.12	0
Miscellaneous Manufacturing	Fans	Existing	Premium Fan	Per Industry	26,114	10	\$4,748	11%	100%	\$0.03	2.69	402
Miscellaneous Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	1,461	10	\$313	21%	100%	\$0.04	2.29	45
Miscellaneous Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	17,709	10	\$3,190	11%	100%	\$0.03	2.72	290
Miscellaneous Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	119,985	15	\$35,475	64%	75%	\$0.04	2.32	8,338
Miscellaneous Manufacturing	HVAC	Existing	Improved Controls	Per Industry	152,786	10	\$15,644	33%	50%	\$0.02	4.78	3,675
Miscellaneous Manufacturing	HVAC	Existing	Recommissioning	Per Industry	117,036	7	\$31,673	74%	50%	\$0.06	1.35	5,543
Miscellaneous Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	6,164	11	\$2,639	100%	50%	\$0.07	1.24	444
Miscellaneous Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	1,173	13	\$1,005	Technical Feasibility	Percent Incomplete	\$0.13	0.71	0
Miscellaneous Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	32,964	2	\$38	100%	50%	\$0.00	100.83	0
Miscellaneous Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	35,991	7	\$5,844	100%	90%	\$0.04	2.25	0

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Miscellaneous Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	37,047	5	\$2,277	100%	90%	\$0.02	4.47	5,897
Miscellaneous Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	21,647	6	\$5,298	90%	75%	\$0.06	1.31	2,584
Miscellaneous Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	17,159	11	\$134,185	80%	98%	\$1.32	0.07	0
Miscellaneous Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	13,679	5	\$5,298	100%	50%	\$0.12	0.71	0
Miscellaneous Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	33,552	11	\$2,885	100%	95%	\$0.01	6.19	5,638
Miscellaneous Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	113,856	10	\$24,251	15%	70%	\$0.04	2.30	1,775
Miscellaneous Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	4,767	15	\$8,030	75%	100%	\$0.24	0.41	0
Miscellaneous Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	3,904	15	\$4,877	75%	100%	\$0.18	0.55	0
Miscellaneous Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	2,340	15	\$1,869	75%	100%	\$0.11	0.86	0
Miscellaneous Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	2,051	15	\$617	75%	100%	\$0.04	2.28	221
Miscellaneous Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	4,809	15	\$925	75%	100%	\$0.03	3.57	519
Miscellaneous Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	18,096	10	\$73,632	5%	100%	\$0.73	0.12	0
Miscellaneous Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	15,177	10	\$1,072	50%	100%	\$0.01	6.94	1,091
Miscellaneous Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	39,427	12	\$8,435	11%	100%	\$0.03	2.68	596
Miscellaneous Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	5,884	10	\$1,259	21%	100%	\$0.04	2.29	178
Miscellaneous Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	65,795	10	\$13,801	11%	100%	\$0.04	2.34	1,053
Miscellaneous Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	62,092	11	\$12,240	22%	100%	\$0.03	2.70	1,964
Miscellaneous Manufacturing	Other	Existing	Material Handling	Per Industry	6,221	10	\$2,907	53%	100%	\$0.08	1.05	479
Miscellaneous Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	361	20	\$797	20%	100%	\$0.27	0.38	0
Miscellaneous Manufacturing	Other	Existing	Transformers	Per Industry	1,863	30	\$185	9%	100%	\$0.01	10.60	25
Miscellaneous Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	10,702	10	\$1,682	17%	100%	\$0.03	3.12	262
Miscellaneous Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	36,721	10	\$5,560	36%	100%	\$0.03	3.24	1,857



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Miscellaneous Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	3,523	10	\$249	50%	100%	\$0.01	6.94	254
Miscellaneous Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	14,238	10	\$2,867	34%	100%	\$0.04	2.43	603
Miscellaneous Manufacturing	Process Other	Existing	Cleaners: Professional Wet Cleaning	Per Industry	23,444	15	\$178,378	2%	100%	\$1.08	0.09	0
Miscellaneous Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	1,505	10	\$322	21%	100%	\$0.04	2.29	46
Miscellaneous Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	673	15	\$1,134	76%	100%	\$0.24	0.41	0
Miscellaneous Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	551	15	\$689	76%	100%	\$0.18	0.55	0
Miscellaneous Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	331	15	\$264	76%	100%	\$0.11	0.86	0
Miscellaneous Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	290	15	\$87	76%	100%	\$0.04	2.28	32
Miscellaneous Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	679	15	\$131	76%	100%	\$0.03	3.57	74
Miscellaneous Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	2,556	10	\$10,399	5%	100%	\$0.73	0.12	0
Miscellaneous Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	8,982	12	\$2,309	16%	100%	\$0.04	2.23	198
Miscellaneous Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	2,619	10	\$557	11%	100%	\$0.04	2.30	43
Paper Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	1,263	15	\$2,127	77%	100%	\$0.24	0.41	0
Paper Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	1,034	15	\$1,292	77%	100%	\$0.18	0.55	0
Paper Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	620	15	\$495	77%	100%	\$0.11	0.87	0
Paper Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	543	15	\$163	77%	100%	\$0.04	2.30	60
Paper Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	1,274	15	\$245	77%	100%	\$0.03	3.60	141
Paper Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	4,794	10	\$19,507	6%	100%	\$0.73	0.12	0
Paper Manufacturing	Fans	Existing	Premium Fan	Per Industry	27,853	10	\$5,064	26%	100%	\$0.03	2.72	1,024
Paper Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	1,559	10	\$333	21%	100%	\$0.04	2.31	48

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Paper Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	18,889	10	\$3,403	11%	100%	\$0.03	2.74	310
Paper Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	6,756	15	\$1,998	62%	75%	\$0.04	2.34	455
Paper Manufacturing	HVAC	Existing	Improved Controls	Per Industry	8,603	10	\$881	32%	50%	\$0.02	4.83	201
Paper Manufacturing	HVAC	Existing	Recommissioning	Per Industry	6,590	7	\$1,783	72%	50%	\$0.06	1.37	304
Paper Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	603	11	\$258	100%	50%	\$0.07	1.25	43
Paper Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	115	13	\$98	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Paper Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	3,225	2	\$4	100%	50%	\$0.00	101.35	0
Paper Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	3,521	7	\$572	100%	90%	\$0.04	2.28	0
Paper Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	3,624	5	\$223	100%	90%	\$0.02	4.51	577
Paper Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	2,118	6	\$518	90%	75%	\$0.06	1.33	253
Paper Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	1,679	11	\$13,126	80%	98%	\$1.32	0.07	0
Paper Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	1,338	5	\$518	100%	50%	\$0.12	0.72	0
Paper Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	3,282	11	\$282	100%	95%	\$0.01	6.24	551
Paper Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	11,138	10	\$2,372	15%	70%	\$0.04	2.32	174
Paper Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,500	15	\$4,212	76%	100%	\$0.24	0.41	0
Paper Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	2,048	15	\$2,558	76%	100%	\$0.18	0.55	0
Paper Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	1,227	15	\$981	76%	100%	\$0.11	0.87	0
Paper Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	1,076	15	\$324	76%	100%	\$0.04	2.30	117
Paper Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,522	15	\$485	76%	100%	\$0.03	3.60	274
Paper Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	9,491	10	\$38,619	6%	100%	\$0.73	0.12	0
Paper Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	7,960	10	\$562	50%	100%	\$0.01	7.00	577
Paper Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	20,679	12	\$4,424	11%	100%	\$0.03	2.70	315



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Paper Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	3,086	10	\$660	21%	100%	\$0.04	2.31	94
Paper Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	34,509	10	\$7,239	11%	100%	\$0.04	2.36	554
Paper Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	25,105	11	\$4,949	22%	100%	\$0.03	2.72	794
Paper Manufacturing	Other	Existing	Material Handling	Per Industry	6,582	10	\$4,231	25%	100%	\$0.12	0.77	0
Paper Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	146	20	\$322	20%	100%	\$0.27	0.38	0
Paper Manufacturing	Other	Existing	Transformers	Per Industry	753	30	\$75	9%	100%	\$0.01	10.66	10
Paper Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	2,837	10	\$446	17%	100%	\$0.03	3.15	70
Paper Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	9,736	10	\$1,474	35%	100%	\$0.03	3.27	490
Paper Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	934	10	\$66	50%	100%	\$0.01	7.00	67
Paper Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	3,775	10	\$760	34%	100%	\$0.04	2.46	160
Paper Manufacturing	Process Other	Existing	Efficient Agitator	Per Industry	20,245	10	\$1,697	14%	100%	\$0.02	5.90	401
Paper Manufacturing	Process Other	Existing	Effluent Treatment System	Per Industry	6,073	10	\$451	9%	100%	\$0.01	6.67	80
Paper Manufacturing	Process Other	Existing	Mech Pulp: Premium Process	Per Industry	68	5	\$8	23%	100%	\$0.03	2.44	2
Paper Manufacturing	Process Other	Existing	Mech Pulp: Refiner Plate Improvement	Per Industry	181	1	\$6	37%	100%	\$0.05	1.69	10
Paper Manufacturing	Process Other	Existing	Mech Pulp: Refiner Replacement	Per Industry	4,049	12	\$2,389	25%	100%	\$0.09	0.98	0
Paper Manufacturing	Process Other	Existing	Paper: Efficient Pulp Screen	Per Industry	6,073	10	\$1,099	14%	100%	\$0.03	2.73	125
Paper Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	551	10	\$118	21%	100%	\$0.04	2.31	17
Paper Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,003	15	\$3,374	78%	100%	\$0.24	0.41	0
Paper Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	1,640	15	\$2,049	78%	100%	\$0.18	0.55	0
Paper Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	983	15	\$785	78%	100%	\$0.11	0.87	0
Paper Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	862	15	\$259	78%	100%	\$0.04	2.30	97

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Paper Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,020	15	\$388	78%	100%	\$0.03	3.60	227
Paper Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	7,603	10	\$30,935	6%	100%	\$0.73	0.12	0
Paper Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	26,718	12	\$6,868	16%	100%	\$0.04	2.25	609
Paper Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	7,791	10	\$1,658	11%	100%	\$0.04	2.32	128
Primary Metal Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	512	15	\$863	73%	100%	\$0.24	0.41	0
Primary Metal Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	420	15	\$524	73%	100%	\$0.18	0.55	0
Primary Metal Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	251	15	\$201	73%	100%	\$0.11	0.86	0
Primary Metal Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	220	15	\$66	73%	100%	\$0.04	2.28	23
Primary Metal Manufacturing	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	517	15	\$99	73%	100%	\$0.03	3.57	55
Primary Metal Manufacturing	Fans	Existing	Motor Early Retirement	Per Industry	1,945	10	\$7,913	5%	100%	\$0.73	0.12	0
Primary Metal Manufacturing	Fans	Existing	Premium Fan	Per Industry	11,299	10	\$2,054	10%	100%	\$0.03	2.69	167
Primary Metal Manufacturing	Fans	Existing	Synchronous Belts	Per Industry	632	10	\$135	21%	100%	\$0.04	2.29	19
Primary Metal Manufacturing	Fans	Existing	Variable Speed Drive Control	Per Industry	7,662	10	\$1,380	11%	100%	\$0.03	2.72	121
Primary Metal Manufacturing	HVAC	Existing	Equipment Upgrades	Per Industry	8,155	15	\$2,411	65%	75%	\$0.04	2.32	570
Primary Metal Manufacturing	HVAC	Existing	Improved Controls	Per Industry	10,384	10	\$1,063	34%	50%	\$0.02	4.78	251
Primary Metal Manufacturing	HVAC	Existing	Recommissioning	Per Industry	7,954	7	\$2,153	75%	50%	\$0.06	1.35	378
Primary Metal Manufacturing	Lighting	Existing	Exit Sign - LED	Per Industry	693	11	\$297	100%	50%	\$0.07	1.24	50
Primary Metal Manufacturing	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	132	13	\$113	Technical Feasibility	Percent Incomplete	\$0.13	0.71	0
Primary Metal Manufacturing	Lighting	Existing	Lighting - CFL Packages	Per Industry	3,705	2	\$4	100%	50%	\$0.00	100.83	0
Primary Metal Manufacturing	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	4,045	7	\$657	100%	90%	\$0.04	2.25	0
Primary Metal Manufacturing	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	4,164	5	\$256	100%	90%	\$0.02	4.47	663
Primary Metal Manufacturing	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	2,433	6	\$596	90%	75%	\$0.06	1.31	291



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Primary Metal Manufacturing	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	1,929	11	\$15,083	80%	98%	\$1.32	0.07	0
Primary Metal Manufacturing	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	1,538	5	\$596	100%	50%	\$0.12	0.71	0
Primary Metal Manufacturing	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	3,771	11	\$324	100%	95%	\$0.01	6.19	634
Primary Metal Manufacturing	Lighting	Existing	Lighting Controls	Per Industry	12,798	10	\$2,726	15%	70%	\$0.04	2.30	200
Primary Metal Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	2,062	15	\$3,475	74%	100%	\$0.24	0.41	0
Primary Metal Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	1,689	15	\$2,110	74%	100%	\$0.18	0.55	0
Primary Metal Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	1,013	15	\$809	74%	100%	\$0.11	0.86	0
Primary Metal Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	888	15	\$267	74%	100%	\$0.04	2.28	95
Primary Metal Manufacturing	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	2,081	15	\$400	74%	100%	\$0.03	3.57	222
Primary Metal Manufacturing	Motors Other	Existing	Motor Early Retirement	Per Industry	7,830	10	\$31,859	5%	100%	\$0.73	0.12	0
Primary Metal Manufacturing	Motors Other	Existing	Motor Management Plan	Per Industry	6,567	10	\$464	49%	100%	\$0.01	6.94	467
Primary Metal Manufacturing	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	17,059	12	\$3,649	10%	100%	\$0.03	2.68	255
Primary Metal Manufacturing	Motors Other	Existing	Synchronous Belts	Per Industry	2,546	10	\$545	21%	100%	\$0.04	2.29	76
Primary Metal Manufacturing	Motors Other	Existing	Variable Speed Drive Control	Per Industry	28,468	10	\$5,971	11%	100%	\$0.04	2.34	439
Primary Metal Manufacturing	Other	Existing	Integrated Plant Energy Management	Per Industry	12,780	11	\$2,519	22%	100%	\$0.03	2.70	404
Primary Metal Manufacturing	Other	Existing	Material Handling	Per Industry	1,280	10	\$598	52%	100%	\$0.08	1.05	97
Primary Metal Manufacturing	Other	Existing	Power Quality-Improving Appliances	Per Industry	74	20	\$164	20%	100%	\$0.27	0.38	0
Primary Metal Manufacturing	Other	Existing	Transformers	Per Industry	383	30	\$38	9%	100%	\$0.01	10.60	5
Primary Metal Manufacturing	Process AirComp	Existing	Air Compressor Equipment	Per Industry	4,630	10	\$728	17%	100%	\$0.03	3.12	113
Primary Metal Manufacturing	Process AirComp	Existing	Air Compressor Optimization	Per Industry	15,888	10	\$2,405	35%	100%	\$0.03	3.24	782
Primary Metal Manufacturing	Process AirComp	Existing	Motor Management Plan	Per Industry	1,524	10	\$108	49%	100%	\$0.01	6.94	107
Primary Metal Manufacturing	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	6,160	10	\$1,240	34%	100%	\$0.04	2.43	262



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Primary Metal Manufacturing	Process Heat	Existing	New Arc Furnace	Per Industry	192,166	10	\$17,742	10%	100%	\$0.02	5.31	2,766
Primary Metal Manufacturing	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	181	10	\$39	21%	100%	\$0.04	2.29	5
Primary Metal Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	291	15	\$491	72%	100%	\$0.24	0.41	0
Primary Metal Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	239	15	\$298	72%	100%	\$0.18	0.55	0
Primary Metal Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	143	15	\$114	72%	100%	\$0.11	0.86	0
Primary Metal Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	125	15	\$38	72%	100%	\$0.04	2.28	13
Primary Metal Manufacturing	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	294	15	\$56	72%	100%	\$0.03	3.57	31
Primary Metal Manufacturing	Pumps	Existing	Motor Early Retirement	Per Industry	1,106	10	\$4,500	5%	100%	\$0.73	0.12	0
Primary Metal Manufacturing	Pumps	Existing	Pump System Optimization	Per Industry	3,886	12	\$999	15%	100%	\$0.04	2.23	82
Primary Metal Manufacturing	Pumps	Existing	Variable Speed Drive Control	Per Industry	1,133	10	\$241	11%	100%	\$0.04	2.30	18
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 100W to LED 62W	Per Industry	10,663	8	\$12,434	75%	100%	\$0.24	0.35	0
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 150W to LED 113W	Per Industry	7,724	8	\$9,127	75%	100%	\$0.25	0.35	0
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 200W to LED 120W	Per Industry	10,068	8	\$6,863	75%	100%	\$0.14	0.60	0
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 250W to LED 150W	Per Industry	9,517	8	\$5,816	75%	100%	\$0.13	0.67	0
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 400W to LED 225W	Per Industry	9,993	8	\$3,690	75%	100%	\$0.08	1.11	1,031
Street Lighting	Lighting - Street	Existing	Streetlight - HPS 70W to LED 42W	Per Industry	10,802	8	\$18,062	75%	100%	\$0.35	0.25	0
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Amber (20 Watts)	Per Industry	30	8	\$193	75%	100%	\$1.33	0.06	0
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Don't Walk 12"	Per Industry	3,694	8	\$388	75%	100%	\$0.02	3.90	381
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Don't Walk 8"	Per Industry	1,686	8	\$388	75%	100%	\$0.05	1.78	174
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Green 10" or 12"	Per Industry	1,588	8	\$364	75%	100%	\$0.05	1.79	164
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Green 8"	Per Industry	702	8	\$364	75%	100%	\$0.11	0.79	0
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Green Arrow	Per Industry	233	8	\$364	75%	100%	\$0.33	0.26	0



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Red 10" or 12"	Per Industry	2,061	8	\$166	75%	100%	\$0.02	5.10	213
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Red 8"	Per Industry	927	8	\$166	75%	100%	\$0.04	2.30	96
Street Lighting	Lighting - Traffic	Existing	LED Traffic Light - Red Arrow (7 Watts)	Per Industry	913	8	\$166	75%	100%	\$0.04	2.26	94
Transportation Equipment Mfg	Fans	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	41	15	\$69	76%	100%	\$0.24	0.41	0
Transportation Equipment Mfg	Fans	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	34	15	\$42	76%	100%	\$0.18	0.56	0
Transportation Equipment Mfg	Fans	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	20	15	\$16	76%	100%	\$0.11	0.87	0
Transportation Equipment Mfg	Fans	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	18	15	\$5	76%	100%	\$0.04	2.31	2
Transportation Equipment Mfg	Fans	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	41	15	\$8	76%	100%	\$0.03	3.62	5
Transportation Equipment Mfg	Fans	Existing	Motor Early Retirement	Per Industry	155	10	\$632	5%	100%	\$0.73	0.12	0
Transportation Equipment Mfg	Fans	Existing	Premium Fan	Per Industry	902	10	\$164	11%	100%	\$0.03	2.73	14
Transportation Equipment Mfg	Fans	Existing	Synchronous Belts	Per Industry	51	10	\$11	21%	100%	\$0.04	2.32	2
Transportation Equipment Mfg	Fans	Existing	Variable Speed Drive Control	Per Industry	612	10	\$110	11%	100%	\$0.03	2.76	10
Transportation Equipment Mfg	HVAC	Existing	Equipment Upgrades	Per Industry	3,241	15	\$958	64%	75%	\$0.04	2.35	225
Transportation Equipment Mfg	HVAC	Existing	Improved Controls	Per Industry	4,127	10	\$423	33%	50%	\$0.02	4.86	99
Transportation Equipment Mfg	HVAC	Existing	Recommissioning	Per Industry	3,161	7	\$856	74%	50%	\$0.06	1.37	150
Transportation Equipment Mfg	Lighting	Existing	Exit Sign - LED	Per Industry	234	11	\$100	100%	50%	\$0.07	1.26	17
Transportation Equipment Mfg	Lighting	Existing	Exit Sign - Photoluminescent	Per Industry	45	13	\$38	Technical Feasibility	Percent Incomplete	\$0.13	0.72	0
Transportation Equipment Mfg	Lighting	Existing	Lighting - CFL Packages	Per Industry	1,251	2	\$1	100%	50%	\$0.00	102.02	0
Transportation Equipment Mfg	Lighting	Existing	Lighting - Fluorescent High Performance Packages	Per Industry	1,366	7	\$222	100%	90%	\$0.04	2.29	0
Transportation Equipment Mfg	Lighting	Existing	Lighting - Fluorescent Reduced Wattage Packages	Per Industry	1,406	5	\$86	100%	90%	\$0.02	4.53	224
Transportation Equipment Mfg	Lighting	Existing	Lighting - High Bay Fluorescent High Output Packages	Per Industry	822	6	\$201	90%	75%	\$0.06	1.33	98

Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Transportation Equipment Mfg	Lighting	Existing	Lighting - High Bay LED Packages	Per Industry	651	11	\$5,094	80%	98%	\$1.32	0.07	0
Transportation Equipment Mfg	Lighting	Existing	Lighting - High Intensity Discharge Packages	Per Industry	519	5	\$201	100%	50%	\$0.12	0.72	0
Transportation Equipment Mfg	Lighting	Existing	Lighting - LED Lamp Packages	Per Industry	1,274	11	\$110	100%	95%	\$0.01	6.28	214
Transportation Equipment Mfg	Lighting	Existing	Lighting Controls	Per Industry	4,322	10	\$921	15%	70%	\$0.04	2.33	67
Transportation Equipment Mfg	Motors Other	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	92	15	\$155	75%	100%	\$0.24	0.41	0
Transportation Equipment Mfg	Motors Other	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	75	15	\$94	75%	100%	\$0.18	0.56	0
Transportation Equipment Mfg	Motors Other	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	45	15	\$36	75%	100%	\$0.11	0.87	0
Transportation Equipment Mfg	Motors Other	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	40	15	\$12	75%	100%	\$0.04	2.31	4
Transportation Equipment Mfg	Motors Other	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	93	15	\$18	75%	100%	\$0.03	3.62	10
Transportation Equipment Mfg	Motors Other	Existing	Motor Early Retirement	Per Industry	349	10	\$1,418	5%	100%	\$0.73	0.12	0
Transportation Equipment Mfg	Motors Other	Existing	Motor Management Plan	Per Industry	292	10	\$21	50%	100%	\$0.01	7.04	21
Transportation Equipment Mfg	Motors Other	Existing	Switch from Belt drive to Direct Drive	Per Industry	759	12	\$162	10%	100%	\$0.03	2.71	11
Transportation Equipment Mfg	Motors Other	Existing	Synchronous Belts	Per Industry	113	10	\$24	21%	100%	\$0.04	2.32	3
Transportation Equipment Mfg	Motors Other	Existing	Variable Speed Drive Control	Per Industry	1,267	10	\$266	11%	100%	\$0.04	2.37	20
Transportation Equipment Mfg	Other	Existing	Integrated Plant Energy Management	Per Industry	4,602	11	\$907	22%	100%	\$0.03	2.74	146
Transportation Equipment Mfg	Other	Existing	Material Handling	Per Industry	461	10	\$215	53%	100%	\$0.08	1.06	35
Transportation Equipment Mfg	Other	Existing	Power Quality-Improving Appliances	Per Industry	27	20	\$59	20%	100%	\$0.27	0.39	0
Transportation Equipment Mfg	Other	Existing	Transformers	Per Industry	138	30	\$14	9%	100%	\$0.01	10.72	2
Transportation Equipment Mfg	Process AirComp	Existing	Air Compressor Equipment	Per Industry	921	10	\$145	17%	100%	\$0.03	3.16	23
Transportation Equipment Mfg	Process AirComp	Existing	Air Compressor Optimization	Per Industry	3,161	10	\$479	36%	100%	\$0.03	3.28	160
Transportation Equipment Mfg	Process AirComp	Existing	Motor Management Plan	Per Industry	303	10	\$21	50%	100%	\$0.01	7.04	22
Transportation Equipment Mfg	Process AirComp	Existing	VFD Controlled Compressor	Per Industry	1,225	10	\$247	34%	100%	\$0.04	2.47	52



Segment	End Use	Construction Vintage	Measure Name	Unit Description	Savings per Unit (MWh)	Measure Life	Incremental Cost (\$000)	Technical Feasibility	Percent Incomplete	Levelized Cost (\$/kWh)	TRC B/C Ratio	Achievable Potential (MWh)
Transportation Equipment Mfg	Process Refrig and Cooling	Existing	Synchronous Belts	Per Industry	91	10	\$19	21%	100%	\$0.04	2.32	3
Transportation Equipment Mfg	Pumps	Existing	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	Per Industry	89	15	\$151	76%	100%	\$0.24	0.41	0
Transportation Equipment Mfg	Pumps	Existing	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	Per Industry	73	15	\$91	76%	100%	\$0.18	0.56	0
Transportation Equipment Mfg	Pumps	Existing	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	Per Industry	44	15	\$35	76%	100%	\$0.11	0.87	0
Transportation Equipment Mfg	Pumps	Existing	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	Per Industry	38	15	\$12	76%	100%	\$0.04	2.31	4
Transportation Equipment Mfg	Pumps	Existing	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	Per Industry	90	15	\$17	76%	100%	\$0.03	3.62	10
Transportation Equipment Mfg	Pumps	Existing	Motor Early Retirement	Per Industry	339	10	\$1,381	5%	100%	\$0.73	0.12	0
Transportation Equipment Mfg	Pumps	Existing	Pump System Optimization	Per Industry	1,193	12	\$307	16%	100%	\$0.04	2.26	26
Transportation Equipment Mfg	Pumps	Existing	Variable Speed Drive Control	Per Industry	348	10	\$74	11%	100%	\$0.04	2.34	6

## Appendix D. Program Potential Measures

### Residential Program Potential Measures

**Table 9. Residential Program Potential Measures**

Classification	Program Measure Category	End Use	Measure Name
Low Income	Appliance Recycling	Cool Room	Room AC Retirement
Low Income	Behavioral	All	Behavioral Home Energy Reports
Low Income	Direct Install Equipment: Appliances	Computer Desktop	Smart Strip Plug Outlet
Low Income	Direct Install Equipment: Appliances	Dehumidifier	ENERGY STAR Dehumidifiers
Low Income	Direct Install Equipment: Appliances	Dryer	Heat Pump Dryer
Low Income	Direct Install Equipment: Appliances	Freezer	Refrigerator / Freezer Recycling with Replacement
Low Income	Direct Install Equipment: Appliances	Freezer	Refrigerator / Freezer Recycling without Replacement
Low Income	Direct Install Equipment: Appliances	Pool Pump	Variable Speed Pool Pumps (with Load Shifting Option)
Low Income	Direct Install Equipment: Appliances	Refrigerator	Refrigerator - CEE Tier 2
Low Income	Direct Install Equipment: Appliances	Refrigerator	Refrigerator - CEE Tier 3
Low Income	Direct Install Equipment: Appliances	Refrigerator	Refrigerator / Freezer Recycling with Replacement
Low Income	Direct Install Equipment: Appliances	Refrigerator	Refrigerator / Freezer Recycling without Replacement
Low Income	Direct Install Equipment: Appliances	TV	Smart Strip Plug Outlet
Low Income	Direct Install Equipment: Appliances	TV Bigscreen	Smart Strip Plug Outlet
Low Income	Direct Install Equipment: HVAC Equipment	Cool Central	Central Air Conditioner - CEE Tier 3
Low Income	Direct Install Equipment: HVAC Equipment	Cool Central	Central Air Conditioner - Enhanced
Low Income	Direct Install Equipment: HVAC Equipment	Cool Central	Smart Thermostat
Low Income	Direct Install Equipment: HVAC Equipment	Cool Room	Ductless Mini-Split HP / AC
Low Income	Direct Install Equipment: HVAC Equipment	Heat Central	Smart Thermostat
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	Cold Climate Heat Pump
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	ENERGY STAR Ground Source Heat Pump
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	Heat Pump - Air Source CEE Tier 2



Classification	Program Measure Category	End Use	Measure Name
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	Heat Pump - Air Source Enhanced
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	Heat Pump - Air Source Premium
Low Income	Direct Install Equipment: HVAC Equipment	Heat Pump	Smart Thermostat
Low Income	Direct Install Equipment: HVAC Equipment	Heat Room	Ductless Mini-Split HP / AC
Low Income	Direct Install Equipment: HVAC Equipment	Ventilation And Circulation	Furnace Whistle
Low Income	Direct Install Equipment: HVAC Equipment	Ventilation And Circulation	High Efficiency Furnace Fan (on existing furnace)
Low Income	Direct Install Equipment: HVAC Equipment	Ventilation And Circulation	Residential Whole House Fan
Low Income	Direct Install Equipment: Lighting - LED	Lighting Exterior	ENERGY STAR General Service LED
Low Income	Direct Install Equipment: Lighting - LED	Lighting Interior Specialty	ENERGY STAR Specialty LED
Low Income	Direct Install Equipment: Lighting - LED	Lighting Interior Specialty	LED Nightlight
Low Income	Direct Install Equipment: Lighting - LED	Lighting Interior Standard	ENERGY STAR General Service LED
Low Income	Direct Install Equipment: Lighting - NonLED	Lighting Exterior	Residential Occupancy Sensors
Low Income	Direct Install Equipment: Lighting - NonLED	Lighting Interior Linear Fluorescent	Residential Occupancy Sensors
Low Income	Direct Install Equipment: Lighting - NonLED	Lighting Interior Specialty	Residential Occupancy Sensors
Low Income	Direct Install Equipment: Lighting - NonLED	Lighting Interior Standard	Residential Occupancy Sensors
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	CO2 Heat Pump Water Heater
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Desuperheater (on existing GSHP)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Drain Water Heat Recovery Device
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	ENERGY STAR Dishwashers (Electric Water Heating)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Heat Pump Water Heater

Classification	Program Measure Category	End Use	Measure Name
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Heater Pipe Insulation
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Low Flow Faucet Aerator (Bathroom/Kitchen)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Low Flow Showerhead
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Solar Water Heaters
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat GT 55 Gal	Water Heater Temperature Setback
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	CO2 Heat Pump Water Heater
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Desuperheater (on existing GSHP)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Drain Water Heat Recovery Device
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	ENERGY STAR Dishwashers (Electric Water Heating)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Heat Pump Water Heater
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Heater Pipe Insulation
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Low Flow Faucet Aerator (Bathroom/Kitchen)
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Low Flow Showerhead
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Solar Water Heaters
Low Income	Direct Install Equipment: Water Heating Equipment	Water Heat LE 55 Gal	Water Heater Temperature Setback
Low Income	New Construction	Cool Central	Construction - ICF/SIP
Low Income	New Construction	Cool Room	Construction - ICF/SIP
Low Income	New Construction	Heat Central	Construction - ICF/SIP
Low Income	New Construction	Heat Pump	Construction - ICF/SIP



Classification	Program Measure Category	End Use	Measure Name
Low Income	New Construction	Heat Room	Construction - ICF/SIP
Low Income	Weatherization	Cool Central	Air Sealing
Low Income	Weatherization	Cool Central	Ceiling / Attic Insulation
Low Income	Weatherization	Cool Central	Duct Insulation
Low Income	Weatherization	Cool Central	Duct Sealing
Low Income	Weatherization	Cool Central	Wall Insulation
Low Income	Weatherization	Cool Room	Air Sealing
Low Income	Weatherization	Cool Room	Ceiling / Attic Insulation
Low Income	Weatherization	Cool Room	Wall Insulation
Low Income	Weatherization	Heat Central	Air Sealing
Low Income	Weatherization	Heat Central	Basement / Crawlspace Wall Insulation
Low Income	Weatherization	Heat Central	Ceiling / Attic Insulation
Low Income	Weatherization	Heat Central	Duct Insulation
Low Income	Weatherization	Heat Central	Duct Sealing
Low Income	Weatherization	Heat Central	Floor Insulation
Low Income	Weatherization	Heat Central	Wall Insulation
Low Income	Weatherization	Heat Pump	Air Sealing
Low Income	Weatherization	Heat Pump	Basement / Crawlspace Wall Insulation
Low Income	Weatherization	Heat Pump	Ceiling / Attic Insulation
Low Income	Weatherization	Heat Pump	Duct Insulation
Low Income	Weatherization	Heat Pump	Duct Sealing
Low Income	Weatherization	Heat Pump	Floor Insulation
Low Income	Weatherization	Heat Pump	Wall Insulation
Low Income	Weatherization	Heat Room	Air Sealing
Low Income	Weatherization	Heat Room	Basement / Crawlspace Wall Insulation
Low Income	Weatherization	Heat Room	Ceiling / Attic Insulation
Low Income	Weatherization	Heat Room	Floor Insulation
Low Income	Weatherization	Heat Room	Wall Insulation
Residential	Appliance Recycling	Cool Room	Room AC Retirement
Residential	Appliances	Computer Desktop	Smart Strip Plug Outlet
Residential	Appliances	Dehumidifier	ENERGY STAR Dehumidifiers
Residential	Appliances	Dryer	Heat Pump Dryer
Residential	Appliance Recycling	Freezer	Refrigerator / Freezer Recycling with Replacement
Residential	Appliance Recycling	Freezer	Refrigerator / Freezer Recycling without Replacement
Residential	Appliances	Pool Pump	Variable Speed Pool Pumps (with Load Shifting Option)
Residential	Appliances	Refrigerator	ENERGY STAR Refrigerators
Residential	Appliances	Refrigerator	Refrigerator - CEE Tier 2
Residential	Appliances	Refrigerator	Refrigerator - CEE Tier 3



Classification	Program Measure Category	End Use	Measure Name
Residential	Appliance Recycling	Refrigerator	Refrigerator / Freezer Recycling with Replacement
Residential	Appliance Recycling	Refrigerator	Refrigerator / Freezer Recycling without Replacement
Residential	Appliances	TV	ENERGY STAR Televisions < 50"
Residential	Appliances	TV	Smart Strip Plug Outlet
Residential	Appliances	TV Bigscreen	ENERGY STAR Televisions > 50"
Residential	Appliances	TV Bigscreen	Smart Strip Plug Outlet
Residential	Behavioral	All	Behavioral Home Energy Reports
Residential	HVAC Equipment	Cool Central	Central Air Conditioner - CEE Tier 3
Residential	HVAC Equipment	Cool Central	Central Air Conditioner - Enhanced
Residential	HVAC Equipment	Cool Central	ENERGY STAR Central Air Conditioner
Residential	HVAC Equipment	Cool Central	Programmable Thermostat
Residential	Smart Thermostats	Cool Central	Smart Thermostat
Residential	HVAC Equipment	Cool Room	Ductless Mini-Split HP / AC
Residential	HVAC Equipment	Heat Central	Programmable Thermostat
Residential	Smart Thermostats	Heat Central	Smart Thermostat
Residential	HVAC Equipment	Heat Pump	Cold Climate Heat Pump
Residential	HVAC Equipment	Heat Pump	ENERGY STAR Air Source Heat Pump
Residential	HVAC Equipment	Heat Pump	ENERGY STAR Ground Source Heat Pump
Residential	HVAC Equipment	Heat Pump	Heat Pump - Air Source CEE Tier 2
Residential	HVAC Equipment	Heat Pump	Heat Pump - Air Source Enhanced
Residential	HVAC Equipment	Heat Pump	Heat Pump - Air Source Premium
Residential	HVAC Equipment	Heat Pump	Programmable Thermostat
Residential	Smart Thermostats	Heat Pump	Smart Thermostat
Residential	HVAC Equipment	Heat Room	Ductless Mini-Split HP / AC
Residential	HVAC Equipment	Ventilation And Circulation	Furnace Whistle
Residential	HVAC Equipment	Ventilation And Circulation	High Efficiency Furnace Fan (on existing furnace)
Residential	HVAC Equipment	Ventilation And Circulation	Residential Whole House Fan
Residential	Lighting - LED	Lighting Exterior	ENERGY STAR General Service LED
Residential	Lighting - LED	Lighting Interior Specialty	ENERGY STAR Specialty LED
Residential	Lighting - LED	Lighting Interior Specialty	LED Nightlight
Residential	Lighting - LED	Lighting Interior Standard	ENERGY STAR General Service LED
Residential	Lighting - NonLED	Lighting Exterior	Residential Occupancy Sensors
Residential	Lighting - NonLED	Lighting Interior Linear Fluorescent	Residential Occupancy Sensors
Residential	Lighting - NonLED	Lighting Interior Specialty	Residential Occupancy Sensors



Classification	Program Measure Category	End Use	Measure Name
Residential	Lighting - NonLED	Lighting Interior Standard	Residential Occupancy Sensors
Residential	New Construction	Cool Central	Construction - ICF/SIP
Residential	New Construction	Cool Room	Construction - ICF/SIP
Residential	New Construction	Heat Central	Construction - ICF/SIP
Residential	New Construction	Heat Pump	Construction - ICF/SIP
Residential	New Construction	Heat Room	Construction - ICF/SIP
Residential	Water Heating Equipment	Water Heat GT 55 Gal	CO2 Heat Pump Water Heater
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Desuperheater (on existing GSHP)
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Drain Water Heat Recovery Device
Residential	Water Heating Equipment	Water Heat GT 55 Gal	ENERGY STAR Dishwashers (Electric Water Heating)
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Heat Pump Water Heater
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Heater Pipe Insulation
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Low Flow Faucet Aerator (Bathroom/Kitchen)
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Low Flow Showerhead
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Showerstart
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Solar Water Heaters
Residential	Water Heating Equipment	Water Heat GT 55 Gal	Water Heater Temperature Setback
Residential	Water Heating Equipment	Water Heat LE 55 Gal	CO2 Heat Pump Water Heater
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Desuperheater (on existing GSHP)
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Drain Water Heat Recovery Device
Residential	Water Heating Equipment	Water Heat LE 55 Gal	ENERGY STAR Dishwashers (Electric Water Heating)
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Heat Pump Water Heater
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Heater Pipe Insulation
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Low Flow Faucet Aerator (Bathroom/Kitchen)
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Low Flow Showerhead

Classification	Program Measure Category	End Use	Measure Name
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Showerstart
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Solar Water Heaters
Residential	Water Heating Equipment	Water Heat LE 55 Gal	Water Heater Temperature Setback
Residential	Weatherization	Cool Central	Air Sealing
Residential	Weatherization	Cool Central	Ceiling / Attic Insulation
Residential	Weatherization	Cool Central	Duct Insulation
Residential	Weatherization	Cool Central	Duct Sealing
Residential	Weatherization	Cool Central	Wall Insulation
Residential	Weatherization	Cool Central	Window Film
Residential	Weatherization	Cool Room	Air Sealing
Residential	Weatherization	Cool Room	Ceiling / Attic Insulation
Residential	Weatherization	Cool Room	Wall Insulation
Residential	Weatherization	Cool Room	Window Film
Residential	Weatherization	Heat Central	Air Sealing
Residential	Weatherization	Heat Central	Basement / Crawlspace Wall Insulation
Residential	Weatherization	Heat Central	Ceiling / Attic Insulation
Residential	Weatherization	Heat Central	Duct Insulation
Residential	Weatherization	Heat Central	Duct Sealing
Residential	Weatherization	Heat Central	Floor Insulation
Residential	Weatherization	Heat Central	Wall Insulation
Residential	Weatherization	Heat Pump	Air Sealing
Residential	Weatherization	Heat Pump	Basement / Crawlspace Wall Insulation
Residential	Weatherization	Heat Pump	Ceiling / Attic Insulation
Residential	Weatherization	Heat Pump	Duct Insulation
Residential	Weatherization	Heat Pump	Duct Sealing
Residential	Weatherization	Heat Pump	Floor Insulation
Residential	Weatherization	Heat Pump	Wall Insulation
Residential	Weatherization	Heat Pump	Window Film
Residential	Weatherization	Heat Room	Air Sealing
Residential	Weatherization	Heat Room	Basement / Crawlspace Wall Insulation
Residential	Weatherization	Heat Room	Ceiling / Attic Insulation
Residential	Weatherization	Heat Room	Floor Insulation
Residential	Weatherization	Heat Room	Wall Insulation



## Commercial, GNI, and Industrial Program Potential Measures

**Table 10. Commercial, GNI, and Industrial Program Potential Measures**

Classification	Program Measure Category	End Use	Measure Name
Commercial	HVAC Equipment	Package Terminal Air Conditioning	PTAC (12.0 EER/10,000 BTU)
Commercial	HVAC Equipment	Package Terminal Air Conditioning	PTAC (10.4 EER/10,000 BTU)
Institutional	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 10% better than code (New Construction)
Commercial	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 10% better than code (New Construction)
Institutional	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 15% better than code (New Construction)
Commercial	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 15% better than code (New Construction)
Institutional	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 30% better than code (New Construction)
Commercial	New Construction	Lighting Interior Other	HE Lighting Fixtures/Design 30% better than code (New Construction)
Institutional	Refrigeration Equipment	Vending Machines	Vending Machines - ENERGY STAR - High Efficiency
Commercial	Refrigeration Equipment	Vending Machines	Vending Machines - ENERGY STAR - High Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - High Efficiency
Commercial	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - High Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - Premium Efficiency
Commercial	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - Premium Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - Advanced Efficiency
Commercial	HVAC Equipment	Cooling Chillers	Chillers < 150 tons (screw) - Advanced Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - High Efficiency
Commercial	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - High Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - Premium Efficiency
Commercial	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - Premium Efficiency
Institutional	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - Advanced Efficiency

Classification	Program Measure Category	End Use	Measure Name
Commercial	HVAC Equipment	Cooling Chillers	Chillers 150-300 tons (screw) - Advanced Efficiency
Institutional	HVAC Equipment	Cooling DX	DX Package 65 to 135 kBtuh - High Efficiency
Commercial	HVAC Equipment	Cooling DX	DX Package 65 to 135 kBtuh - High Efficiency
Institutional	HVAC Equipment	Cooling DX	DX Package 65 to 135 kBtuh - Premium Efficiency
Commercial	HVAC Equipment	Cooling DX	DX Package 65 to 135 kBtuh - Premium Efficiency
Institutional	HVAC Equipment	Cooling DX	DX Package 240 to 760 kBtuh - High Efficiency
Commercial	HVAC Equipment	Cooling DX	DX Package 240 to 760 kBtuh - High Efficiency
Institutional	HVAC Equipment	Cooling DX	DX Package 240 to 760 kBtuh - Premium Efficiency
Commercial	HVAC Equipment	Cooling DX	DX Package 240 to 760 kBtuh - Premium Efficiency
Institutional	HVAC Equipment	Heat Pump	Air Source Heat Pump 65 to 135 kBtuh - High Efficiency
Commercial	HVAC Equipment	Heat Pump	Air Source Heat Pump 65 to 135 kBtuh - High Efficiency
Institutional	HVAC Equipment	Heat Pump	Air Source Heat Pump 65 to 135 kBtuh - Premium Efficiency
Commercial	HVAC Equipment	Heat Pump	Air Source Heat Pump 65 to 135 kBtuh - Premium Efficiency
Institutional	HVAC Equipment	Heat Pump	Water Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh
Commercial	HVAC Equipment	Heat Pump	Water Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh
Institutional	HVAC Equipment	Heat Pump	Ground Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh - Advanced Efficiency
Commercial	HVAC Equipment	Heat Pump	Ground Source Heat Pump Replacing Air Source Heat Pump 65 to 135 kBtuh - Advanced Efficiency
Institutional	HVAC Equipment	Heat Pump	Air Source Heat Pump > 240 kBtuh - High Efficiency
Commercial	HVAC Equipment	Heat Pump	Air Source Heat Pump > 240 kBtuh - High Efficiency
Institutional	HVAC Equipment	Heat Pump	Air Source Heat Pump > 240 kBtuh - Premium Efficiency
Commercial	HVAC Equipment	Heat Pump	Air Source Heat Pump > 240 kBtuh - Premium Efficiency
Institutional	HVAC Equipment	Heat Pump	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh
Commercial	HVAC Equipment	Heat Pump	Water Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh



Classification	Program Measure Category	End Use	Measure Name
Institutional	HVAC Equipment	Heat Pump	Ground Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh - Advanced Efficiency
Commercial	HVAC Equipment	Heat Pump	Ground Source Heat Pump Replacing Air Source Heat Pump > 240 kBtuh - Advanced Efficiency
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Water Heater LE 55 Gal - Heat Pump - ENERGY STAR
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Solar Water Heater
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Solar Water Heater
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Water Heater GT 55 Gal - Heat Pump - ENERGY STAR
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Solar Water Heater
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Solar Water Heater
Institutional	Custom	Servers	Server - High Efficiency
Commercial	Custom	Servers	Server - High Efficiency
Institutional	Appliances	Refrigerator	Refrigerator - CEE Tier 2
Commercial	Appliances	Refrigerator	Refrigerator - CEE Tier 2
Institutional	Appliances	Refrigerator	Refrigerator - CEE Tier 3
Commercial	Appliances	Refrigerator	Refrigerator - CEE Tier 3
Commercial	Custom	Compressed Air	Compressed Air System Improvements
Commercial	Custom	Compressed Air	Low Pressure-drop Filters
Commercial	Custom	Compressed Air	Air Entraining Air Nozzle
Commercial	Custom	Compressed Air	VFD Controlled Compressor
Commercial	Custom	Compressed Air	Zero Loss Condensate Drains
Institutional	Food Service	Cooking	Commercial Hot Food Holding Cabinets (Energy Star)
Commercial	Food Service	Cooking	Commercial Hot Food Holding Cabinets (Energy Star)
Institutional	Food Service	Cooking	Electric combination oven (Energy Star)
Commercial	Food Service	Cooking	Electric combination oven (Energy Star)
Institutional	Food Service	Cooking	Electric convection oven (Energy Star)
Commercial	Food Service	Cooking	Electric convection oven (Energy Star)
Institutional	Food Service	Cooking	Electric Steam cooker (Energy Star)
Commercial	Food Service	Cooking	Electric Steam cooker (Energy Star)
Institutional	Food Service	Cooking	High Efficiency Fryers (Energy Star)

Classification	Program Measure Category	End Use	Measure Name
Commercial	Food Service	Cooking	High Efficiency Fryers (Energy Star)
Institutional	Food Service	Cooking	High Efficiency Griddle (Energy Star)
Commercial	Food Service	Cooking	High Efficiency Griddle (Energy Star)
Institutional	Food Service	Cooking	High Efficiency Induction Cooking
Commercial	Food Service	Cooking	High Efficiency Induction Cooking
Institutional	Custom	Ventilation and Circulation	High Efficiency Ventilation Hoods
Commercial	Custom	Ventilation and Circulation	High Efficiency Ventilation Hoods
Institutional	Custom	Cooling Chillers	Solid-state temperature controls
Institutional	Custom	Space Heat	Solid-state temperature controls
Institutional	Custom	Cooling DX	Solid-state temperature controls
Institutional	Custom	Heat Pump	Solid-state temperature controls
Commercial	Custom	Cooling Chillers	Solid-state temperature controls
Commercial	Custom	Space Heat	Solid-state temperature controls
Commercial	Custom	Cooling DX	Solid-state temperature controls
Commercial	Custom	Heat Pump	Solid-state temperature controls
Institutional	Lighting and Controls - NonLED	Lighting Exterior	Photocell Controls (outdoor)
Commercial	Lighting and Controls - NonLED	Lighting Exterior	Photocell Controls (outdoor)
Institutional	Weatherization	Cooling Chillers	Adding reflective roof treatment
Institutional	Weatherization	Cooling DX	Adding reflective roof treatment
Institutional	Weatherization	Heat Pump	Adding reflective roof treatment
Commercial	Weatherization	Cooling Chillers	Adding reflective roof treatment
Commercial	Weatherization	Cooling DX	Adding reflective roof treatment
Commercial	Weatherization	Heat Pump	Adding reflective roof treatment
Institutional	Custom	Cooling Chillers	Automated control system
Institutional	Custom	Space Heat	Automated control system
Institutional	Custom	Cooling DX	Automated control system
Institutional	Custom	Heat Pump	Automated control system
Commercial	Custom	Cooling Chillers	Automated control system
Commercial	Custom	Space Heat	Automated control system
Commercial	Custom	Cooling DX	Automated control system
Commercial	Custom	Heat Pump	Automated control system
Institutional	Weatherization	Cooling Chillers	Ceiling Insulation
Institutional	Weatherization	Space Heat	Ceiling Insulation
Institutional	Weatherization	Cooling DX	Ceiling Insulation
Institutional	Weatherization	Heat Pump	Ceiling Insulation
Institutional	Weatherization	Room Cooling	Ceiling Insulation
Commercial	Weatherization	Cooling Chillers	Ceiling Insulation
Commercial	Weatherization	Space Heat	Ceiling Insulation
Commercial	Weatherization	Cooling DX	Ceiling Insulation
Commercial	Weatherization	Heat Pump	Ceiling Insulation
Commercial	Weatherization	Room Cooling	Ceiling Insulation
Commercial	Weatherization	Package Terminal Air Conditioning	Ceiling Insulation



Classification	Program Measure Category	End Use	Measure Name
Institutional	HVAC Equipment	Cooling Chillers	Chiller Tuneup/Diagnostics
Commercial	HVAC Equipment	Cooling Chillers	Chiller Tuneup/Diagnostics
Institutional	Custom	Cooling Chillers	Commercial energy recovery ventilation systems
Institutional	Custom	Space Heat	Commercial energy recovery ventilation systems
Institutional	Custom	Cooling DX	Commercial energy recovery ventilation systems
Institutional	Custom	Heat Pump	Commercial energy recovery ventilation systems
Commercial	Custom	Cooling Chillers	Commercial energy recovery ventilation systems
Commercial	Custom	Space Heat	Commercial energy recovery ventilation systems
Commercial	Custom	Cooling DX	Commercial energy recovery ventilation systems
Commercial	Custom	Heat Pump	Commercial energy recovery ventilation systems
Institutional	Custom	Cooling Chillers	Cooling Tower Optimization
Commercial	Custom	Cooling Chillers	Cooling Tower Optimization
Institutional	Weatherization	Space Heat	Duct Insulation, Add R8
Institutional	Weatherization	Cooling DX	Duct Insulation, Add R8
Institutional	Weatherization	Heat Pump	Duct Insulation, Add R8
Commercial	Weatherization	Space Heat	Duct Insulation, Add R8
Commercial	Weatherization	Cooling DX	Duct Insulation, Add R8
Commercial	Weatherization	Heat Pump	Duct Insulation, Add R8
Institutional	Weatherization	Space Heat	Duct Testing & Sealing
Institutional	Weatherization	Cooling DX	Duct Testing & Sealing
Institutional	Weatherization	Heat Pump	Duct Testing & Sealing
Commercial	Weatherization	Space Heat	Duct Testing & Sealing
Commercial	Weatherization	Cooling DX	Duct Testing & Sealing
Commercial	Weatherization	Heat Pump	Duct Testing & Sealing
Institutional	HVAC Equipment	Space Heat	Ductless Heat Pump
Institutional	HVAC Equipment	Cooling DX	Ductless Heat Pump
Commercial	HVAC Equipment	Space Heat	Ductless Heat Pump
Commercial	HVAC Equipment	Cooling DX	Ductless Heat Pump
Institutional	HVAC Equipment	Cooling DX	DX Coil Cleaning
Institutional	HVAC Equipment	Heat Pump	DX Coil Cleaning
Commercial	HVAC Equipment	Cooling DX	DX Coil Cleaning
Commercial	HVAC Equipment	Heat Pump	DX Coil Cleaning
Institutional	HVAC Equipment	Ventilation and Circulation	ECM Motors for split systems
Commercial	HVAC Equipment	Ventilation and Circulation	ECM Motors for split systems
Institutional	New Construction	Cooling Chillers	Facility Commissioning (New Construction)



Classification	Program Measure Category	End Use	Measure Name
Institutional	New Construction	Space Heat	Facility Commissioning (New Construction)
Institutional	New Construction	Cooling DX	Facility Commissioning (New Construction)
Institutional	New Construction	Heat Pump	Facility Commissioning (New Construction)
Commercial	New Construction	Cooling Chillers	Facility Commissioning (New Construction)
Commercial	New Construction	Space Heat	Facility Commissioning (New Construction)
Commercial	New Construction	Cooling DX	Facility Commissioning (New Construction)
Commercial	New Construction	Heat Pump	Facility Commissioning (New Construction)
Institutional	Weatherization	Cooling Chillers	Green Roof (New construction or roof replacement)
Institutional	Weatherization	Space Heat	Green Roof (New construction or roof replacement)
Institutional	Weatherization	Cooling DX	Green Roof (New construction or roof replacement)
Institutional	Weatherization	Heat Pump	Green Roof (New construction or roof replacement)
Commercial	Weatherization	Cooling Chillers	Green Roof (New construction or roof replacement)
Commercial	Weatherization	Space Heat	Green Roof (New construction or roof replacement)
Commercial	Weatherization	Cooling DX	Green Roof (New construction or roof replacement)
Commercial	Weatherization	Heat Pump	Green Roof (New construction or roof replacement)
Institutional	HVAC Equipment	Cooling DX	HVAC Diagnostic/Air Conditioner Tune Up
Commercial	HVAC Equipment	Cooling DX	HVAC Diagnostic/Air Conditioner Tune Up
Institutional	HVAC Equipment	Heat Pump	HVAC Diagnostic/Heat Pump Tune Up
Commercial	HVAC Equipment	Heat Pump	HVAC Diagnostic/Heat Pump Tune Up
Institutional	Custom	Cooling Chillers	Outside Air Economizer
Institutional	Custom	Cooling DX	Outside Air Economizer
Institutional	Custom	Heat Pump	Outside Air Economizer
Commercial	Custom	Cooling Chillers	Outside Air Economizer
Commercial	Custom	Cooling DX	Outside Air Economizer
Commercial	Custom	Heat Pump	Outside Air Economizer
Institutional	Custom	Cooling Chillers	Re-commissioning (Existing Construction)
Institutional	Custom	Space Heat	Re-commissioning (Existing Construction)
Institutional	Custom	Cooling DX	Re-commissioning (Existing Construction)



Classification	Program Measure Category	End Use	Measure Name
Institutional	Custom	Heat Pump	Re-commissioning (Existing Construction)
Commercial	Custom	Cooling Chillers	Re-commissioning (Existing Construction)
Commercial	Custom	Space Heat	Re-commissioning (Existing Construction)
Commercial	Custom	Cooling DX	Re-commissioning (Existing Construction)
Commercial	Custom	Heat Pump	Re-commissioning (Existing Construction)
Institutional	HVAC Equipment	Heat Pump	Variable Refrigerant Flow Heat Pump
Commercial	HVAC Equipment	Heat Pump	Variable Refrigerant Flow Heat Pump
Institutional	Weatherization	Cooling Chillers	Wall Insulation
Institutional	Weatherization	Space Heat	Wall Insulation
Institutional	Weatherization	Cooling DX	Wall Insulation
Institutional	Weatherization	Heat Pump	Wall Insulation
Commercial	Weatherization	Cooling Chillers	Wall Insulation
Commercial	Weatherization	Space Heat	Wall Insulation
Commercial	Weatherization	Cooling DX	Wall Insulation
Commercial	Weatherization	Heat Pump	Wall Insulation
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Central lighting control system
Institutional	Lighting and Controls - NonLED	Lighting Interior Screw Base	Central lighting control system
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Central lighting control system
Institutional	Lighting and Controls - NonLED	Lighting Interior Other	Central lighting control system
Institutional	Lighting and Controls - NonLED	Lighting Exterior	Central lighting control system
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Central lighting control system
Commercial	Lighting and Controls - NonLED	Lighting Interior Screw Base	Central lighting control system
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Central lighting control system
Commercial	Lighting and Controls - NonLED	Lighting Interior Other	Central lighting control system
Commercial	Lighting and Controls - NonLED	Lighting Exterior	Central lighting control system
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Delamping fixtures
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Delamping fixtures
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Fiber Optic Display Lighting

Classification	Program Measure Category	End Use	Measure Name
Commercial	Lighting and Controls - NonLED	Lighting Interior Other	Fiber Optic Display Lighting
Institutional	Lighting - LED	Lighting Interior Other	LED exit sign
Commercial	Lighting - LED	Lighting Interior Other	LED exit sign
Commercial	Lighting - LED	Lighting Exterior	LED or equivalent sign lighting
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Light Pipes
Institutional	Lighting and Controls - NonLED	Lighting Interior Screw Base	Light Pipes
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Light Pipes
Institutional	Lighting and Controls - NonLED	Lighting Interior Other	Light Pipes
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Light Pipes
Commercial	Lighting and Controls - NonLED	Lighting Interior Screw Base	Light Pipes
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Light Pipes
Commercial	Lighting and Controls - NonLED	Lighting Interior Other	Light Pipes
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Occupancy sensor, wall or ceiling mounted
Institutional	Lighting and Controls - NonLED	Lighting Interior Screw Base	Occupancy sensor, wall or ceiling mounted
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Occupancy sensor, wall or ceiling mounted
Institutional	Lighting and Controls - NonLED	Lighting Interior Other	Occupancy sensor, wall or ceiling mounted
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Occupancy sensor, wall or ceiling mounted
Commercial	Lighting and Controls - NonLED	Lighting Interior Screw Base	Occupancy sensor, wall or ceiling mounted
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Occupancy sensor, wall or ceiling mounted
Commercial	Lighting and Controls - NonLED	Lighting Interior Other	Occupancy sensor, wall or ceiling mounted
Institutional	Lighting - LED	Lighting Interior Other	Photoluminescent Exit Sign
Commercial	Lighting - LED	Lighting Interior Other	Photoluminescent Exit Sign
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent Reduced Wattage - Above Standard
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent High Performance - Above Standard
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent T5 - Above Standard
Commercial	Lighting - LED	Lighting Interior Fluorescent	Lighting Interior - LED Tube - Above Standard



Classification	Program Measure Category	End Use	Measure Name
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - Induction - Above Standard
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - Efficient Metal Halide - Above Standard
Commercial	Lighting - LED	Lighting Interior HID	Lighting Interior - High Bay LED - Above Standard
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - High Bay Fluorescent High Output - Above Standard
Commercial	Lighting - LED	Lighting Interior Screw Base	Lighting Interior - Screw Base LED - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent Reduced Wattage - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent High Performance - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Lighting Interior - Fluorescent T5 - Above Standard
Institutional	Lighting - LED	Lighting Interior Fluorescent	Lighting Interior - LED Tube - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - Induction - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - Efficient Metal Halide - Above Standard
Institutional	Lighting - LED	Lighting Interior HID	Lighting Interior - High Bay LED - Above Standard
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Lighting Interior - High Bay Fluorescent High Output - Above Standard
Institutional	Lighting - LED	Lighting Interior Screw Base	Lighting Interior - Screw Base LED - Above Standard
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Downsizing motor during retrofit
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Downsizing motor during retrofit
Institutional	Custom	Other Plug Load	Escalator Motor Controller
Commercial	Custom	Other Plug Load	Escalator Motor Controller
Institutional	Refrigeration Equipment	Vending Machines	Beverage machine control
Commercial	Refrigeration Equipment	Vending Machines	Beverage machine control
Commercial	Custom	Servers	Data Center - Server/Storage Consolidation
Commercial	Custom	Servers	Data Center - Server/Storage Virtualization
Institutional	Custom	Computers	Network PC Power Management
Commercial	Custom	Computers	Network PC Power Management
Institutional	Refrigeration Equipment	Vending Machines	Non-cooled snack control
Commercial	Refrigeration Equipment	Vending Machines	Non-cooled snack control
Institutional	Appliances	Other Plug Load	Occupancy sensor controls/Smart Strip
Commercial	Appliances	Other Plug Load	Occupancy sensor controls/Smart Strip

Classification	Program Measure Category	End Use	Measure Name
Institutional	Custom	Other Plug Load	Elevators
Commercial	Custom	Other Plug Load	Elevators
Institutional	Custom	Water Heat GT 55 Gal	Ozone commercial laundry system
Institutional	Custom	Water Heat LE 55 Gal	Ozone commercial laundry system
Commercial	Custom	Water Heat GT 55 Gal	Ozone commercial laundry system
Commercial	Custom	Water Heat LE 55 Gal	Ozone commercial laundry system
Institutional	Custom	Cooling Chillers	Air curtain technology
Institutional	Custom	Space Heat	Air curtain technology
Institutional	Custom	Cooling DX	Air curtain technology
Institutional	Custom	Heat Pump	Air curtain technology
Commercial	Custom	Cooling Chillers	Air curtain technology
Commercial	Custom	Space Heat	Air curtain technology
Commercial	Custom	Cooling DX	Air curtain technology
Commercial	Custom	Heat Pump	Air curtain technology
Institutional	Refrigeration Equipment	Refrigeration	Anti-sweat heat (ASH) controls - Cooler
Commercial	Refrigeration Equipment	Refrigeration	Anti-sweat heat (ASH) controls - Cooler
Institutional	Refrigeration Equipment	Refrigeration	Anti-sweat heat (ASH) controls - Freezer
Commercial	Refrigeration Equipment	Refrigeration	Anti-sweat heat (ASH) controls - Freezer
Institutional	Refrigeration Equipment	Refrigeration	Auto-closer: Walk-In Cooler
Commercial	Refrigeration Equipment	Refrigeration	Auto-closer: Walk-In Cooler
Institutional	Refrigeration Equipment	Refrigeration	Auto-closer:Walk-In Freezer
Commercial	Refrigeration Equipment	Refrigeration	Auto-closer:Walk-In Freezer
Institutional	Refrigeration Equipment	Refrigeration	Commercial Solid Door Refrigerator & Freezer (Energy Star)
Commercial	Refrigeration Equipment	Refrigeration	Commercial Solid Door Refrigerator & Freezer (Energy Star)
Institutional	Refrigeration Equipment	Refrigeration	Compressor VSD retrofit
Commercial	Refrigeration Equipment	Refrigeration	Compressor VSD retrofit
Institutional	Refrigeration Equipment	Refrigeration	Demand Defrost Electric
Commercial	Refrigeration Equipment	Refrigeration	Demand Defrost Electric
Institutional	Refrigeration Equipment	Refrigeration	Demand Hot Gas Defrost
Commercial	Refrigeration Equipment	Refrigeration	Demand Hot Gas Defrost
Institutional	Refrigeration Equipment	Refrigeration	Door Gasket - Cooler
Commercial	Refrigeration Equipment	Refrigeration	Door Gasket - Cooler
Institutional	Refrigeration Equipment	Refrigeration	Door Gasket - Freezer
Commercial	Refrigeration Equipment	Refrigeration	Door Gasket - Freezer
Institutional	Refrigeration Equipment	Refrigeration	ECM Case Motors
Commercial	Refrigeration Equipment	Refrigeration	ECM Case Motors
Institutional	Refrigeration Equipment	Refrigeration	Economizer for Walk-in Coolers
Commercial	Refrigeration Equipment	Refrigeration	Economizer for Walk-in Coolers
Institutional	Refrigeration Equipment	Refrigeration	eCube
Commercial	Refrigeration Equipment	Refrigeration	eCube
Institutional	Refrigeration Equipment	Refrigeration	Efficient compressor motor
Commercial	Refrigeration Equipment	Refrigeration	Efficient compressor motor
Institutional	Refrigeration Equipment	Refrigeration	Floating head pressure controller



Classification	Program Measure Category	End Use	Measure Name
Commercial	Refrigeration Equipment	Refrigeration	Floating head pressure controller
Institutional	Refrigeration Equipment	Refrigeration	LED Refrigerated Case Door Lighting
Commercial	Refrigeration Equipment	Refrigeration	LED Refrigerated Case Door Lighting
Institutional	Refrigeration Equipment	Refrigeration	No-heat glass doors
Commercial	Refrigeration Equipment	Refrigeration	No-heat glass doors
Institutional	Refrigeration Equipment	Refrigeration	Quick acting freezer doors
Commercial	Refrigeration Equipment	Refrigeration	Quick acting freezer doors
Institutional	Refrigeration Equipment	Refrigeration	Reach-in PSC to ECM Evaporator Fan Motor
Commercial	Refrigeration Equipment	Refrigeration	Reach-in PSC to ECM Evaporator Fan Motor
Institutional	Refrigeration Equipment	Refrigeration	Reach-in Shaded Pole to ECM Evaporator Fan Motor
Commercial	Refrigeration Equipment	Refrigeration	Reach-in Shaded Pole to ECM Evaporator Fan Motor
Institutional	Refrigeration Equipment	Refrigeration	Reach-in Shaded Pole to PSC Evaporator Fan Motor
Commercial	Refrigeration Equipment	Refrigeration	Reach-in Shaded Pole to PSC Evaporator Fan Motor
Institutional	Refrigeration Equipment	Refrigeration	Refrigeration Commissioning
Commercial	Refrigeration Equipment	Refrigeration	Refrigeration Commissioning
Commercial	Refrigeration Equipment	Refrigeration	Vertical night covers
Institutional	HVAC Equipment	Cooling Chillers	VFD on cooling tower fans
Commercial	HVAC Equipment	Cooling Chillers	VFD on cooling tower fans
Institutional	Refrigeration Equipment	Refrigeration	Walk-in PSC to ECM
Commercial	Refrigeration Equipment	Refrigeration	Walk-in PSC to ECM
Institutional	Refrigeration Equipment	Refrigeration	Walk-in Shaded Pole to ECM
Commercial	Refrigeration Equipment	Refrigeration	Walk-in Shaded Pole to ECM
Institutional	Custom	Ventilation and Circulation	CO sensors for parking garage exhaust fans
Commercial	Custom	Ventilation and Circulation	CO sensors for parking garage exhaust fans
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Electronically Commutated Motors (ECM) on an Air Handler Unit
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Electronically Commutated Motors (ECM) on an Air Handler Unit
Institutional	Custom	Ventilation and Circulation	Energy Efficient Laboratory Fume Hood
Commercial	Custom	Ventilation and Circulation	Energy Efficient Laboratory Fume Hood
Institutional	Custom	Space Heat	Demand controlled Ventilation and Circulating Systems
Institutional	Custom	Cooling DX	Demand controlled Ventilation and Circulating Systems
Institutional	Custom	Heat Pump	Demand controlled Ventilation and Circulating Systems

Classification	Program Measure Category	End Use	Measure Name
Commercial	Custom	Space Heat	Demand controlled Ventilation and Circulating Systems
Commercial	Custom	Cooling DX	Demand controlled Ventilation and Circulating Systems
Commercial	Custom	Heat Pump	Demand controlled Ventilation and Circulating Systems
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Drainwater Heat Recovery Water Heater
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Drainwater Heat Recovery Water Heater
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Drainwater Heat Recovery Water Heater
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Drainwater Heat Recovery Water Heater
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Faucet Aerators
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Faucet Aerators
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Faucet Aerators
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Faucet Aerators
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Heat Recovery Unit
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Heat Recovery Unit
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Heat Recovery Unit
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Heat Recovery Unit
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Heat Trap
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Heat Trap
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Heat Trap
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Heat Trap
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	High-efficiency coin-op washer w/ Electric water heat
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	High-efficiency coin-op washer w/ Electric water heat
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Hot Water (DHW) Pipe Insulation
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Hot Water (DHW) Pipe Insulation
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Hot Water (DHW) Pipe Insulation



Classification	Program Measure Category	End Use	Measure Name
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Hot Water (DHW) Pipe Insulation
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Pre-Rinse Spray Valves - 1.6 GPM (Existing to Code)
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Pre-Rinse Spray Valves - 0.6 GPM (Code to high Efficiency)
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Showerheads
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Showerheads
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Low-Flow Showerheads
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Low-Flow Showerheads
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Ultrasonic Faucet Control
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Ultrasonic Faucet Control
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Ultrasonic Faucet Control
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Ultrasonic Faucet Control
Institutional	Water Heating Equipment	Water Heat GT 55 Gal	Water Heater Thermostat Setback
Institutional	Water Heating Equipment	Water Heat LE 55 Gal	Water Heater Thermostat Setback
Commercial	Water Heating Equipment	Water Heat GT 55 Gal	Water Heater Thermostat Setback
Commercial	Water Heating Equipment	Water Heat LE 55 Gal	Water Heater Thermostat Setback
Commercial	Custom	Space Heat	Hotel Room Controls
Commercial	Custom	Package Terminal Air Conditioning	Hotel Room Controls
Commercial	Lighting and Controls - NonLED	Lighting Interior Screw Base	Hotel Room Controls



Classification	Program Measure Category	End Use	Measure Name
Institutional	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Indoor Daylight Sensors
Institutional	Lighting and Controls - NonLED	Lighting Interior Screw Base	Indoor Daylight Sensors
Institutional	Lighting and Controls - NonLED	Lighting Interior HID	Indoor Daylight Sensors
Institutional	Lighting and Controls - NonLED	Lighting Interior Other	Indoor Daylight Sensors
Commercial	Lighting and Controls - NonLED	Lighting Interior Fluorescent	Indoor Daylight Sensors
Commercial	Lighting and Controls - NonLED	Lighting Interior Screw Base	Indoor Daylight Sensors
Commercial	Lighting and Controls - NonLED	Lighting Interior HID	Indoor Daylight Sensors
Commercial	Lighting and Controls - NonLED	Lighting Interior Other	Indoor Daylight Sensors
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	VFD on HVAC Fan
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	VFD on HVAC Fan
Institutional	Motor Equipment - VSD's, etc.	Ventilation and Circulation	VFD on HVAC Pump
Commercial	Motor Equipment - VSD's, etc.	Ventilation and Circulation	VFD on HVAC Pump
Institutional	Custom	Other Plug Load	VFD on Process
Commercial	Custom	Other Plug Load	VFD on Process
Institutional	Refrigeration Equipment	Refrigeration	High Efficiency Ice Makers
Commercial	Refrigeration Equipment	Refrigeration	High Efficiency Ice Makers



Classification	Program Measure Category	End Use	Measure Name
Institutional	Custom	Other Plug Load	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week
Commercial	Custom	Other Plug Load	15HP irrigation pump 91% efficient operates 12hrs/day, 3 days/week
Industrial	Air Compressor Improvements	Process AirComp	Air Compressor Equipment
Industrial	Custom	HVAC	Clean Room: Change Filter Strategy
Industrial	Custom	HVAC	Clean Room: Chiller Optimize
Industrial	Custom	HVAC	Clean Room: Clean Room HVAC
Industrial	Refrigeration Equipment	Process Refrig and Cooling	Defrost Control System
Industrial	Motor Equipment - VSD's, etc.	Fans	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Pumps	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Fans	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Pumps	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Fans	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Pumps	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Fans	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Pumps	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Fans	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Pumps	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM
Industrial	Refrigeration Equipment	Process Refrig and Cooling	Evaporator Fan Controller
Industrial	Lighting - LED	Lighting	Exit Sign - LED
Industrial	Lighting - LED	Lighting	Exit Sign - Photoluminescent

Classification	Program Measure Category	End Use	Measure Name
Industrial	Whole Building/Energy Management Systems	Other	Integrated Plant Energy Management
Industrial	Lighting and Controls - NonLED	Lighting	Lighting - Fluorescent High Performance Packages
Industrial	Lighting and Controls - NonLED	Lighting	Lighting - High Bay Fluorescent High Output Packages
Industrial	Lighting and Controls - NonLED	Lighting	Lighting - High Intensity Discharge Packages
Industrial	Lighting - LED	Lighting	Lighting - LED Lamp Packages
Industrial	Custom	Other	Material Handling
Industrial	Custom	Process Refrig and Cooling	Mechanical Subcoolers
Industrial	Motor Equipment - VSD's, etc.	Fans	Motor Early Retirement
Industrial	Motor Equipment - VSD's, etc.	Pumps	Motor Early Retirement
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Motor Early Retirement
Industrial	Whole Building/Energy Management Systems	Motors Other	Motor Management Plan
Industrial	Whole Building/Energy Management Systems	Process AirComp	Motor Management Plan
Industrial	Custom	Other	Power Quality-Improving Appliances
Industrial	Motor Equipment - VSD's, etc.	Fans	Premium Fan
Industrial	Custom	Pumps	Pump System Optimization
Industrial	Custom	Motors Other	Switch from Belt drive to Direct Drive
Industrial	Custom	Fans	Synchronous Belts
Industrial	Custom	Motors Other	Synchronous Belts
Industrial	Custom	Process Refrig and Cooling	Synchronous Belts
Industrial	Custom	Other	Transformers
Industrial	Motor Equipment - VSD's, etc.	Pumps	Variable Speed Drive Control
Industrial	Motor Equipment - VSD's, etc.	Fans	Variable Speed Drive Control
Industrial	Motor Equipment - VSD's, etc.	Motors Other	Variable Speed Drive Control
Industrial	Air Compressor Improvements	Process AirComp	VFD Controlled Compressor
Industrial	Air Compressor Improvements	Process AirComp	Air Compressor Equipment
Industrial	Refrigeration Equipment	Process Refrig and Cooling	Floating Head Pressure Controller
Industrial	Refrigeration Equipment	Process Refrig and Cooling	Floating Suction Pressure Controller
Industrial	Custom	Process Other	Cleaners: Professional Wet Cleaning
Industrial	Custom	Process Other	Efficient Agitator



Classification	Program Measure Category	End Use	Measure Name
Industrial	Custom	Process Other	Effluent Treatment System
Industrial	Custom	Process Other	Mech Pulp: Premium Process
Industrial	Custom	Process Other	Mech Pulp: Refiner Plate Improvement
Industrial	Custom	Process Other	Mech Pulp: Refiner Replacement
Industrial	Custom	Process Other	Paper: Efficient Pulp Screen
Industrial	Custom	Process Other	High Efficiency Plastic Injection Molders
Industrial	Custom	Process Other	Pulse Cooling for Injection Molders
Industrial	Custom	Process Heat	New Arc Furnace
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 100W to LED 62W
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 150W to LED 113W
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 200W to LED 120W
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 250W to LED 150W
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 400W to LED 225W
Industrial	Lighting - LED Street	Lighting - Street	Streetlight - HPS 70W to LED 42W
Industrial	Custom	HVAC	Solidstate Chiller
Industrial	Custom	Process Other	Elec Chip Fab: Eliminate Exhaust
Industrial	Custom	Process Other	Elec Chip Fab: Exhaust Injector
Industrial	Custom	Process Other	Elec Chip Fab: Reduce Gas Pressure
Industrial	Lighting and Controls - NonLED	Lighting	Lighting Controls
Industrial	Lighting - LED	Lighting	Lighting - High Bay LED Packages
Industrial	Agriculture/Irrigation	Fans	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)
Industrial	Agriculture/Irrigation	Motors Other	Automatic Milker Takeoff
Industrial	Agriculture/Irrigation	Other	Block Heater Timer
Industrial	Agriculture/Irrigation	Fans	Circulating Fans
Industrial	Agriculture/Irrigation	Process Heat	Crate Heating Pads
Industrial	Agriculture/Irrigation	HVAC	Energy-Efficient Dehumidifier
Industrial	Agriculture/Irrigation	Other	Grain bin aeration control systems
Industrial	Agriculture/Irrigation	Process Heat	Grain dryers
Industrial	Agriculture/Irrigation	Other	Greenhouse Heat Curtain
Industrial	Agriculture/Irrigation	Process Heat	Heat Lamp Setback (Microzone)
Industrial	Agriculture/Irrigation	Process Heat	Heat Lamp/Heating Pad Controller
Industrial	Agriculture/Irrigation	Process Heat	Heat Lamps
Industrial	Agriculture/Irrigation	HVAC	Heat Reclaimer
Industrial	Agriculture/Irrigation	HVAC	Heat Recovery Ventilators
Industrial	Agriculture/Irrigation	Other	High Efficiency Stock tank
Industrial	Agriculture/Irrigation	Fans	High Volume Low Speed Fans
Industrial	Agriculture/Irrigation	Fans	High-Efficiency Ventilation System
Industrial	Agriculture/Irrigation	HVAC	Infrared Film for Greenhouses
Industrial	Agriculture/Irrigation	Other	Livestock Waterers
Industrial	Agriculture/Irrigation	Pumps	Low Pressure Irrigation
Industrial	Agriculture/Irrigation	Process Refrig and Cooling	Milk Precooler - Dairy Plate Cooler

Classification	Program Measure Category	End Use	Measure Name
Industrial	Agriculture/Irrigation	HVAC	Programmable Ventilation Controller
Industrial	Agriculture/Irrigation	HVAC	Scroll Compressor
Industrial	Agriculture/Irrigation	Motors Other	Variable Speed Drives for Dairy Vacuum Pumps
Industrial	Agriculture/Irrigation	Motors Other	VFDs on Small Milking Machines
Industrial	HVAC Equipment	HVAC	Equipment Upgrades
Industrial	Custom	HVAC	Improved Controls
Industrial	Custom	HVAC	Recommissioning
Industrial	Air Compressor Improvements	Process AirComp	Air Compressor Optimization