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)
Multi-family	Lighting Exterior	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	45.9	5	1.08	90%	100%	0.01	13.4	0
Multi-family	Lighting Exterior	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	45.9	5	1.08	90%	100%	0.01	13.4	0
Multi-family	Lighting Exterior	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	24.6	10	218.15	20%	83%	1.59	0.1	0
Multi-family	Lighting Exterior	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	24.6	10	218.15	20%	83%	1.59	0.1	0
Multi-family	Lighting Interior Linear Fluorescent	Existing	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Multi-family	Lighting Interior Linear Fluorescent	New	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Multi-family	Lighting Interior Linear Fluorescent	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	218.15	20%	83%	2.08	0.0	0
Multi-family	Lighting Interior Linear Fluorescent	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	218.15	20%	83%	2.08	0.0	0
Multi-family	Lighting Interior Specialty	Existing	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	42.5	5	1.31	90%	100%	0.01	10.2	0
Multi-family	Lighting Interior Specialty	New	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	42.5	5	1.31	90%	100%	0.01	10.2	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)
Multi-family	Lighting Interior Specialty	Existing	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	43.8	15	9.93	90%	100%	0.04	2.7	3,596
Multi-family	Lighting Interior Specialty	New	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	43.8	15	9.93	90%	100%	0.04	2.7	77
Multi-family	Lighting Interior Specialty	Existing	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	4.20	25%	91%	0.03	3.4	128
Multi-family	Lighting Interior Specialty	New	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	2.70	25%	91%	0.02	5.3	3
Multi-family	Lighting Interior Specialty	Existing	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Multi-family	Lighting Interior Specialty	New	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Multi-family	Lighting Interior Specialty	Existing	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	2.00	25%	60%	0.01	7.4	0
Multi-family	Lighting Interior Specialty	New	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	0.50	25%	60%	0.00	29.6	0
Multi-family	Lighting Interior Specialty	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	15.9	10	218.15	20%	83%	2.47	0.0	0
Multi-family	Lighting Interior Specialty	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	15.9	10	218.15	20%	83%	2.47	0.0	0
Multi-family	Lighting Interior Standard	Existing	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.2	5	1.10	90%	100%	0.01	8.4	0
Multi-family	Lighting Interior Standard	New	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.2	5	1.10	90%	100%	0.01	8.4	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)
Multi-family	Lighting Interior Standard	Existing	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	31.4	15	11.04	90%	100%	0.06	1.7	8,386
Multi-family	Lighting Interior Standard	New	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	31.4	15	11.04	90%	100%	0.06	1.7	199
Multi-family	Lighting Interior Standard	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.2	5	1.10	90%	100%	0.01	8.4	0
Multi-family	Lighting Interior Standard	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.2	5	1.10	90%	100%	0.01	8.4	0
Multi-family	Lighting Interior Standard	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	15.7	10	218.15	20%	83%	2.51	0.0	0
Multi-family	Lighting Interior Standard	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	15.7	10	218.15	20%	83%	2.51	0.0	0
Multi-family	Monitor	Existing	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	17
Multi-family	Monitor	New	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	1
Multi-family	Multifunction Device	Existing	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.3	63
Multi-family	Multifunction Device	New	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.3	2
Multi-family	Plug Load Other	Existing	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	31.3	9	0.08	100%	30%	0.00	195.8	360
Multi-family	Plug Load Other	New	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	31.3	9	0.08	100%	30%	0.00	195.8	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)
Multi-family	Plug Load Other	Existing	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	287.1	55
Multi-family	Plug Load Other	New	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	287.1	1
Multi-family	Refrigerator	Existing	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	38.2	12	25.25	90%	100%	0.11	1.0	0
Multi-family	Refrigerator	New	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	38.2	12	25.25	90%	100%	0.11	1.0	0
Multi-family	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	75.4	12	48.46	90%	100%	0.10	1.0	0
Multi-family	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	75.4	12	48.46	90%	100%	0.10	1.0	0
Multi-family	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	99.9	12	64.20	90%	100%	0.10	1.0	0
Multi-family	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	99.9	12	64.20	90%	100%	0.10	1.0	0
Multi-family	Refrigerator	Existing	Refrigerator / Freezer Recycling with Replacement	Proper Disposal of Refrigerator/Freezer and Replacing with New Unit	Existing Non-Efficient Refrigerator/Freezer	Per Home	547.7	7	120.00	18%	94%	0.05	1.9	3,590
Multi-family	Refrigerator	Existing	Refrigerator / Freezer Recycling without Replacement	Proper Disposal of Refrigerator/Freezer	Existing Non-Efficient Refrigerator/Freezer	Per Home	1072.9	8	120.00	2%	94%	0.02	4.1	662
Multi-family	TV	Existing	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	20
Multi-family	TV	New	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	0
Multi-family	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	32.97	57%	95%	0.29	0.3	0
Multi-family	TV	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	15.91	57%	95%	0.14	0.6	0
Multi-family	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	32.97	93%	95%	0.19	0.5	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)
Multi-family	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	15.91	93%	95%	0.09	1.0	81
Multi-family	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	0
Multi-family	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	0
Multi-family	TV Bigscreen	Existing	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	23
Multi-family	TV Bigscreen	New	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	1
Multi-family	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	32.97	4%	95%	0.29	0.3	0
Multi-family	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	15.91	4%	95%	0.14	0.6	0
Multi-family	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	32.97	7%	95%	0.19	0.5	0
Multi-family	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	15.91	7%	95%	0.09	1.0	1
Multi-family	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	0
Multi-family	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	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)
Multi-family	Ventilation And Circulation	Existing	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	306.9	18	360.00	75%	90%	0.15	0.8	0
Multi-family	Ventilation And Circulation	New	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	252.9	18	153.00	100%	90%	0.08	1.6	25
Multi-family	Ventilation And Circulation	Existing	Furnace Whistle	Furnace Whistle	No Furnace Whistle	Per Home	87.6	14	3.99	80%	90%	0.01	17.6	526
Multi-family	Ventilation And Circulation	Existing	High Efficiency Furnace Fan (on existing furnace)	High Efficiency Furnace Fan	Existing Furnace Motor	Per Home	306.9	15	360.00	75%	90%	0.17	0.7	0
Multi-family	Water Heat GT 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Multi-family	Water Heat GT 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Multi-family	Water Heat GT 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	2%	79%	0.05	2.6	0
Multi-family	Water Heat GT 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	250.1	25	463.82	5%	90%	0.21	0.6	0
Multi-family	Water Heat GT 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	250.1	25	463.82	5%	90%	0.21	0.6	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	113.8	11	98.64	55%	72%	0.15	0.7	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)
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	113.8	11	98.64	55%	72%	0.15	0.7	0
Multi-family	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 Home	32.6	11	37.32	55%	72%	0.19	0.5	0
Multi-family	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 Home	32.6	11	37.32	55%	72%	0.19	0.5	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	145.4	11	151.95	55%	5%	0.18	0.6	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	145.4	11	151.95	55%	5%	0.18	0.6	0
Multi-family	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 Home	64.2	11	90.64	55%	5%	0.24	0.4	0
Multi-family	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 Home	64.2	11	90.64	55%	5%	0.24	0.4	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)
Multi-family	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 Home	33.1	11	53.32	55%	5%	0.27	0.4	0
Multi-family	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 Home	33.1	11	53.32	55%	5%	0.27	0.4	0
Multi-family	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 Home	4.4	10	3.69	40%	56%	0.15	0.7	0
Multi-family	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 Home	4.4	10	3.69	40%	56%	0.15	0.7	0
Multi-family	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	4.4	10	3.69	0%	56%	0.15	0.7	0
Multi-family	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	4.4	10	3.69	0%	56%	0.15	0.7	0
Multi-family	Water Heat GT 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Multi-family	Water Heat GT 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Multi-family	Water Heat GT 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	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)
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	387.8	12	0.71	95%	95%	0.00	344.8	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	387.8	12	0.71	95%	95%	0.00	344.8	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	273.7	12	0.48	95%	80%	0.00	365.1	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	273.7	12	0.48	95%	80%	0.00	365.1	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	159.7	12	0.24	95%	64%	0.00	426.0	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	159.7	12	0.24	95%	65%	0.00	426.0	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	182.5	12	3.82	95%	15%	0.00	30.2	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	270.0	9	4.00	95%	42%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	270.0	9	4.00	95%	42%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	202.5	9	3.00	95%	65%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	202.5	9	3.00	95%	75%	0.00	33.4	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)
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	135.0	9	2.00	95%	45%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	135.0	9	2.00	95%	65%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	135.0	9	2.00	95%	25%	0.00	33.4	0
Multi-family	Water Heat GT 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	99.3	10	25.00	90%	100%	0.05	2.2	0
Multi-family	Water Heat GT 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	99.3	10	25.00	90%	100%	0.05	2.2	0
Multi-family	Water Heat GT 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Multi-family	Water Heat GT 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Multi-family	Water Heat GT 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	95%	92%	0.05	1.9	0
Multi-family	Water Heat GT 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	75%	92%	0.05	1.9	0
Multi-family	Water Heat GT 55 Gal	Existing	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	0
Multi-family	Water Heat GT 55 Gal	New	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	0
Multi-family	Water Heat LE 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	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)
Multi-family	Water Heat LE 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	0
Multi-family	Water Heat LE 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	2%	79%	0.05	2.6	113
Multi-family	Water Heat LE 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	250.1	25	463.82	5%	90%	0.21	0.6	0
Multi-family	Water Heat LE 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	250.1	25	463.82	5%	90%	0.21	0.6	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	113.8	11	98.64	55%	72%	0.15	0.7	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	113.8	11	98.64	55%	72%	0.15	0.7	0
Multi-family	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 Home	32.6	11	37.32	55%	72%	0.19	0.5	0
Multi-family	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 Home	32.6	11	37.32	55%	72%	0.19	0.5	0
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	145.4	11	151.95	55%	5%	0.18	0.6	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)
Multi-family	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	145.4	11	151.95	55%	5%	0.18	0.6	0
Multi-family	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 Home	64.2	11	90.64	55%	5%	0.24	0.4	0
Multi-family	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 Home	64.2	11	90.64	55%	5%	0.24	0.4	0
Multi-family	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 Home	33.1	11	53.32	55%	5%	0.27	0.4	0
Multi-family	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 Home	33.1	11	53.32	55%	5%	0.27	0.4	0
Multi-family	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 Home	4.4	10	3.69	40%	56%	0.15	0.7	0
Multi-family	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 Home	4.4	10	3.69	40%	56%	0.15	0.7	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)
Multi-family	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	4.4	10	3.69	0%	56%	0.15	0.7	0
Multi-family	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	4.4	10	3.69	0%	56%	0.15	0.7	0
Multi-family	Water Heat LE 55 Gal	Existing	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.5	14	116.00	90%	100%	0.26	0.4	0
Multi-family	Water Heat LE 55 Gal	New	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.5	14	116.00	90%	100%	0.26	0.4	0
Multi-family	Water Heat LE 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1442.3	14	945.00	90%	100%	0.10	1.1	4,807
Multi-family	Water Heat LE 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1442.3	14	945.00	90%	100%	0.10	1.1	169
Multi-family	Water Heat LE 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	257
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	387.8	12	0.71	95%	95%	0.00	344.8	7,081
Multi-family	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	387.8	12	0.71	95%	95%	0.00	344.8	189
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	273.7	12	0.48	95%	80%	0.00	365.1	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)
Multi-family	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	273.7	12	0.48	95%	80%	0.00	365.1	0
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	159.7	12	0.24	95%	64%	0.00	426.0	0
Multi-family	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	159.7	12	0.24	95%	65%	0.00	426.0	0
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	182.5	12	3.82	95%	15%	0.00	30.2	526
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	270.0	9	4.00	95%	42%	0.00	33.4	2,199
Multi-family	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	270.0	9	4.00	95%	42%	0.00	33.4	59
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	202.5	9	3.00	95%	65%	0.00	33.4	0
Multi-family	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	202.5	9	3.00	95%	75%	0.00	33.4	0
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	135.0	9	2.00	95%	45%	0.00	33.4	0
Multi-family	Water Heat LE 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	135.0	9	2.00	95%	65%	0.00	33.4	0
Multi-family	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	135.0	9	2.00	95%	25%	0.00	33.4	649
Multi-family	Water Heat LE 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	99.3	10	25.00	90%	100%	0.05	2.2	477

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)
Multi-family	Water Heat LE 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	99.3	10	25.00	90%	100%	0.05	2.2	13
Multi-family	Water Heat LE 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1536.6	15	5236.93	90%	100%	0.48	0.2	0
Multi-family	Water Heat LE 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1536.6	15	5236.93	90%	100%	0.48	0.2	0
Multi-family	Water Heat LE 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	95%	92%	0.04	2.4	2,253
Multi-family	Water Heat LE 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	75%	92%	0.04	2.4	49
Multi-family	Water Heat LE 55 Gal	Existing	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	226
Multi-family	Water Heat LE 55 Gal	New	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	6
Single Family Attached	Computer Desktop	Existing	ENERGY STAR Computer - Desktop	ENERGY STAR Computer - Desktop	Standard Desktop	Per Installation	70.7	4	1.00	90%	73%	0.01	17.7	993
Single Family Attached	Computer Desktop	New	ENERGY STAR Computer - Desktop	ENERGY STAR Computer - Desktop	Standard Desktop	Per Installation	70.7	4	1.00	90%	73%	0.01	17.7	30
Single Family Attached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: Computer Desktop	Standard Power Strip	Per Home	40.7	4	32.97	39%	95%	0.29	0.3	0
Single Family Attached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: Computer Desktop	Standard Power Strip	Per Home	40.7	4	15.91	39%	95%	0.14	0.6	0
Single Family Attached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: Computer Desktop	Standard Power Strip	Per Home	63.7	4	32.97	0%	95%	0.19	0.5	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)
Single Family Attached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: Computer Desktop	Standard Power Strip	Per Home	63.7	4	15.91	0%	95%	0.09	1.0	0
Single Family Attached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: Computer Desktop	Standard Power Strip	Per Home	46.5	4	99.99	100%	95%	0.78	0.1	0
Single Family Attached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: Computer Desktop	Standard Power Strip	Per Home	46.5	4	82.93	100%	95%	0.65	0.1	0
Single Family Attached	Computer Laptop	Existing	ENERGY STAR Computer - Laptop	ENERGY STAR Computer - Laptop	Standard Laptop	Per Installation	21.5	4	1.00	90%	25%	0.02	5.4	53
Single Family Attached	Computer Laptop	New	ENERGY STAR Computer - Laptop	ENERGY STAR Computer - Laptop	Standard Laptop	Per Installation	21.5	4	1.00	90%	25%	0.02	5.4	2
Single Family Attached	Cool Central	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	104.2	15	911.48	56%	21%	0.45	0.3	0
Single Family Attached	Cool Central	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	104.2	15	911.48	0%	21%	0.45	0.3	0
Single Family Attached	Cool Central	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	22.9	25	2831.44	85%	13%	6.02	0.0	0
Single Family Attached	Cool Central	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	7.6	25	405.52	75%	55%	2.61	0.0	0
Single Family Attached	Cool Central	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	7.6	25	405.52	90%	55%	2.61	0.0	0
Single Family Attached	Cool Central	Existing	Central AC Maintenance	Tune-up/Maintenance on Central AC	No Tune-up Maintenance on Central AC	Per Home	364.5	7	100.00	95%	84%	0.06	1.8	0
Single Family Attached	Cool Central	Existing	Central Air Conditioner - CEE Tier 3	CEE Tier 3 Central Air Conditioner - SEER/EER 16/13 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	237.0	14	2235.08	90%	100%	1.38	0.1	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)
Single Family Attached	Cool Central	New	Central Air Conditioner - CEE Tier 3	CEE Tier 3 Central Air Conditioner - SEER/EER 16/13 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	195.3	14	1841.83	90%	100%	1.38	0.1	0
Single Family Attached	Cool Central	Existing	Central Air Conditioner - Enhanced	Enhanced Central Air Conditioner - SEER/EER 18/14 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	351.1	14	3725.13	90%	100%	1.56	0.1	0
Single Family Attached	Cool Central	New	Central Air Conditioner - Enhanced	Enhanced Central Air Conditioner - SEER/EER 18/14 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	289.4	14	3069.71	90%	100%	1.56	0.1	0
Single Family Attached	Cool Central	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	169.4	40	4480.95	25%	100%	2.70	0.1	0
Single Family Attached	Cool Central	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	32.9	15	403.95	50%	69%	0.97	0.1	0
Single Family Attached	Cool Central	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	157.9	20	188.51	50%	34%	0.11	1.2	218
Single Family Attached	Cool Central	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	157.9	20	188.51	0%	34%	0.11	1.2	0
Single Family Attached	Cool Central	Existing	ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner - SEER/EER 14.5/12 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	130.8	14	1117.54	90%	100%	1.25	0.1	0
Single Family Attached	Cool Central	New	ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner - SEER/EER 14.5/12 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	107.8	14	920.91	90%	100%	1.25	0.1	0
Single Family Attached	Cool Central	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	4.08	0.0	0
Single Family Attached	Cool Central	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	4.08	0.0	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)
Single Family Attached	Cool Central	Existing	Home Energy Reports	Home Energy Reports (Opower, Aclara, C3 Energy, and Simple Energy)	No report	Per Home	146.8	1	10.37	90%	100%	0.09	0.9	0
Single Family Attached	Cool Central	New	Home Energy Reports	Home Energy Reports (Opower, Aclara, C3 Energy, and Simple Energy)	No report	Per Home	146.8	1	10.37	90%	100%	0.09	0.9	0
Single Family Attached	Cool Central	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	31.6	11	64.00	95%	71%	0.34	0.3	0
Single Family Attached	Cool Central	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	26.1	11	31.15	95%	71%	0.20	0.6	0
Single Family Attached	Cool Central	Existing	Proper Sizing of Central Air Conditioner	Proper Sizing - Central Air Conditioner	Oversized Central Air Conditioner	Per Home	79.1	14	186.50	95%	95%	0.35	0.4	0
Single Family Attached	Cool Central	New	Proper Sizing of Central Air Conditioner	Proper Sizing - Central Air Conditioner	Oversized Central Air Conditioner	Per Home	65.2	14	186.50	95%	95%	0.42	0.3	0
Single Family Attached	Cool Central	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	118.6	11	197.59	25%	95%	0.28	0.4	0
Single Family Attached	Cool Central	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	97.8	11	197.59	95%	95%	0.34	0.3	0
Single Family Attached	Cool Central	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	78.8	25	2218.89	50%	62%	3.20	0.0	0
Single Family Attached	Cool Central	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	12.9	25	1079.46	20%	14%	9.52	0.0	0
Single Family Attached	Cool Central	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	12.9	25	1079.46	95%	14%	9.52	0.0	0
Single Family Attached	Cool Central	Existing	Window Film	Window Film	No Window Film	Per Home	28.4	20	937.15	38%	95%	4.07	0.0	0
Single Family Attached	Cool Central	New	Window Film	Window Film	No Window Film	Per Home	16.3	20	937.15	0%	95%	7.09	0.0	0
Single Family Attached	Cool Central	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	5.3	15	742.82	100%	12%	19.95	0.0	0
Single Family Attached	Cool Room	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	39.6	15	911.48	56%	21%	0.06	1.8	96

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)
Single Family Attached	Cool Room	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	39.6	15	911.48	0%	21%	0.06	1.8	0
Single Family Attached	Cool Room	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	11.6	25	2831.44	85%	13%	0.87	0.1	0
Single Family Attached	Cool Room	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	3.8	25	405.52	75%	55%	0.37	0.3	0
Single Family Attached	Cool Room	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	3.8	25	405.52	90%	55%	0.37	0.3	0
Single Family Attached	Cool Room	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	18.3	40	4480.95	25%	100%	24.95	0.0	0
Single Family Attached	Cool Room	Existing	Ductless Mini-Split HP / AC	Ductless Air Conditioner - SEER/EER 18/12.5	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	Per Installation	50.0	9	1767.94	90%	100%	6.83	0.0	0
Single Family Attached	Cool Room	New	Ductless Mini-Split HP / AC	Ductless Air Conditioner - SEER/EER 18/12.5	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	Per Installation	50.0	9	1767.94	90%	100%	6.83	0.0	0
Single Family Attached	Cool Room	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)	Per Installation	3.4	9	40.00	90%	100%	2.27	0.0	0
Single Family Attached	Cool Room	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)	Per Installation	3.4	9	40.00	90%	100%	2.27	0.0	0
Single Family Attached	Cool Room	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	0.66	0.2	0
Single Family Attached	Cool Room	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	0.66	0.2	0
Single Family Attached	Cool Room	Existing	Room AC Retirement	Proper Disposal of Room AC	Existing Non-Efficient Room AC	Per Home	167.9	4	60.00	8%	65%	0.13	0.7	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)
Single Family Attached	Cool Room	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	39.7	25	2218.89	50%	62%	6.35	0.0	0
Single Family Attached	Cool Room	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	6.5	25	1079.46	20%	14%	18.90	0.0	0
Single Family Attached	Cool Room	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	6.5	25	1079.46	95%	14%	18.90	0.0	0
Single Family Attached	Cool Room	Existing	Window Film	Window Film	No Window Film	Per Home	2.5	20	937.15	38%	95%	45.64	0.0	0
Single Family Attached	Cool Room	New	Window Film	Window Film	No Window Film	Per Home	1.8	20	937.15	0%	95%	65.49	0.0	0
Single Family Attached	Cool Room	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	5.3	15	742.82	100%	12%	19.95	0.0	0
Single Family Attached	Copier	Existing	ENERGY STAR Copier	ENERGY STAR Copier	Standard Office Copier	Per Installation	81.4	6	1.00	90%	20%	0.00	29.2	43
Single Family Attached	Copier	New	ENERGY STAR Copier	ENERGY STAR Copier	Standard Office Copier	Per Installation	81.4	6	1.00	90%	20%	0.00	29.2	2
Single Family Attached	Dehumidifier	Existing	ENERGY STAR Dehumidifiers	ENERGY STAR Dehumidifier	Federal Standard 2013 Dehumidifier	Per Installation	169.6	12	20.21	90%	100%	0.02	5.4	333
Single Family Attached	Dehumidifier	New	ENERGY STAR Dehumidifiers	ENERGY STAR Dehumidifier	Federal Standard 2013 Dehumidifier	Per Installation	169.6	12	20.21	90%	100%	0.02	5.4	17
Single Family Attached	Dryer	Existing	ENERGY STAR Dryer - CEF/EF 3.93/4.04	ENERGY STAR Dryer - CEF/EF 3.93/4.04	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	27.4	13	51.91	90%	100%	0.29	0.4	0
Single Family Attached	Dryer	New	ENERGY STAR Dryer - CEF/EF 3.93/4.04	ENERGY STAR Dryer - CEF/EF 3.93/4.04	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	27.4	13	51.91	90%	100%	0.29	0.4	0
Single Family Attached	Dryer	Existing	Heat Pump Dryer	Heat Pump Dryer	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	277.6	13	409.33	90%	100%	0.23	0.5	0
Single Family Attached	Dryer	New	Heat Pump Dryer	Heat Pump Dryer	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	277.6	13	409.33	90%	100%	0.23	0.5	0
Single Family Attached	Fax	Existing	ENERGY STAR Fax Machine	ENERGY STAR Fax Machine	Standard Fax Machine	Per Installation	15.6	4	60.00	90%	20%	1.39	0.1	0
Single Family Attached	Fax	New	ENERGY STAR Fax Machine	ENERGY STAR Fax Machine	Standard Fax Machine	Per Installation	15.6	4	60.00	90%	20%	1.39	0.1	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)
Single Family Attached	Freezer	Existing	ENERGY STAR Freezers	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Installation	34.3	12	6.61	90%	100%	0.03	3.3	375
Single Family Attached	Freezer	New	ENERGY STAR Freezers	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Installation	34.3	12	6.61	90%	100%	0.03	3.3	16
Single Family Attached	Freezer	Existing	Refrigerator / Freezer Recycling with Replacement	Proper Disposal of Refrigerator/Freezer and Replacing with New Unit	Existing Non-Efficient Refrigerator/Freezer	Per Home	547.7	7	120.00	18%	94%	0.05	1.9	1,655
Single Family Attached	Freezer	Existing	Refrigerator / Freezer Recycling without Replacement	Proper Disposal of Refrigerator/Freezer	Existing Non-Efficient Refrigerator/Freezer	Per Home	1072.9	8	120.00	2%	94%	0.02	4.1	305
Single Family Attached	Heat Central	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	56%	21%	0.03	3.8	110
Single Family Attached	Heat Central	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	0%	21%	0.03	3.8	0
Single Family Attached	Heat Central	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	1226.1	25	1259.55	60%	35%	0.12	1.0	4
Single Family Attached	Heat Central	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	45%	77%	0.07	1.6	4
Single Family Attached	Heat Central	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	60%	77%	0.07	1.6	1
Single Family Attached	Heat Central	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	764.6	25	2831.44	85%	13%	0.42	0.3	0
Single Family Attached	Heat Central	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	75%	55%	0.18	0.6	0
Single Family Attached	Heat Central	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	90%	55%	0.18	0.6	0
Single Family Attached	Heat Central	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	1411.6	40	4480.95	25%	100%	0.32	0.4	0
Single Family Attached	Heat Central	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	646.7	15	403.95	50%	69%	0.09	1.2	39
Single Family Attached	Heat Central	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	1561.2	20	188.51	50%	34%	0.01	7.6	55
Single Family Attached	Heat Central	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	1561.2	20	188.51	0%	34%	0.01	7.6	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)
Single Family Attached	Heat Central	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	696.7	15	955.13	100%	12%	0.19	0.5	0
Single Family Attached	Heat Central	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	696.7	15	955.13	100%	12%	0.19	0.5	0
Single Family Attached	Heat Central	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	872.3	25	2751.01	35%	50%	0.36	0.3	0
Single Family Attached	Heat Central	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	300.4	25	557.71	35%	50%	0.21	0.6	0
Single Family Attached	Heat Central	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	300.4	25	557.71	35%	50%	0.21	0.6	0
Single Family Attached	Heat Central	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	474.4	11	64.00	95%	71%	0.02	4.3	91
Single Family Attached	Heat Central	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	390.9	11	31.15	95%	71%	0.01	7.3	2
Single Family Attached	Heat Central	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	777.4	11	197.59	25%	95%	0.04	2.3	69
Single Family Attached	Heat Central	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	640.6	11	197.59	95%	95%	0.05	1.9	6
Single Family Attached	Heat Central	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	2628.9	25	2218.89	50%	62%	0.10	1.2	151
Single Family Attached	Heat Central	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	20%	14%	0.29	0.4	0
Single Family Attached	Heat Central	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	95%	14%	0.29	0.4	0
Single Family Attached	Heat Central	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	696.7	15	742.82	100%	12%	0.15	0.7	0
Single Family Attached	Heat Pump	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	2812.4	15	911.48	56%	21%	0.05	2.4	1,319
Single Family Attached	Heat Pump	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	2812.4	15	911.48	0%	21%	0.05	2.4	0
Single Family Attached	Heat Pump	Existing	Air Source Heat Pump Maintenance	Tune-up/Maintenance on Air Source Heat Pump	No Tune-up Maintenance on Air Source Heat Pump	Per Home	358.6	7	100.00	95%	84%	0.06	1.5	1,496

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)
Single Family Attached	Heat Pump	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	543.3	25	1259.55	60%	35%	0.26	0.5	0
Single Family Attached	Heat Pump	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	313.6	25	454.46	45%	77%	0.16	0.7	0
Single Family Attached	Heat Pump	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	313.6	25	454.46	60%	77%	0.16	0.7	0
Single Family Attached	Heat Pump	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	338.8	25	2831.44	85%	13%	0.95	0.1	0
Single Family Attached	Heat Pump	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	112.1	25	405.52	75%	55%	0.41	0.3	0
Single Family Attached	Heat Pump	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	112.1	25	405.52	90%	55%	0.41	0.3	0
Single Family Attached	Heat Pump	Existing	Cold Climate Heat Pump	Cold Climate Heat Pump - SEER/EER 21.5/12 and HSPF 10.3 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1591.2	12	2546.71	90%	100%	0.26	0.4	0
Single Family Attached	Heat Pump	New	Cold Climate Heat Pump	Cold Climate Heat Pump - SEER/EER 21.5/12 and HSPF 10.3 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1311.3	12	2098.63	90%	100%	0.26	0.4	0
Single Family Attached	Heat Pump	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	869.1	40	4480.95	25%	100%	0.53	0.2	0
Single Family Attached	Heat Pump	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	354.0	15	403.95	50%	69%	0.16	0.7	0
Single Family Attached	Heat Pump	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	807.5	20	188.51	50%	34%	0.03	4.0	558
Single Family Attached	Heat Pump	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	807.5	20	188.51	0%	34%	0.03	4.0	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)
Single Family Attached	Heat Pump	Existing	ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump - SEER/EER 14.5/12 and HSPF 8.2 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	40.5	12	271.26	90%	100%	1.07	0.1	0
Single Family Attached	Heat Pump	New	ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump - SEER/EER 14.5/12 and HSPF 8.2 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	33.4	12	223.53	90%	100%	1.07	0.1	0
Single Family Attached	Heat Pump	Existing	ENERGY STAR Ground Source Heat Pump	ENERGY STAR Ground Source Heat Pump - EER 17.1 and 3.6 COP (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	2140.8	15	10575.45	90%	100%	0.70	0.2	0
Single Family Attached	Heat Pump	New	ENERGY STAR Ground Source Heat Pump	ENERGY STAR Ground Source Heat Pump - EER 17.1 and 3.6 COP (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1764.1	15	8714.77	90%	100%	0.70	0.2	0
Single Family Attached	Heat Pump	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Attached	Heat Pump	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Attached	Heat Pump	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	419.6	25	2751.01	35%	50%	0.75	0.2	0
Single Family Attached	Heat Pump	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	144.5	25	557.71	35%	50%	0.44	0.3	0
Single Family Attached	Heat Pump	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	144.5	25	557.71	35%	50%	0.44	0.3	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)
Single Family Attached	Heat Pump	Existing	Heat Pump - Air Source CEE Tier 2	CEE Tier 2 Air Source Heat Pump - SEER/EER 15/12.5 and HSPF 8.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	282.8	12	542.51	90%	100%	0.31	0.3	0
Single Family Attached	Heat Pump	New	Heat Pump - Air Source CEE Tier 2	CEE Tier 2 Air Source Heat Pump - SEER/EER 15/12.5 and HSPF 8.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	233.1	12	447.06	90%	100%	0.31	0.3	0
Single Family Attached	Heat Pump	Existing	Heat Pump - Air Source Enhanced	Enhanced Air Source Heat Pump - SEER/EER 18/14 and HSPF 9.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1054.0	12	4068.83	90%	100%	0.62	0.2	0
Single Family Attached	Heat Pump	New	Heat Pump - Air Source Enhanced	Enhanced Air Source Heat Pump - SEER/EER 18/14 and HSPF 9.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	868.6	12	3352.95	90%	100%	0.62	0.2	0
Single Family Attached	Heat Pump	Existing	Heat Pump - Air Source Premium	Premium Air Source Heat Pump - SEER/EER 16/13 and HSPF 9.0 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	662.0	12	1085.02	90%	100%	0.26	0.4	0
Single Family Attached	Heat Pump	New	Heat Pump - Air Source Premium	Premium Air Source Heat Pump - SEER/EER 16/13 and HSPF 9.0 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	545.5	12	894.12	90%	100%	0.26	0.4	0
Single Family Attached	Heat Pump	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	267.2	11	64.00	95%	71%	0.04	2.5	1,015
Single Family Attached	Heat Pump	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	220.2	11	31.15	95%	71%	0.02	4.2	23
Single Family Attached	Heat Pump	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	503.5	11	197.59	25%	95%	0.07	1.5	884

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)
Single Family Attached	Heat Pump	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	414.9	11	197.59	95%	95%	0.08	1.3	79
Single Family Attached	Heat Pump	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	1243.7	25	2218.89	50%	62%	0.20	0.6	0
Single Family Attached	Heat Pump	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	203.4	25	1079.46	20%	14%	0.60	0.2	0
Single Family Attached	Heat Pump	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	203.4	25	1079.46	95%	14%	0.60	0.2	0
Single Family Attached	Heat Pump	Existing	Window Film	Window Film	No Window Film	Per Home	28.2	20	937.15	38%	95%	4.11	0.0	0
Single Family Attached	Heat Pump	New	Window Film	Window Film	No Window Film	Per Home	16.2	20	937.15	0%	95%	7.16	0.0	0
Single Family Attached	Heat Pump	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	393.0	15	742.82	100%	12%	0.27	0.4	0
Single Family Attached	Heat Room	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	56%	21%	0.03	3.8	4,135
Single Family Attached	Heat Room	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	0%	21%	0.03	3.8	0
Single Family Attached	Heat Room	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	1226.1	25	1259.55	60%	35%	0.12	1.0	148
Single Family Attached	Heat Room	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	45%	77%	0.07	1.6	163
Single Family Attached	Heat Room	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	60%	77%	0.07	1.6	33
Single Family Attached	Heat Room	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	764.6	25	2831.44	85%	13%	0.42	0.3	0
Single Family Attached	Heat Room	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	75%	55%	0.18	0.6	0
Single Family Attached	Heat Room	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	90%	55%	0.18	0.6	0
Single Family Attached	Heat Room	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	819.4	40	4480.95	25%	100%	0.56	0.2	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)
Single Family Attached	Heat Room	Existing	Ductless Mini-Split HP / AC	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Standard Baseboard Heating - HSPF 3.41	Per Installation	3994.0	15	5823.72	90%	100%	0.21	0.5	0
Single Family Attached	Heat Room	New	Ductless Mini-Split HP / AC	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Standard Baseboard Heating - HSPF 3.41	Per Installation	3291.3	15	4799.07	90%	100%	0.21	0.5	0
Single Family Attached	Heat Room	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Attached	Heat Room	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Attached	Heat Room	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	445.7	25	2751.01	35%	50%	0.70	0.2	0
Single Family Attached	Heat Room	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	153.5	25	557.71	35%	50%	0.41	0.3	0
Single Family Attached	Heat Room	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	153.5	25	557.71	35%	50%	0.41	0.3	0
Single Family Attached	Heat Room	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	2628.9	25	2218.89	50%	62%	0.10	1.2	5,512
Single Family Attached	Heat Room	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	20%	14%	0.29	0.4	0
Single Family Attached	Heat Room	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	95%	14%	0.29	0.4	0
Single Family Attached	Heat Room	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	393.0	15	742.82	100%	12%	0.27	0.4	0
Single Family Attached	Lighting Exterior	Existing	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Attached	Lighting Exterior	New	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Attached	Lighting Exterior	Existing	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	51.8	15	12.76	90%	100%	0.05	2.5	3,043

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)
Single Family Attached	Lighting Exterior	New	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	51.8	15	12.76	90%	100%	0.05	2.5	83
Single Family Attached	Lighting Exterior	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Attached	Lighting Exterior	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Attached	Lighting Exterior	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	26.2	10	497.17	20%	83%	3.42	0.0	0
Single Family Attached	Lighting Exterior	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	26.2	10	497.17	20%	83%	3.42	0.0	0
Single Family Attached	Lighting Interior Linear Fluorescent	Existing	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Single Family Attached	Lighting Interior Linear Fluorescent	New	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Single Family Attached	Lighting Interior Linear Fluorescent	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	497.17	20%	83%	4.74	0.0	0
Single Family Attached	Lighting Interior Linear Fluorescent	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	497.17	20%	83%	4.74	0.0	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)
Single Family Attached	Lighting Interior Specialty	Existing	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	35.4	5	1.50	90%	100%	0.01	7.4	0
Single Family Attached	Lighting Interior Specialty	New	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	35.4	5	1.50	90%	100%	0.01	7.4	0
Single Family Attached	Lighting Interior Specialty	Existing	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	36.8	15	9.08	90%	100%	0.05	2.4	14,889
Single Family Attached	Lighting Interior Specialty	New	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	36.8	15	9.08	90%	100%	0.05	2.4	307
Single Family Attached	Lighting Interior Specialty	Existing	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	4.20	27%	91%	0.03	3.4	796
Single Family Attached	Lighting Interior Specialty	New	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	2.70	27%	91%	0.02	5.3	22
Single Family Attached	Lighting Interior Specialty	Existing	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Single Family Attached	Lighting Interior Specialty	New	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Single Family Attached	Lighting Interior Specialty	Existing	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	2.00	27%	60%	0.01	7.4	0
Single Family Attached	Lighting Interior Specialty	New	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	0.50	27%	60%	0.00	29.6	0
Single Family Attached	Lighting Interior Specialty	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	13.3	10	497.17	20%	83%	6.75	0.0	0
Single Family Attached	Lighting Interior Specialty	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	13.3	10	497.17	20%	83%	6.75	0.0	0
Single Family Attached	Lighting Interior Standard	Existing	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	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)
Single Family Attached	Lighting Interior Standard	New	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Attached	Lighting Interior Standard	Existing	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.3	15	10.47	90%	100%	0.07	1.7	23,912
Single Family Attached	Lighting Interior Standard	New	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.3	15	10.47	90%	100%	0.07	1.7	573
Single Family Attached	Lighting Interior Standard	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Attached	Lighting Interior Standard	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Attached	Lighting Interior Standard	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	14.7	10	497.17	20%	83%	6.11	0.0	0
Single Family Attached	Lighting Interior Standard	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	14.7	10	497.17	20%	83%	6.11	0.0	0
Single Family Attached	Monitor	Existing	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	35
Single Family Attached	Monitor	New	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	1
Single Family Attached	Multifunction Device	Existing	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.1	126
Single Family Attached	Multifunction Device	New	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.1	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)
Single Family Attached	Plug Load Other	Existing	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	52.2	9	0.13	100%	30%	0.00	194.7	727
Single Family Attached	Plug Load Other	New	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	52.2	9	0.13	100%	30%	0.00	194.7	20
Single Family Attached	Plug Load Other	Existing	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	285.5	67
Single Family Attached	Plug Load Other	New	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	285.5	2
Single Family Attached	Refrigerator	Existing	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	42.6	12	25.25	90%	100%	0.10	1.1	0
Single Family Attached	Refrigerator	New	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	42.6	12	25.25	90%	100%	0.10	1.1	0
Single Family Attached	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	81.8	12	48.46	90%	100%	0.10	1.1	0
Single Family Attached	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	81.8	12	48.46	90%	100%	0.10	1.1	0
Single Family Attached	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	108.3	12	64.20	90%	100%	0.10	1.1	3,633
Single Family Attached	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	108.3	12	64.20	90%	100%	0.10	1.1	164
Single Family Attached	Refrigerator	Existing	Refrigerator / Freezer Recycling with Replacement	Proper Disposal of Refrigerator/Freezer and Replacing with New Unit	Existing Non-Efficient Refrigerator/Freezer	Per Home	547.7	7	120.00	18%	94%	0.05	1.9	4,217
Single Family Attached	Refrigerator	Existing	Refrigerator / Freezer Recycling without Replacement	Proper Disposal of Refrigerator/Freezer	Existing Non-Efficient Refrigerator/Freezer	Per Home	1072.9	8	120.00	2%	94%	0.02	4.1	778
Single Family Attached	TV	Existing	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	40
Single Family Attached	TV	New	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	1
Single Family Attached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	32.97	57%	95%	0.29	0.3	0
Single Family Attached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	15.91	57%	95%	0.14	0.6	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)
Single Family Attached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	32.97	93%	95%	0.19	0.5	0
Single Family Attached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	15.91	93%	95%	0.09	1.0	163
Single Family Attached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	0
Single Family Attached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	0
Single Family Attached	TV Bigscreen	Existing	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	31
Single Family Attached	TV Bigscreen	New	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	1
Single Family Attached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	32.97	4%	95%	0.29	0.3	0
Single Family Attached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	15.91	4%	95%	0.14	0.6	0
Single Family Attached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	32.97	7%	95%	0.19	0.5	0
Single Family Attached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	15.91	7%	95%	0.09	1.0	1
Single Family Attached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	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)
Single Family Attached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	0
Single Family Attached	Ventilation And Circulation	Existing	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	387.1	18	360.00	75%	90%	0.12	1.1	0
Single Family Attached	Ventilation And Circulation	New	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	319.0	18	153.00	100%	90%	0.06	2.1	45
Single Family Attached	Ventilation And Circulation	Existing	Furnace Whistle	Furnace Whistle	No Furnace Whistle	Per Home	110.5	14	3.99	80%	90%	0.01	23.0	930
Single Family Attached	Ventilation And Circulation	Existing	High Efficiency Furnace Fan (on existing furnace)	High Efficiency Furnace Fan	Existing Furnace Motor	Per Home	387.1	15	360.00	75%	90%	0.13	0.9	0
Single Family Attached	Ventilation And Circulation	Existing	Residential Whole House Fan	Whole House Fan	No Whole House Fan	Per Home	199.1	15	1153.72	50%	91%	0.82	0.2	0
Single Family Attached	Ventilation And Circulation	New	Residential Whole House Fan	Whole House Fan	No Whole House Fan	Per Home	199.1	15	1153.72	50%	91%	0.82	0.2	0
Single Family Attached	Water Heat GT 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Single Family Attached	Water Heat GT 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	20%	79%	0.05	2.6	25
Single Family Attached	Water Heat GT 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	30%	90%	0.14	0.9	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)
Single Family Attached	Water Heat GT 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	60%	90%	0.14	0.9	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Attached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Attached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	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)
Single Family Attached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Attached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Attached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Attached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Attached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Attached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Attached	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Attached	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	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)
Single Family Attached	Water Heat GT 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Single Family Attached	Water Heat GT 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	7
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	581.9	12	1.04	95%	95%	0.00	353.9	271
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	581.9	12	1.04	95%	95%	0.00	353.9	7
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	410.8	12	0.69	95%	80%	0.00	374.7	0
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	410.8	12	0.69	95%	80%	0.00	374.7	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	239.6	12	0.35	95%	65%	0.00	437.2	0
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	239.6	12	0.35	95%	65%	0.00	437.2	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	273.9	12	5.59	95%	15%	0.00	31.0	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)
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	104
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	3
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	65%	0.00	38.3	0
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	75%	0.00	38.3	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	45%	0.00	38.3	0
Single Family Attached	Water Heat GT 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	65%	0.00	38.3	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	250.6	9	3.24	95%	25%	0.00	38.3	31
Single Family Attached	Water Heat GT 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	23
Single Family Attached	Water Heat GT 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	1
Single Family Attached	Water Heat GT 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Single Family Attached	Water Heat GT 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Single Family Attached	Water Heat GT 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	95%	92%	0.05	1.9	42
Single Family Attached	Water Heat GT 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	75%	92%	0.05	1.9	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)
Single Family Attached	Water Heat GT 55 Gal	Existing	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	6
Single Family Attached	Water Heat GT 55 Gal	New	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	0
Single Family Attached	Water Heat LE 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	0
Single Family Attached	Water Heat LE 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	20%	79%	0.05	2.6	568
Single Family Attached	Water Heat LE 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	30%	90%	0.14	0.9	0
Single Family Attached	Water Heat LE 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	60%	90%	0.14	0.9	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	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)
Single Family Attached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Attached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Attached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Attached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Attached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Attached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	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)
Single Family Attached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Attached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Attached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Attached	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Attached	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.5	14	116.00	90%	100%	0.26	0.4	0
Single Family Attached	Water Heat LE 55 Gal	New	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.5	14	116.00	90%	100%	0.26	0.4	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1442.3	14	945.00	90%	100%	0.10	1.1	7,045
Single Family Attached	Water Heat LE 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1442.3	14	945.00	90%	100%	0.10	1.1	227

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)
Single Family Attached	Water Heat LE 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	140
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	581.9	12	1.04	95%	95%	0.00	353.9	6,741
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	581.9	12	1.04	95%	95%	0.00	353.9	179
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	410.8	12	0.69	95%	80%	0.00	374.7	0
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	410.8	12	0.69	95%	80%	0.00	374.7	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	239.6	12	0.35	95%	65%	0.00	437.2	0
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	239.6	12	0.35	95%	65%	0.00	437.2	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	273.9	12	5.59	95%	15%	0.00	31.0	501
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	2,589
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	69
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	65%	0.00	38.3	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)
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	75%	0.00	38.3	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	45%	0.00	38.3	0
Single Family Attached	Water Heat LE 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	65%	0.00	38.3	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	250.6	9	3.24	95%	25%	0.00	38.3	764
Single Family Attached	Water Heat LE 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	567
Single Family Attached	Water Heat LE 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	15
Single Family Attached	Water Heat LE 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1536.6	15	5236.93	90%	100%	0.48	0.2	0
Single Family Attached	Water Heat LE 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1536.6	15	5236.93	90%	100%	0.48	0.2	0
Single Family Attached	Water Heat LE 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	95%	92%	0.04	2.4	1,225
Single Family Attached	Water Heat LE 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	75%	92%	0.04	2.4	27
Single Family Attached	Water Heat LE 55 Gal	Existing	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	143
Single Family Attached	Water Heat LE 55 Gal	New	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	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)
Single Family Detached	Computer Desktop	Existing	ENERGY STAR Computer - Desktop	ENERGY STAR Computer - Desktop	Standard Desktop	Per Installation	70.7	4	1.00	90%	73%	0.01	17.7	3,930
Single Family Detached	Computer Desktop	New	ENERGY STAR Computer - Desktop	ENERGY STAR Computer - Desktop	Standard Desktop	Per Installation	70.7	4	1.00	90%	73%	0.01	17.7	120
Single Family Detached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: Computer Desktop	Standard Power Strip	Per Home	40.7	4	32.97	39%	95%	0.29	0.3	0
Single Family Detached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: Computer Desktop	Standard Power Strip	Per Home	40.7	4	15.91	39%	95%	0.14	0.6	0
Single Family Detached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: Computer Desktop	Standard Power Strip	Per Home	63.7	4	32.97	0%	95%	0.19	0.5	0
Single Family Detached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: Computer Desktop	Standard Power Strip	Per Home	63.7	4	15.91	0%	95%	0.09	1.0	0
Single Family Detached	Computer Desktop	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: Computer Desktop	Standard Power Strip	Per Home	46.5	4	99.99	100%	95%	0.78	0.1	0
Single Family Detached	Computer Desktop	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: Computer Desktop	Standard Power Strip	Per Home	46.5	4	82.93	100%	95%	0.65	0.1	0
Single Family Detached	Computer Laptop	Existing	ENERGY STAR Computer - Laptop	ENERGY STAR Computer - Laptop	Standard Laptop	Per Installation	21.5	4	1.00	90%	25%	0.02	5.4	211
Single Family Detached	Computer Laptop	New	ENERGY STAR Computer - Laptop	ENERGY STAR Computer - Laptop	Standard Laptop	Per Installation	21.5	4	1.00	90%	25%	0.02	5.4	6
Single Family Detached	Cool Central	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	104.2	15	911.48	56%	21%	0.45	0.3	0
Single Family Detached	Cool Central	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	104.2	15	911.48	0%	21%	0.45	0.3	0
Single Family Detached	Cool Central	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	22.9	25	2831.44	85%	13%	6.02	0.0	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)
Single Family Detached	Cool Central	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	7.6	25	405.52	75%	55%	2.61	0.0	0
Single Family Detached	Cool Central	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	7.6	25	405.52	90%	55%	2.61	0.0	0
Single Family Detached	Cool Central	Existing	Central AC Maintenance	Tune-up/Maintenance on Central AC	No Tune-up Maintenance on Central AC	Per Home	364.5	7	100.00	95%	84%	0.06	1.8	0
Single Family Detached	Cool Central	Existing	Central Air Conditioner - CEE Tier 3	CEE Tier 3 Central Air Conditioner - SEER/EER 16/13 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	237.0	14	2235.08	90%	100%	1.38	0.1	0
Single Family Detached	Cool Central	New	Central Air Conditioner - CEE Tier 3	CEE Tier 3 Central Air Conditioner - SEER/EER 16/13 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	195.3	14	1841.83	90%	100%	1.38	0.1	0
Single Family Detached	Cool Central	Existing	Central Air Conditioner - Enhanced	Enhanced Central Air Conditioner - SEER/EER 18/14 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	351.1	14	3725.13	90%	100%	1.56	0.1	0
Single Family Detached	Cool Central	New	Central Air Conditioner - Enhanced	Enhanced Central Air Conditioner - SEER/EER 18/14 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	289.4	14	3069.71	90%	100%	1.56	0.1	0
Single Family Detached	Cool Central	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	169.4	40	4480.95	25%	100%	2.70	0.1	0
Single Family Detached	Cool Central	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	32.9	15	403.95	50%	69%	0.97	0.1	0
Single Family Detached	Cool Central	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	157.9	20	188.51	50%	34%	0.11	1.2	861
Single Family Detached	Cool Central	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	157.9	20	188.51	0%	34%	0.11	1.2	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)
Single Family Detached	Cool Central	Existing	ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner - SEER/EER 14.5/12 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	130.8	14	1117.54	90%	100%	1.25	0.1	0
Single Family Detached	Cool Central	New	ENERGY STAR Central Air Conditioner	ENERGY STAR Central Air Conditioner - SEER/EER 14.5/12 (Split System)	Federal Standard 2015 Central Air Conditioner - SEER 13 (Split System)	Per Installation	107.8	14	920.91	90%	100%	1.25	0.1	0
Single Family Detached	Cool Central	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	4.08	0.0	0
Single Family Detached	Cool Central	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	4.08	0.0	0
Single Family Detached	Cool Central	Existing	Home Energy Reports	Home Energy Reports (Opower, Aclara, C3 Energy, and Simple Energy)	No report	Per Home	150.1	1	10.37	90%	100%	0.09	0.9	0
Single Family Detached	Cool Central	New	Home Energy Reports	Home Energy Reports (Opower, Aclara, C3 Energy, and Simple Energy)	No report	Per Home	150.1	1	10.37	90%	100%	0.09	0.9	0
Single Family Detached	Cool Central	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	31.6	11	64.00	95%	73%	0.34	0.3	0
Single Family Detached	Cool Central	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	26.1	11	31.15	95%	73%	0.20	0.6	0
Single Family Detached	Cool Central	Existing	Proper Sizing of Central Air Conditioner	Proper Sizing - Central Air Conditioner	Oversized Central Air Conditioner	Per Home	79.1	14	186.50	95%	95%	0.35	0.4	0
Single Family Detached	Cool Central	New	Proper Sizing of Central Air Conditioner	Proper Sizing - Central Air Conditioner	Oversized Central Air Conditioner	Per Home	65.2	14	186.50	95%	95%	0.42	0.3	0
Single Family Detached	Cool Central	Existing	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	48.4	25	565.79	50%	90%	1.33	0.1	0
Single Family Detached	Cool Central	New	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	39.9	25	565.79	75%	90%	1.61	0.1	0
Single Family Detached	Cool Central	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	118.6	11	197.59	25%	95%	0.28	0.4	0
Single Family Detached	Cool Central	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	97.8	11	197.59	95%	95%	0.34	0.3	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)
Single Family Detached	Cool Central	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	78.8	25	2218.89	75%	62%	3.20	0.0	0
Single Family Detached	Cool Central	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	12.9	25	1079.46	20%	14%	9.52	0.0	0
Single Family Detached	Cool Central	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	12.9	25	1079.46	95%	14%	9.52	0.0	0
Single Family Detached	Cool Central	Existing	Window Film	Window Film	No Window Film	Per Home	28.4	20	937.15	38%	95%	4.07	0.0	0
Single Family Detached	Cool Central	New	Window Film	Window Film	No Window Film	Per Home	16.3	20	937.15	0%	95%	7.09	0.0	0
Single Family Detached	Cool Central	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	5.3	15	742.82	100%	12%	19.95	0.0	0
Single Family Detached	Cool Room	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	39.6	15	911.48	56%	21%	0.06	1.8	378
Single Family Detached	Cool Room	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	39.6	15	911.48	0%	21%	0.06	1.8	0
Single Family Detached	Cool Room	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	11.6	25	2831.44	85%	13%	0.87	0.1	0
Single Family Detached	Cool Room	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	3.8	25	405.52	75%	55%	0.37	0.3	0
Single Family Detached	Cool Room	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	3.8	25	405.52	90%	55%	0.37	0.3	0
Single Family Detached	Cool Room	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	18.3	40	4480.95	25%	100%	24.95	0.0	0
Single Family Detached	Cool Room	Existing	Ductless Mini-Split HP / AC	Ductless Air Conditioner - SEER/EER 18/12.5	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	Per Installation	50.0	9	1767.94	90%	100%	6.83	0.0	0
Single Family Detached	Cool Room	New	Ductless Mini-Split HP / AC	Ductless Air Conditioner - SEER/EER 18/12.5	Federal Standard 2014 Room AC - CEER/EER 10.9/11.0 (8,000-13,999 Btuh)	Per Installation	50.0	9	1767.94	90%	100%	6.83	0.0	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)
Single Family Detached	Cool Room	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)	Per Installation	3.4	9	40.00	90%	100%	2.27	0.0	0
Single Family Detached	Cool Room	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)	Per Installation	3.4	9	40.00	90%	100%	2.27	0.0	0
Single Family Detached	Cool Room	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	0.66	0.2	0
Single Family Detached	Cool Room	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	5.3	15	955.13	100%	12%	0.66	0.2	0
Single Family Detached	Cool Room	Existing	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	4.3	25	565.79	50%	90%	14.90	0.0	0
Single Family Detached	Cool Room	New	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	4.3	25	565.79	75%	90%	14.90	0.0	0
Single Family Detached	Cool Room	Existing	Room AC Retirement	Proper Disposal of Room AC	Existing Non-Efficient Room AC	Per Home	167.9	4	60.00	8%	65%	0.13	0.8	0
Single Family Detached	Cool Room	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	39.7	25	2218.89	75%	62%	6.35	0.0	0
Single Family Detached	Cool Room	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	6.5	25	1079.46	20%	14%	18.90	0.0	0
Single Family Detached	Cool Room	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	6.5	25	1079.46	95%	14%	18.90	0.0	0
Single Family Detached	Cool Room	Existing	Window Film	Window Film	No Window Film	Per Home	2.5	20	937.15	38%	95%	45.64	0.0	0
Single Family Detached	Cool Room	New	Window Film	Window Film	No Window Film	Per Home	1.8	20	937.15	0%	95%	65.49	0.0	0
Single Family Detached	Cool Room	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	5.3	15	742.82	100%	12%	19.95	0.0	0
Single Family Detached	Copier	Existing	ENERGY STAR Copier	ENERGY STAR Copier	Standard Office Copier	Per Installation	81.4	6	1.00	90%	20%	0.00	29.2	169
Single Family Detached	Copier	New	ENERGY STAR Copier	ENERGY STAR Copier	Standard Office Copier	Per Installation	81.4	6	1.00	90%	20%	0.00	29.2	6

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)
Single Family Detached	Dehumidifier	Existing	ENERGY STAR Dehumidifiers	ENERGY STAR Dehumidifier	Federal Standard 2013 Dehumidifier	Per Installation	169.6	12	20.21	90%	100%	0.02	5.4	1,319
Single Family Detached	Dehumidifier	New	ENERGY STAR Dehumidifiers	ENERGY STAR Dehumidifier	Federal Standard 2013 Dehumidifier	Per Installation	169.6	12	20.21	90%	100%	0.02	5.4	65
Single Family Detached	Dryer	Existing	ENERGY STAR Dryer - CEF/EF 3.93/4.04	ENERGY STAR Dryer - CEF/EF 3.93/4.04	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	27.4	13	51.91	90%	100%	0.29	0.4	0
Single Family Detached	Dryer	New	ENERGY STAR Dryer - CEF/EF 3.93/4.04	ENERGY STAR Dryer - CEF/EF 3.93/4.04	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	27.4	13	51.91	90%	100%	0.29	0.4	0
Single Family Detached	Dryer	Existing	Heat Pump Dryer	Heat Pump Dryer	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	277.6	13	409.33	90%	100%	0.23	0.5	0
Single Family Detached	Dryer	New	Heat Pump Dryer	Heat Pump Dryer	Federal Standard 2015 Dryer - CEF/EF 3.73/3.83	Per Installation	277.6	13	409.33	90%	100%	0.23	0.5	0
Single Family Detached	Fax	Existing	ENERGY STAR Fax Machine	ENERGY STAR Fax Machine	Standard Fax Machine	Per Installation	15.6	4	60.00	90%	20%	1.39	0.1	0
Single Family Detached	Fax	New	ENERGY STAR Fax Machine	ENERGY STAR Fax Machine	Standard Fax Machine	Per Installation	15.6	4	60.00	90%	20%	1.39	0.1	0
Single Family Detached	Freezer	Existing	ENERGY STAR Freezers	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Installation	34.3	12	6.61	90%	100%	0.03	3.3	1,483
Single Family Detached	Freezer	New	ENERGY STAR Freezers	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Installation	34.3	12	6.61	90%	100%	0.03	3.3	64
Single Family Detached	Freezer	Existing	Refrigerator / Freezer Recycling with Replacement	Proper Disposal of Refrigerator/Freezer and Replacing with New Unit	Existing Non-Efficient Refrigerator/Freezer	Per Home	547.7	7	120.00	18%	94%	0.05	1.9	6,549
Single Family Detached	Freezer	Existing	Refrigerator / Freezer Recycling without Replacement	Proper Disposal of Refrigerator/Freezer	Existing Non-Efficient Refrigerator/Freezer	Per Home	1072.9	8	120.00	2%	94%	0.02	4.1	1,208
Single Family Detached	Heat Central	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	56%	21%	0.03	3.8	433
Single Family Detached	Heat Central	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	0%	21%	0.03	3.8	0
Single Family Detached	Heat Central	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	1226.1	25	1259.55	63%	35%	0.12	1.0	17

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)
Single Family Detached	Heat Central	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	47%	77%	0.07	1.6	18
Single Family Detached	Heat Central	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	63%	77%	0.07	1.6	3
Single Family Detached	Heat Central	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	764.6	25	2831.44	85%	13%	0.42	0.3	0
Single Family Detached	Heat Central	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	75%	55%	0.18	0.6	0
Single Family Detached	Heat Central	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	90%	55%	0.18	0.6	0
Single Family Detached	Heat Central	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	1411.6	40	4480.95	25%	100%	0.32	0.4	0
Single Family Detached	Heat Central	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	646.7	15	403.95	50%	69%	0.09	1.2	148
Single Family Detached	Heat Central	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	1561.2	20	188.51	50%	34%	0.01	7.6	217
Single Family Detached	Heat Central	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	1561.2	20	188.51	0%	34%	0.01	7.6	0
Single Family Detached	Heat Central	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	696.7	15	955.13	100%	12%	0.19	0.5	0
Single Family Detached	Heat Central	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	696.7	15	955.13	100%	12%	0.19	0.5	0
Single Family Detached	Heat Central	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	872.3	25	2751.01	20%	50%	0.36	0.3	0
Single Family Detached	Heat Central	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	300.4	25	557.71	20%	50%	0.21	0.6	0
Single Family Detached	Heat Central	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	300.4	25	557.71	20%	50%	0.21	0.6	0
Single Family Detached	Heat Central	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	474.4	11	64.00	95%	73%	0.02	4.3	373
Single Family Detached	Heat Central	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	390.9	11	31.15	95%	73%	0.01	7.3	8
Single Family Detached	Heat Central	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	777.4	11	197.59	25%	95%	0.04	2.3	272

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)
Single Family Detached	Heat Central	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	640.6	11	197.59	95%	95%	0.05	1.9	25
Single Family Detached	Heat Central	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	2628.9	25	2218.89	75%	62%	0.10	1.2	894
Single Family Detached	Heat Central	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	20%	14%	0.29	0.4	0
Single Family Detached	Heat Central	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	95%	14%	0.29	0.4	0
Single Family Detached	Heat Central	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	696.7	15	742.82	100%	12%	0.15	0.7	0
Single Family Detached	Heat Pump	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	2812.4	15	911.48	56%	21%	0.05	2.4	5,215
Single Family Detached	Heat Pump	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	2812.4	15	911.48	0%	21%	0.05	2.4	0
Single Family Detached	Heat Pump	Existing	Air Source Heat Pump Maintenance	Tune-up/Maintenance on Air Source Heat Pump	No Tune-up Maintenance on Air Source Heat Pump	Per Home	358.6	7	100.00	95%	84%	0.06	1.5	5,892
Single Family Detached	Heat Pump	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	543.3	25	1259.55	63%	35%	0.26	0.5	0
Single Family Detached	Heat Pump	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	313.6	25	454.46	47%	77%	0.16	0.7	0
Single Family Detached	Heat Pump	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	313.6	25	454.46	63%	77%	0.16	0.7	0
Single Family Detached	Heat Pump	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	338.8	25	2831.44	85%	13%	0.95	0.1	0
Single Family Detached	Heat Pump	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	112.1	25	405.52	75%	55%	0.41	0.3	0
Single Family Detached	Heat Pump	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	112.1	25	405.52	90%	55%	0.41	0.3	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)
Single Family Detached	Heat Pump	Existing	Cold Climate Heat Pump	Cold Climate Heat Pump - SEER/EER 21.5/12 and HSPF 10.3 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1591.2	12	2546.71	90%	100%	0.26	0.4	0
Single Family Detached	Heat Pump	New	Cold Climate Heat Pump	Cold Climate Heat Pump - SEER/EER 21.5/12 and HSPF 10.3 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1311.3	12	2098.63	90%	100%	0.26	0.4	0
Single Family Detached	Heat Pump	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	869.1	40	4480.95	25%	100%	0.53	0.2	0
Single Family Detached	Heat Pump	Existing	Duct Insulation	R-6 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	354.0	15	403.95	50%	69%	0.16	0.7	0
Single Family Detached	Heat Pump	Existing	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	807.5	20	188.51	50%	34%	0.03	4.0	2,206
Single Family Detached	Heat Pump	New	Duct Sealing	Duct Sealing	No Duct Sealing	Per Home	807.5	20	188.51	0%	34%	0.03	4.0	0
Single Family Detached	Heat Pump	Existing	ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump - SEER/EER 14.5/12 and HSPF 8.2 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	40.5	12	271.26	90%	100%	1.07	0.1	0
Single Family Detached	Heat Pump	New	ENERGY STAR Air Source Heat Pump	ENERGY STAR Air Source Heat Pump - SEER/EER 14.5/12 and HSPF 8.2 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	33.4	12	223.53	90%	100%	1.07	0.1	0
Single Family Detached	Heat Pump	Existing	ENERGY STAR Ground Source Heat Pump	ENERGY STAR Ground Source Heat Pump - EER 17.1 and 3.6 COP (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	2140.8	15	10575.45	90%	100%	0.70	0.2	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)
Single Family Detached	Heat Pump	New	ENERGY STAR Ground Source Heat Pump	ENERGY STAR Ground Source Heat Pump - EER 17.1 and 3.6 COP (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1764.1	15	8714.77	90%	100%	0.70	0.2	0
Single Family Detached	Heat Pump	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Detached	Heat Pump	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Detached	Heat Pump	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	419.6	25	2751.01	20%	50%	0.75	0.2	0
Single Family Detached	Heat Pump	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	144.5	25	557.71	20%	50%	0.44	0.3	0
Single Family Detached	Heat Pump	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	144.5	25	557.71	20%	50%	0.44	0.3	0
Single Family Detached	Heat Pump	Existing	Heat Pump - Air Source CEE Tier 2	CEE Tier 2 Air Source Heat Pump - SEER/EER 15/12.5 and HSPF 8.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	282.8	12	542.51	90%	100%	0.31	0.3	0
Single Family Detached	Heat Pump	New	Heat Pump - Air Source CEE Tier 2	CEE Tier 2 Air Source Heat Pump - SEER/EER 15/12.5 and HSPF 8.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	233.1	12	447.06	90%	100%	0.31	0.3	0
Single Family Detached	Heat Pump	Existing	Heat Pump - Air Source Enhanced	Enhanced Air Source Heat Pump - SEER/EER 18/14 and HSPF 9.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	1054.0	12	4068.83	90%	100%	0.62	0.2	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)
Single Family Detached	Heat Pump	New	Heat Pump - Air Source Enhanced	Enhanced Air Source Heat Pump - SEER/EER 18/14 and HSPF 9.5 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	868.6	12	3352.95	90%	100%	0.62	0.2	0
Single Family Detached	Heat Pump	Existing	Heat Pump - Air Source Premium	Premium Air Source Heat Pump - SEER/EER 16/13 and HSPF 9.0 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	662.0	12	1085.02	90%	100%	0.26	0.4	0
Single Family Detached	Heat Pump	New	Heat Pump - Air Source Premium	Premium Air Source Heat Pump - SEER/EER 16/13 and HSPF 9.0 (Split System)	Federal Standard 2015 Air Source Heat Pump - SEER/EER 14/12 and HSPF 8.2 (Split System)	Per Installation	545.5	12	894.12	90%	100%	0.26	0.4	0
Single Family Detached	Heat Pump	Existing	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	267.2	11	64.00	95%	73%	0.04	2.5	4,148
Single Family Detached	Heat Pump	New	Programmable Thermostat	Programmable Thermostat	Manual Thermostat	Per Home	220.2	11	31.15	95%	73%	0.02	4.2	94
Single Family Detached	Heat Pump	Existing	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	88.2	25	565.79	50%	90%	0.73	0.2	0
Single Family Detached	Heat Pump	New	Radiant Barriers	Install Radiant Barrier	No Radiant Barrier	Per Home	72.7	25	565.79	75%	90%	0.89	0.1	0
Single Family Detached	Heat Pump	Existing	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	503.5	11	197.59	25%	95%	0.07	1.5	3,495
Single Family Detached	Heat Pump	New	Smart Thermostat	WiFi Thermostat	Programmable Thermostat	Per Home	414.9	11	197.59	95%	95%	0.08	1.3	313
Single Family Detached	Heat Pump	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	1243.7	25	2218.89	75%	62%	0.20	0.6	0
Single Family Detached	Heat Pump	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	203.4	25	1079.46	20%	14%	0.60	0.2	0
Single Family Detached	Heat Pump	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	203.4	25	1079.46	95%	14%	0.60	0.2	0
Single Family Detached	Heat Pump	Existing	Window Film	Window Film	No Window Film	Per Home	28.2	20	937.15	38%	95%	4.11	0.0	0
Single Family Detached	Heat Pump	New	Window Film	Window Film	No Window Film	Per Home	16.2	20	937.15	0%	95%	7.16	0.0	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)
Single Family Detached	Heat Pump	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	393.0	15	742.82	100%	12%	0.27	0.4	0
Single Family Detached	Heat Room	Existing	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	56%	21%	0.03	3.8	16,359
Single Family Detached	Heat Room	New	Air Sealing	Air Sealing	No Air Sealing	Per Home	4629.2	15	911.48	0%	21%	0.03	3.8	0
Single Family Detached	Heat Room	Existing	Basement / Crawlspace Wall Insulation	R-13 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	1226.1	25	1259.55	63%	35%	0.12	1.0	574
Single Family Detached	Heat Room	Existing	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	47%	77%	0.07	1.6	677
Single Family Detached	Heat Room	New	Basement / Crawlspace Wall Insulation	R-21 (Above Code)	R-13 (IECC 2009 - Zone 5)	Per Home	707.7	25	454.46	63%	77%	0.07	1.6	136
Single Family Detached	Heat Room	Existing	Ceiling / Attic Insulation	R-38 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	764.6	25	2831.44	85%	13%	0.42	0.3	0
Single Family Detached	Heat Room	Existing	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	75%	55%	0.18	0.6	0
Single Family Detached	Heat Room	New	Ceiling / Attic Insulation	R-49 (Above Code)	R-38 (IECC 2009 - Zone 5)	Per Home	252.9	25	405.52	90%	55%	0.18	0.6	0
Single Family Detached	Heat Room	New	Construction - ICF/SIP	Insulating Concrete Form (ICF) or Structural Insulated Panels (SIP)	Standard Wood Framing	Per Home	819.4	40	4480.95	25%	100%	0.56	0.2	0
Single Family Detached	Heat Room	Existing	Ductless Mini-Split HP / AC	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Standard Baseboard Heating - HSPF 3.41	Per Installation	3994.0	15	5823.72	90%	100%	0.21	0.5	0
Single Family Detached	Heat Room	New	Ductless Mini-Split HP / AC	Ductless Heat Pump - SEER/EER 18/12.5, HSPF 10.0	Standard Baseboard Heating - HSPF 3.41	Per Installation	3291.3	15	4799.07	90%	100%	0.21	0.5	0
Single Family Detached	Heat Room	Existing	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	0
Single Family Detached	Heat Room	New	ENERGY STAR Windows	U-0.30 (ENERGY STAR Qualified - Above Code)	U-0.35 (IECC 2009 - Zone 5)	Per Home	393.0	15	955.13	100%	12%	0.34	0.3	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)
Single Family Detached	Heat Room	Existing	Floor Insulation	R-30 (IECC 2009 - Zone 5)	Average Existing Insulation	Per Home	445.7	25	2751.01	20%	50%	0.70	0.2	0
Single Family Detached	Heat Room	Existing	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	153.5	25	557.71	20%	50%	0.41	0.3	0
Single Family Detached	Heat Room	New	Floor Insulation	R-38 (Above Code)	R-30 (IECC 2009 - Zone 5)	Per Home	153.5	25	557.71	20%	50%	0.41	0.3	0
Single Family Detached	Heat Room	Existing	Wall Insulation	R-13 Wall (Max Fill)	Average Existing Wall Insulation	Per Home	2628.9	25	2218.89	75%	62%	0.10	1.2	32,657
Single Family Detached	Heat Room	Existing	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	20%	14%	0.29	0.4	0
Single Family Detached	Heat Room	New	Wall Insulation	R-21 + R-5 Sheathing (Above Code)	R-21 Wall (IECC 2009 - Zone 5)	Per Home	429.9	25	1079.46	95%	14%	0.29	0.4	0
Single Family Detached	Heat Room	Existing	Windows	U-0.35 (IECC 2009 - Zone 5)	Average Existing Window	Per Home	393.0	15	742.82	100%	12%	0.27	0.4	0
Single Family Detached	Lighting Exterior	Existing	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Detached	Lighting Exterior	New	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Detached	Lighting Exterior	Existing	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	51.8	15	12.76	90%	100%	0.05	2.5	12,037
Single Family Detached	Lighting Exterior	New	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	51.8	15	12.76	90%	100%	0.05	2.5	327
Single Family Detached	Lighting Exterior	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	0
Single Family Detached	Lighting Exterior	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	48.5	5	1.40	90%	100%	0.01	10.9	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)
Single Family Detached	Lighting Exterior	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	26.2	10	497.17	20%	83%	3.42	0.0	0
Single Family Detached	Lighting Exterior	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	26.2	10	497.17	20%	83%	3.42	0.0	0
Single Family Detached	Lighting Interior Linear Fluorescent	Existing	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Single Family Detached	Lighting Interior Linear Fluorescent	New	ENERGY STAR Indoor Fluorescent Fixture	ENERGY STAR Indoor T8 Fluorescent Fixture	Standard Indoor T12 Fixture	Per Installation	13.4	13	52.45	90%	100%	0.60	0.2	0
Single Family Detached	Lighting Interior Linear Fluorescent	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	497.17	20%	83%	4.74	0.0	0
Single Family Detached	Lighting Interior Linear Fluorescent	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	18.9	10	497.17	20%	83%	4.74	0.0	0
Single Family Detached	Lighting Interior Specialty	Existing	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	35.4	5	1.50	90%	100%	0.01	7.4	0
Single Family Detached	Lighting Interior Specialty	New	ENERGY STAR Specialty CFL	High Efficiency Specialty Lamp -CFL	Standard Specialty Lamp - Incandescent	Per Installation	35.4	5	1.50	90%	100%	0.01	7.4	0
Single Family Detached	Lighting Interior Specialty	Existing	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	36.8	15	9.08	90%	100%	0.05	2.4	58,902
Single Family Detached	Lighting Interior Specialty	New	ENERGY STAR Specialty LED	Premium Efficiency Specialty Lamp -LED	Standard Specialty Lamp - Incandescent	Per Installation	36.8	15	9.08	90%	100%	0.05	2.4	1,065

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)
Single Family Detached	Lighting Interior Specialty	Existing	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	4.20	44%	91%	0.03	3.4	5,220
Single Family Detached	Lighting Interior Specialty	New	Electroluminescent Nightlight	Electroluminescent Nightlight	Incandescent Nightlight	Per Home	30.4	8	2.70	44%	91%	0.02	5.3	141
Single Family Detached	Lighting Interior Specialty	Existing	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Single Family Detached	Lighting Interior Specialty	New	Holiday Lights	LED Holiday Lights	Incandescent Holiday Lights	Per Home	10.6	10	7.00	50%	83%	0.12	0.9	0
Single Family Detached	Lighting Interior Specialty	Existing	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	2.00	44%	60%	0.01	7.4	0
Single Family Detached	Lighting Interior Specialty	New	LED Nightlight	LED Nightlight	Incandescent Nightlight	Per Home	26.3	10	0.50	44%	60%	0.00	29.6	0
Single Family Detached	Lighting Interior Specialty	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	13.3	10	497.17	20%	83%	6.75	0.0	0
Single Family Detached	Lighting Interior Specialty	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	13.3	10	497.17	20%	83%	6.75	0.0	0
Single Family Detached	Lighting Interior Standard	Existing	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Detached	Lighting Interior Standard	New	ENERGY STAR General Service CFL	High Efficiency General Service Lamp -CFL	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Detached	Lighting Interior Standard	Existing	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.3	15	10.47	90%	100%	0.07	1.7	94,599
Single Family Detached	Lighting Interior Standard	New	ENERGY STAR General Service LED	Premium Efficiency General Service Lamp -LED	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	29.3	15	10.47	90%	100%	0.07	1.7	2,267

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)
Single Family Detached	Lighting Interior Standard	Existing	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Detached	Lighting Interior Standard	New	Lighting General Service Lamp - EISA Standard 2020	EISA Standard 2020 General Service Lamp - Incandescent	EISA Standard 2014 General Service Lamp - Incandescent	Per Installation	27.3	5	1.10	90%	100%	0.01	7.8	0
Single Family Detached	Lighting Interior Standard	Existing	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	14.7	10	497.17	20%	83%	6.11	0.0	0
Single Family Detached	Lighting Interior Standard	New	Residential Occupancy Sensors	Wall-Switch Occupancy Sensors	No Occupancy Sensor	Per Home	14.7	10	497.17	20%	83%	6.11	0.0	0
Single Family Detached	Monitor	Existing	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	140
Single Family Detached	Monitor	New	ENERGY STAR Monitor	ENERGY STAR Monitor	Standard Monitor	Per Installation	23.8	4	1.00	90%	24%	0.02	6.0	4
Single Family Detached	Multifunction Device	Existing	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.1	497
Single Family Detached	Multifunction Device	New	ENERGY STAR Multifunction	ENERGY STAR Multifunction Device "All-In-One" Imaging Equipment	Standard Multifunction Device "All-In-One" Imaging Equipment	Per Installation	109.0	6	1.00	90%	100%	0.00	39.1	19
Single Family Detached	Plug Load Other	Existing	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	52.2	9	0.13	100%	30%	0.00	194.7	2,878
Single Family Detached	Plug Load Other	New	ENERGY STAR Air Purifier/Cleaner	ENERGY STAR Air Purifier/Cleaner	Standard Air Purifier/Cleaner	Per Home	52.2	9	0.13	100%	30%	0.00	194.7	78
Single Family Detached	Plug Load Other	Existing	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	285.5	265
Single Family Detached	Plug Load Other	New	ENERGY STAR Water Cooler	ENERGY STAR Water Cooler	Standard Water Cooler	Per Home	2.6	10	0.01	95%	58%	0.00	285.5	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)
Single Family Detached	Pool Pump	Existing	Variable Speed Pool Pumps (with Load Shifting Option)	Pool Pump with Variable Speed Drive (VSD)	Standard 1 Speed Pool Pump	Per Installation	1915.2	10	750.00	90%	100%	0.07	1.4	13,193
Single Family Detached	Pool Pump	New	Variable Speed Pool Pumps (with Load Shifting Option)	Pool Pump with Variable Speed Drive (VSD)	Standard 1 Speed Pool Pump	Per Installation	1915.2	10	750.00	90%	100%	0.07	1.4	697
Single Family Detached	Refrigerator	Existing	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	42.6	12	25.25	90%	100%	0.10	1.1	0
Single Family Detached	Refrigerator	New	ENERGY STAR Refrigerators	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	42.6	12	25.25	90%	100%	0.10	1.1	0
Single Family Detached	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	81.8	12	48.46	90%	100%	0.10	1.1	0
Single Family Detached	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	81.8	12	48.46	90%	100%	0.10	1.1	0
Single Family Detached	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	108.3	12	64.20	90%	100%	0.10	1.1	14,374
Single Family Detached	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Installation	108.3	12	64.20	90%	100%	0.10	1.1	647
Single Family Detached	Refrigerator	Existing	Refrigerator / Freezer Recycling with Replacement	Proper Disposal of Refrigerator/Freezer and Replacing with New Unit	Existing Non-Efficient Refrigerator/Freezer	Per Home	547.7	7	120.00	18%	94%	0.05	1.9	16,683
Single Family Detached	Refrigerator	Existing	Refrigerator / Freezer Recycling without Replacement	Proper Disposal of Refrigerator/Freezer	Existing Non-Efficient Refrigerator/Freezer	Per Home	1072.9	8	120.00	2%	94%	0.02	4.1	3,076
Single Family Detached	TV	Existing	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	158
Single Family Detached	TV	New	ENERGY STAR Televisions < 50"	ENERGY STAR Televisions < 50"	Standard Television < 50"	Per Installation	19.2	6	1.00	90%	15%	0.01	6.9	3
Single Family Detached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	32.97	57%	95%	0.29	0.3	0
Single Family Detached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV	Standard Power Strip	Per Home	40.7	4	15.91	57%	95%	0.14	0.6	0
Single Family Detached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	32.97	93%	95%	0.19	0.5	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)
Single Family Detached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV	Standard Power Strip	Per Home	63.7	4	15.91	93%	95%	0.09	1.0	644
Single Family Detached	TV	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	0
Single Family Detached	TV	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	0
Single Family Detached	TV Bigscreen	Existing	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	122
Single Family Detached	TV Bigscreen	New	ENERGY STAR Televisions > 50"	ENERGY STAR Televisions > 50"	Standard Television > 50"	Per Installation	22.8	6	1.00	90%	44%	0.01	8.2	5
Single Family Detached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	32.97	4%	95%	0.29	0.3	0
Single Family Detached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip - Load Sensing: TV Bigscreen	Standard Power Strip	Per Home	40.7	4	15.91	4%	95%	0.14	0.6	0
Single Family Detached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	32.97	7%	95%	0.19	0.5	0
Single Family Detached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Infrared Sensor: TV Bigscreen	Standard Power Strip	Per Home	63.7	4	15.91	7%	95%	0.09	1.0	4
Single Family Detached	TV Bigscreen	Existing	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	99.99	0%	95%	0.78	0.1	0
Single Family Detached	TV Bigscreen	New	Smart Strip Plug Outlet	Advanced Power Strip with Occupancy Sensor: TV Bigscreen	Standard Power Strip	Per Home	46.5	4	82.93	0%	95%	0.65	0.1	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)
Single Family Detached	Ventilation And Circulation	Existing	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	387.1	18	360.00	75%	90%	0.12	1.1	0
Single Family Detached	Ventilation And Circulation	New	Brushless Fan Motor	Brushless Fan Motor	Standard Motor	Per Home	319.0	18	153.00	100%	90%	0.06	2.1	178
Single Family Detached	Ventilation And Circulation	Existing	Furnace Whistle	Furnace Whistle	No Furnace Whistle	Per Home	110.5	14	3.99	80%	90%	0.01	23.0	3,678
Single Family Detached	Ventilation And Circulation	Existing	High Efficiency Furnace Fan (on existing furnace)	High Efficiency Furnace Fan	Existing Furnace Motor	Per Home	387.1	15	360.00	75%	90%	0.13	0.9	0
Single Family Detached	Ventilation And Circulation	Existing	Residential Whole House Fan	Whole House Fan	No Whole House Fan	Per Home	199.1	15	1153.72	50%	91%	0.82	0.2	0
Single Family Detached	Ventilation And Circulation	New	Residential Whole House Fan	Whole House Fan	No Whole House Fan	Per Home	199.1	15	1153.72	50%	91%	0.82	0.2	0
Single Family Detached	Water Heat GT 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Single Family Detached	Water Heat GT 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	1298.5	14	5020.00	90%	100%	0.57	0.2	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	20%	79%	0.05	2.6	98
Single Family Detached	Water Heat GT 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	30%	90%	0.14	0.9	0
Single Family Detached	Water Heat GT 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	60%	90%	0.14	0.9	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)
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Detached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Detached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	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)
Single Family Detached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Detached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Detached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Detached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Detached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Detached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Detached	Water Heat GT 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Detached	Water Heat GT 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	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)
Single Family Detached	Water Heat GT 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Single Family Detached	Water Heat GT 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	36.0	14	100.00	90%	100%	0.41	0.3	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	27
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	574.1	12	1.04	95%	95%	0.00	349.2	1,057
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	574.1	12	1.04	95%	95%	0.00	349.2	27
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	405.2	12	0.69	95%	80%	0.00	369.7	0
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	405.2	12	0.69	95%	80%	0.00	369.7	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	236.4	12	0.35	95%	65%	0.00	431.3	0
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	236.4	12	0.35	95%	65%	0.00	431.3	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	270.2	12	5.59	95%	15%	0.00	30.6	79

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)
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	9.71	95%	42%	0.00	25.6	412
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	11
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	8.09	95%	65%	0.00	23.0	0
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	75%	0.00	38.3	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	6.47	95%	45%	0.00	19.2	0
Single Family Detached	Water Heat GT 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	65%	0.00	38.3	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	250.6	9	3.24	95%	25%	0.00	38.3	121
Single Family Detached	Water Heat GT 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	90
Single Family Detached	Water Heat GT 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	2
Single Family Detached	Water Heat GT 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Single Family Detached	Water Heat GT 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Heat Pump Water Heater > 55 GAL - EF 1.97	Per Installation	164.6	15	6534.00	90%	100%	5.61	0.0	0
Single Family Detached	Water Heat GT 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	25%	92%	0.05	1.9	44
Single Family Detached	Water Heat GT 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	231.0	7	50.00	0%	92%	0.05	1.9	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)
Single Family Detached	Water Heat GT 55 Gal	Existing	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	23
Single Family Detached	Water Heat GT 55 Gal	New	Water Heater Temperature Setback	120 degrees	130 degrees	Per Home	105.9	4	1.00	95%	15%	0.00	26.3	1
Single Family Detached	Water Heat LE 55 Gal	Existing	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	0
Single Family Detached	Water Heat LE 55 Gal	New	CO2 Heat Pump Water Heater	CO2 Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	2362.0	14	5900.00	90%	100%	0.37	0.3	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Desuperheater (on existing GSHP)	Desuperheater (on existing GSHP)	No Desuperheater	Per Home	567.5	30	250.00	20%	79%	0.05	2.6	2,252
Single Family Detached	Water Heat LE 55 Gal	Existing	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	30%	90%	0.14	0.9	0
Single Family Detached	Water Heat LE 55 Gal	New	Drain Water Heat Recovery Device	Drain Water Heat Recovery	No Heat Exchanger	Per Home	375.1	25	463.82	60%	90%	0.14	0.9	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	232.9	11	201.86	99%	72%	0.15	0.7	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)
Single Family Detached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Detached	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 Home	66.7	11	76.38	99%	72%	0.19	0.5	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Detached	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 2011 Clothes Washer - MEF 1.26 and WF 9.5 (Electric DHW & Dryer)	Per Home	297.7	11	310.97	99%	5%	0.18	0.6	0
Single Family Detached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Detached	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 Home	131.5	11	185.49	99%	5%	0.24	0.4	0
Single Family Detached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	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)
Single Family Detached	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 Home	67.8	11	109.11	99%	5%	0.27	0.4	0
Single Family Detached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Detached	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 Home	9.5	10	7.92	76%	56%	0.15	0.7	0
Single Family Detached	Water Heat LE 55 Gal	Existing	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Detached	Water Heat LE 55 Gal	New	ENERGY STAR Dishwashers (Gas 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 Home	9.5	10	7.92	0%	56%	0.15	0.7	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.4	14	116.00	90%	100%	0.26	0.4	0
Single Family Detached	Water Heat LE 55 Gal	New	Efficient Electric Water Heaters	Efficient Electric Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	65.3	14	116.00	90%	100%	0.26	0.4	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1440.7	14	945.00	90%	100%	0.10	1.1	28,016
Single Family Detached	Water Heat LE 55 Gal	New	Heat Pump Water Heater	Heat Pump Water Heater	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1438.5	14	945.00	90%	100%	0.10	1.1	952

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)
Single Family Detached	Water Heat LE 55 Gal	Existing	Heater Pipe Insulation	R-4 Wrap	No insulation	Per Home	30.0	13	9.00	95%	80%	0.05	2.3	588
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	574.1	12	1.04	95%	95%	0.00	349.2	26,312
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	0.5 GPM	2.2 GPM	Per Home	574.1	12	1.04	95%	95%	0.00	349.2	697
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	405.2	12	0.69	95%	80%	0.00	369.7	0
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.0 GPM	2.2 GPM	Per Home	405.2	12	0.69	95%	80%	0.00	369.7	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	236.4	12	0.35	95%	65%	0.00	431.3	0
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Faucet Aerator (Bathroom/Kitchen)	1.5 GPM	2.2 GPM	Per Home	236.4	12	0.35	95%	65%	0.00	431.3	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Faucet Aerator (Bathroom/Kitchen)	2.2 GPM	Existing Faucet Aerator (3.0 GPM)	Per Home	270.2	12	5.59	95%	15%	0.00	30.6	1,955
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	9.71	95%	42%	0.00	25.6	10,244
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.5 GPM	2.5 GPM	Per Home	501.1	9	6.47	95%	42%	0.00	38.3	271
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	8.09	95%	65%	0.00	23.0	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)
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Showerhead	1.75 GPM	2.5 GPM	Per Home	375.9	9	4.85	95%	75%	0.00	38.3	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	6.47	95%	45%	0.00	19.2	0
Single Family Detached	Water Heat LE 55 Gal	New	Low Flow Showerhead	2.0 GPM	2.5 GPM	Per Home	250.6	9	3.24	95%	65%	0.00	38.3	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Low Flow Showerhead	2.5 GPM	Existing Showerhead (3.0 GPM)	Per Home	250.6	9	3.24	95%	25%	0.00	38.3	3,022
Single Family Detached	Water Heat LE 55 Gal	Existing	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	2,244
Single Family Detached	Water Heat LE 55 Gal	New	Showerstart	Add Thermostatic Shower Restriction Valve	No Thermostatic Shower Restriction Valve	Per Home	186.1	10	40.46	90%	100%	0.04	2.5	59
Single Family Detached	Water Heat LE 55 Gal	Existing	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1534.4	15	5236.93	90%	100%	0.48	0.2	0
Single Family Detached	Water Heat LE 55 Gal	New	Solar Water Heaters	Solar Water Heaters	Federal Standard 2015 Storage Water Heater = 55 GAL - EF 0.95	Per Installation	1532.1	15	5236.93	90%	100%	0.48	0.2	0
Single Family Detached	Water Heat LE 55 Gal	Existing	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	25%	92%	0.04	2.4	1,278
Single Family Detached	Water Heat LE 55 Gal	New	Water Heater Tank Wrap	Install Insulation (R-10)	No Tank Insulation	Per Home	296.7	7	50.00	0%	92%	0.04	2.4	0

Commercial Measure Details

Table 6. Commercial Measure Details

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	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	1.89	4	$7.32	95%	86%	$1.40	0.1	0
Education	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	1.97	4	$7.32	95%	86%	$1.35	0.1	0
Education	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.18	4	$0.00	90%	100%	$0.00	2,996.0	171
Education	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.18	4	$0.00	90%	100%	$0.00	2,996.0	5
Education	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	9509.99	5	$2,113.33	50%	80%	$0.07	1.3	359
Education	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	9509.99	5	$2,113.33	50%	80%	$0.07	1.3	8
Education	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	64.88	12	$0.00	75%	95%	$0.00	102,293.5	6
Education	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	64.88	12	$0.00	75%	95%	$0.00	102,293.5	0
Education	Cooking	Existing	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	397.98	12	$7.50	5%	95%	$0.00	31.4	2
Education	Cooking	New	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	397.98	12	$7.50	5%	95%	$0.00	31.4	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	Cooking	Existing	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	238.79	12	$0.00	90%	90%	$0.00	376,498.5	24
Education	Cooking	New	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	238.79	12	$0.00	90%	90%	$0.00	376,498.5	1
Education	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	72.64	12	$0.00	20%	55%	$0.00	114,535.0	0
Education	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	72.64	12	$0.00	20%	55%	$0.00	114,535.0	0
Education	Cooking	Existing	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	35.69	12	$7.88	0%	95%	$0.04	2.7	0
Education	Cooking	New	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	35.69	12	$7.88	0%	95%	$0.04	2.7	0
Education	Cooking	Existing	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	35.80	12	$0.00	95%	95%	$0.00	112,875.3	4
Education	Cooking	New	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	35.80	12	$0.00	95%	95%	$0.00	112,875.3	0
Education	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	118.66	12	$112.28	95%	95%	$0.15	0.6	0
Education	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	118.66	12	$112.28	95%	95%	$0.15	0.6	0
Education	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	7965.12	10	$536.49	100%	67%	$0.01	9.0	47
Education	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	8232.74	15	######	60%	100%	$4.50	0.0	0
Education	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	98.09	20	$18,951.18	95%	95%	$23.86	0.0	0
Education	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	97.76	20	$18,951.18	95%	95%	$23.94	0.0	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	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	41.16	15	$1,685.00	95%	95%	$5.79	0.0	0
Education	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2065.24	10	$8,646.25	95%	65%	$0.75	0.2	0
Education	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	2058.19	10	$8,646.25	95%	65%	$0.76	0.1	0
Education	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	22730.85	15	######	25%	62%	$0.15	0.8	0
Education	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13768.28	15	$11,890.94	25%	95%	$0.12	1.0	0
Education	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13721.24	15	$11,890.94	75%	95%	$0.12	1.0	0
Education	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	826.10	10	######	95%	81%	$7.24	0.0	0
Education	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	3304.39	10	$6,573.89	25%	24%	$0.36	0.3	0
Education	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)	Per Building	0.21	20	$0.40	90%	100%	$0.23	0.6	0
Education	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)	Per Building	0.21	20	$0.40	90%	100%	$0.23	0.6	0
Education	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)	Per Building	0.07	20	$0.13	90%	100%	$0.23	0.6	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	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)	Per Building	0.07	20	$0.13	90%	100%	$0.23	0.6	0
Education	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)	Per Building	0.16	20	$0.30	90%	100%	$0.23	0.6	0
Education	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)	Per Building	0.16	20	$0.30	90%	100%	$0.23	0.6	0
Education	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	8260.97	15	######	95%	75%	$0.84	0.1	0
Education	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	128.67	8	$1,205.21	10%	90%	$1.97	0.1	0
Education	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	6174.56	7	######	75%	85%	$1.83	0.1	0
Education	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	423.90	20	######	75%	99%	$133.64	0.0	0
Education	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	422.45	20	######	75%	99%	$134.10	0.0	0
Education	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6975.93	30	$765.97	20%	84%	$0.01	11.9	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)
Education	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6952.10	30	$765.97	80%	84%	$0.01	11.8	1
Education	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	6608.78	7	$13,217.06	75%	75%	$0.46	0.2	0
Education	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	7434.87	18	$50,123.16	1%	98%	$0.87	0.1	0
Education	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	7409.47	18	$50,123.16	1%	98%	$0.87	0.1	0
Education	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	10027.41	13	$2,740.51	75%	98%	$0.04	2.8	53
Education	Cooling Chillers	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	19255.61	15	$4,225.62	10%	66%	$0.03	3.9	8
Education	Cooling Chillers	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	15735.18	15	$2,600.38	10%	95%	$0.02	5.2	10
Education	Cooling Chillers	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	15681.42	15	$2,600.38	50%	95%	$0.02	5.1	1
Education	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2065.24	5	$5,766.39	50%	95%	$0.84	0.1	0
Education	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2058.19	5	$5,766.39	50%	95%	$0.85	0.1	0
Education	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	10812.01	10	$536.49	100%	67%	$0.01	12.3	258
Education	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	864.96	20	$18,951.18	95%	95%	$2.71	0.1	0
Education	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	838.24	20	$18,951.18	95%	95%	$2.79	0.1	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	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	54.34	15	$1,685.00	95%	95%	$4.38	0.0	0
Education	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	2803.40	10	$8,646.25	95%	65%	$0.56	0.2	0
Education	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	2716.78	10	$8,646.25	95%	65%	$0.57	0.2	0
Education	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	30855.29	15	######	25%	62%	$0.11	1.1	104
Education	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	18689.33	15	$11,890.94	25%	95%	$0.09	1.3	107
Education	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	18111.88	15	$11,890.94	75%	95%	$0.09	1.3	7
Education	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	11213.60	15	$13,821.80	95%	95%	$0.17	0.7	0
Education	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	5090.91	5	$2,631.47	95%	45%	$0.16	0.7	0
Education	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	Per Building	0.05	15	$0.13	90%	100%	$0.34	0.4	0
Education	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	Per Building	0.05	15	$0.13	90%	100%	$0.34	0.4	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	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	Per Building	0.08	15	$0.21	90%	100%	$0.35	0.3	0
Education	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	Per Building	0.08	15	$0.21	90%	100%	$0.35	0.3	0
Education	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5831.07	15	$12,192.86	25%	99%	$0.30	0.4	0
Education	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5650.91	15	$6,502.86	25%	99%	$0.16	0.7	0
Education	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	1037.95	15	$9,398.09	95%	64%	$1.28	0.1	0
Education	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	1037.95	15	$7,142.55	45%	80%	$0.97	0.1	0
Education	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	26476.55	15	######	90%	100%	$1.12	0.1	0
Education	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	8150.35	7	######	95%	85%	$1.39	0.1	0
Education	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	3737.87	20	######	75%	99%	$15.16	0.0	0
Education	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	3622.38	20	######	75%	99%	$15.64	0.0	0
Education	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	5090.91	10	$2,702.59	95%	24%	$0.10	1.2	31

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	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	9469.26	30	$765.97	20%	84%	$0.01	16.1	49
Education	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	9176.69	30	$765.97	80%	84%	$0.01	15.6	5
Education	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	14934.31	10	######	10%	45%	$0.14	0.8	0
Education	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	8970.88	7	$13,217.06	95%	75%	$0.34	0.3	0
Education	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	10092.24	18	$50,123.16	1%	98%	$0.64	0.2	0
Education	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	9780.41	18	$50,123.16	1%	98%	$0.66	0.2	0
Education	Cooling DX	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	26137.94	15	$4,225.62	10%	66%	$0.02	5.3	43
Education	Cooling DX	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	21359.24	15	$2,600.38	10%	95%	$0.02	7.0	53
Education	Cooling DX	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	20699.29	15	$2,600.38	50%	95%	$0.02	6.8	7
Education	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2803.40	5	$5,766.39	50%	95%	$0.62	0.2	0
Education	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2716.78	5	$5,766.39	50%	95%	$0.64	0.2	0
Education	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	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)
Education	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	0
Education	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.04	4	$0.00	90%	100%	$0.00	743.5	21
Education	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.04	4	$0.00	90%	100%	$0.00	743.5	0
Education	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.00	3.2	0
Education	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.00	3.2	0
Education	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	32779.53	10	$536.49	100%	67%	$0.00	32.2	287
Education	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	720.74	20	$18,951.18	95%	95%	$3.25	0.0	0
Education	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	690.62	20	$18,951.18	95%	95%	$3.39	0.0	0
Education	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	Per Building	0.15	15	$0.04	90%	100%	$0.04	2.5	0
Education	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	Per Building	0.15	15	$0.04	90%	100%	$0.04	2.5	0
Education	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	Per Building	0.28	15	$0.08	90%	100%	$0.04	2.4	75
Education	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	Per Building	0.28	15	$0.08	90%	100%	$0.04	2.4	3

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	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	5546.39	15	$1,685.00	95%	95%	$0.04	2.4	46
Education	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	3537.17	15	$1,685.00	95%	95%	$0.07	1.5	1
Education	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	10259.39	10	$8,646.25	95%	65%	$0.15	0.6	0
Education	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	9830.53	10	$8,646.25	95%	65%	$0.16	0.6	0
Education	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	112918.81	15	######	25%	62%	$0.03	3.5	146
Education	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	68395.96	15	$11,890.94	25%	95%	$0.02	4.2	147
Education	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	65536.84	15	$11,890.94	75%	95%	$0.03	4.0	10
Education	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	9343.94	15	######	95%	95%	$0.20	0.5	0
Education	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	4242.10	5	$2,631.47	95%	45%	$0.19	0.5	0
Education	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	18804.05	15	$12,192.86	25%	99%	$0.09	1.1	42

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	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	18017.99	15	$6,502.86	25%	99%	$0.05	2.0	1
Education	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	864.89	15	$9,398.09	95%	64%	$1.54	0.1	0
Education	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	864.89	15	$7,142.55	45%	80%	$1.17	0.1	0
Education	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	29491.58	7	######	95%	85%	$0.38	0.2	0
Education	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	9274.30	20	######	75%	99%	$6.11	0.0	0
Education	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	8886.61	20	######	75%	99%	$6.37	0.0	0
Education	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	Per Building	1.05	15	$9.26	90%	100%	$1.24	0.1	0
Education	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	Per Building	1.05	15	$9.26	90%	100%	$1.24	0.1	0
Education	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	4242.10	10	$2,560.35	95%	24%	$0.11	0.9	0
Education	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	7890.44	30	$765.97	20%	84%	$0.01	11.5	12

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	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	7560.60	30	$765.97	80%	84%	$0.01	11.0	1
Education	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	14934.31	10	######	10%	45%	$0.14	0.7	0
Education	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	32830.06	7	$13,217.06	95%	75%	$0.09	1.0	0
Education	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	8409.54	18	$50,123.16	1%	98%	$0.77	0.1	0
Education	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	8058.01	18	$50,123.16	1%	98%	$0.80	0.1	0
Education	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	121879.85	15	######	50%	95%	$2.04	0.1	0
Education	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	116784.98	15	######	95%	95%	$2.13	0.1	0
Education	Heat Pump	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	95655.07	15	$4,225.62	10%	66%	$0.01	16.5	60
Education	Heat Pump	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	78166.81	15	$2,600.38	10%	95%	$0.00	22.0	72
Education	Heat Pump	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	74899.25	15	$2,600.38	50%	95%	$0.00	21.0	10
Education	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	Per Building	0.94	15	$0.86	90%	100%	$0.13	0.8	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	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	Per Building	0.94	15	$0.86	90%	100%	$0.13	0.8	0
Education	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	10259.39	5	$5,766.39	50%	95%	$0.17	0.5	0
Education	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	9830.53	5	$5,766.39	50%	95%	$0.18	0.5	0
Education	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	2828.74	10	$100.00	85%	45%	$0.01	15.0	37
Education	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	7920.48	8	$300.49	50%	45%	$0.01	11.6	58
Education	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	7920.48	8	$300.49	50%	75%	$0.01	11.6	2
Education	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	6788.98	8	$358.78	10%	100%	$0.01	8.4	21
Education	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	8427.34	10	$100.00	85%	45%	$0.00	44.7	0
Education	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	48.96	13	$6.00	0%	85%	$0.02	5.4	0
Education	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	4198.18	8	######	65%	100%	$0.77	0.1	0
Education	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	22753.82	10	$6,688.65	10%	98%	$0.05	1.8	219
Education	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.16	13	$0.22	90%	100%	$0.21	0.5	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	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.16	13	$0.92	90%	100%	$0.90	0.1	0
Education	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.20	13	$0.43	90%	100%	$0.33	0.3	0
Education	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.05	13	$0.16	90%	100%	$0.49	0.2	0
Education	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.32	20	$2.91	90%	100%	$1.13	0.1	0
Education	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	20225.62	8	$4,451.37	90%	98%	$0.05	2.0	440
Education	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	20225.62	8	$358.78	10%	99%	$0.00	24.9	65
Education	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	48.61	10	$100.00	85%	45%	$0.37	0.3	0
Education	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	24.21	8	######	65%	100%	$133.77	0.0	0
Education	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	131.24	10	$6,688.65	10%	98%	$9.17	0.0	0
Education	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	Per Building	0.00	15	$0.00	90%	100%	$0.11	0.9	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)
					Sodium, Metal Halide									
Education	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	Per Building	0.00	15	$0.00	90%	100%	$0.08	1.3	8
Education	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	Per Building	0.01	20	$0.00	90%	100%	$0.05	2.1	1
Education	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	Per Building	0.01	20	$0.00	90%	100%	-$0.05	999.0	0
Education	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	116.65	8	$4,451.37	90%	98%	$8.01	0.0	0
Education	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	116.65	8	$358.78	10%	99%	$0.65	0.1	0
Education	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	76.04	10	$19.00	95%	25%	$0.04	2.1	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)
Education	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)	Per Building	0.20	15	$0.13	100%	100%	$0.09	1.1	0
Education	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)	Per Building	0.29	15	$0.19	100%	100%	$0.09	1.1	0
Education	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)	Per Building	0.59	15	$0.38	100%	100%	$0.09	1.1	86
Education	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	4758.14	8	######	65%	100%	$0.68	0.1	0
Education	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	56.41	16	$24.00	95%	50%	$0.06	1.8	3
Education	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	25788.77	10	$6,688.65	30%	98%	$0.05	2.0	14
Education	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	22923.35	8	$4,451.37	90%	98%	$0.04	2.3	8
Education	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	147.17	30	$15.00	75%	95%	$0.01	11.1	11
Education	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	147.17	30	$15.00	75%	95%	$0.01	11.1	0
Education	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	94.32	10	$100.00	85%	45%	$0.19	0.5	0
Education	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	46.99	8	######	65%	100%	$68.94	0.0	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	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	254.66	10	$6,688.65	10%	98%	$4.73	0.0	0
Education	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	Per Building	0.01	5	$0.00	90%	100%	$0.01	6.7	3
Education	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	Per Building	0.01	2	$0.00	90%	100%	$0.02	3.8	0
Education	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	Per Building	0.01	12	$0.00	90%	100%	$0.05	1.8	29
Education	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	226.36	8	$4,451.37	90%	98%	$4.13	0.0	0
Education	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	226.36	8	$358.78	10%	99%	$0.33	0.3	0
Education	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	58.23	15	$5.60	75%	75%	$0.01	7.7	4
Education	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	58.23	15	$5.60	75%	75%	$0.01	7.7	0
Education	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	######	75%	90%	$6.49	0.0	0
Education	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	######	100%	90%	$6.49	0.0	0
Education	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	24.35	4	$2.42	100%	20%	$0.04	2.4	1
Education	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	24.35	4	$2.42	100%	20%	$0.04	2.4	0
Education	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	914.78	10	$0.00	95%	20%	$0.00	999.0	22
Education	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	914.78	10	$0.00	95%	20%	$0.00	999.0	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)
Education	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	1.19	5	$4.88	95%	20%	$1.24	0.1	0
Education	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	1.19	5	$4.88	95%	20%	$1.24	0.1	0
Education	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	2183.77	5	$369.83	95%	95%	$0.05	1.8	67
Education	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	2183.77	5	$369.83	95%	95%	$0.05	1.8	2
Education	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.00	6	$0.00	90%	100%	$0.00	1,630.0	0
Education	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.00	6	$0.00	90%	100%	$0.00	1,630.0	0
Education	Pool Pump	Existing	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	Per Building	0.01	10	$0.00	100%	100%	$0.01	7.6	0
Education	Pool Pump	New	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	Per Building	0.01	10	$0.00	100%	100%	$0.01	7.6	0
Education	Pool Pump	Existing	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	Per Building	0.03	10	$0.00	100%	100%	$0.03	3.6	67
Education	Pool Pump	New	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	Per Building	0.03	10	$0.00	100%	100%	$0.03	3.6	3
Education	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.05	5	$0.00	90%	100%	$0.00	4,559.7	9
Education	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.05	5	$0.00	90%	100%	$0.00	4,559.7	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	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	2359.11	12	$161.48	50%	100%	$0.01	9.0	139
Education	Refrigeration	New	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	2359.11	12	$161.48	50%	100%	$0.01	9.0	3
Education	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	4342.28	12	$161.48	50%	100%	$0.01	16.5	273
Education	Refrigeration	New	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	4342.28	12	$161.48	50%	100%	$0.01	16.5	7
Education	Refrigeration	Existing	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	614.05	8	$99.68	95%	80%	$0.03	2.7	59
Education	Refrigeration	New	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	614.05	8	$99.68	95%	80%	$0.03	2.7	1
Education	Refrigeration	Existing	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	1481.78	8	$99.68	95%	80%	$0.01	6.5	141
Education	Refrigeration	New	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	1481.78	8	$99.68	95%	80%	$0.01	6.5	3
Education	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	3.01	12	$0.94	95%	81%	$0.05	2.0	0
Education	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	3.01	12	$0.94	95%	81%	$0.05	2.0	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	Refrigeration	Existing	Compressor VSD retrofit	Compressor VSD retrofit	Base Refrigeration System - Grocery	Per Refrigerator/Freezer Compressor Motor HP	238.70	15	$136.00	70%	86%	$0.08	1.3	11
Education	Refrigeration	Existing	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	238.34	10	$1,405.74	60%	80%	$1.06	0.1	0
Education	Refrigeration	New	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	238.34	10	$1,405.74	60%	80%	$1.06	0.1	0
Education	Refrigeration	Existing	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	59.59	10	$1,405.74	90%	100%	$4.25	0.0	0
Education	Refrigeration	New	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	59.59	10	$1,405.74	90%	100%	$4.25	0.0	0
Education	Refrigeration	Existing	Door Gasket - Cooler	Door Gasket - Cooler	Existing Gasket	Per linear foot of gasket on walk-in or reach-in cooler	230.03	4	$51.12	95%	90%	$0.08	1.1	25
Education	Refrigeration	Existing	Door Gasket - Freezer	Door Gasket - Freezer	Existing Gasket	Per linear foot of gasket on walk-in or reach-in freezer	805.11	4	$51.12	95%	90%	$0.02	3.8	86
Education	Refrigeration	Existing	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	721.69	15	$464.38	95%	93%	$0.09	1.1	80

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	Refrigeration	New	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	721.69	15	$464.38	95%	93%	$0.09	1.1	2
Education	Refrigeration	Existing	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	320.10	15	$428.47	10%	95%	$0.19	0.6	0
Education	Refrigeration	New	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	320.10	15	$428.47	5%	95%	$0.19	0.6	0
Education	Refrigeration	Existing	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	808.94	15	$76.68	90%	100%	$0.01	7.8	0
Education	Refrigeration	New	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	808.94	15	$76.68	90%	100%	$0.01	7.8	0
Education	Refrigeration	Existing	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	179.15	15	$82.86	65%	75%	$0.07	1.6	9
Education	Refrigeration	New	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	179.15	15	$82.86	95%	75%	$0.07	1.6	0
Education	Refrigeration	Existing	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	23.72	10	$52.80	75%	55%	$0.40	0.2	0
Education	Refrigeration	New	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	23.72	10	$52.80	95%	55%	$0.40	0.2	0
Education	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	172.82	15	$123.88	50%	85%	$0.10	1.0	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)
Education	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	172.82	15	$123.88	95%	92%	$0.10	1.0	0
Education	Refrigeration	Existing	Insulation for bare suction lines	Insulation for bare suction lines	No Insulation	Per linear feet of walk-in cooler/freezer suction line	552.77	11	$295.47	95%	50%	$0.09	1.1	20
Education	Refrigeration	Existing	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	805.27	8	$613.63	95%	80%	$0.16	0.6	0
Education	Refrigeration	New	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	805.27	8	$613.63	95%	80%	$0.16	0.6	0
Education	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	172.82	15	$123.88	50%	95%	$0.10	1.0	0
Education	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	172.82	15	$123.88	95%	95%	$0.10	1.0	0
Education	Refrigeration	Existing	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	4374.42	15	$2,348.23	95%	86%	$0.08	1.4	449
Education	Refrigeration	New	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	4374.42	15	$2,348.23	95%	86%	$0.08	1.4	11
Education	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	276.86	15	$576.72	95%	49%	$0.29	0.4	0
Education	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	276.86	15	$576.72	0%	49%	$0.29	0.4	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	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	1093.28	15	$576.72	95%	49%	$0.07	1.4	64
Education	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	1093.28	15	$576.72	0%	49%	$0.07	1.4	0
Education	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	816.42	15	$576.72	95%	49%	$0.10	1.0	48
Education	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	816.42	15	$576.72	0%	49%	$0.10	1.0	0
Education	Refrigeration	Existing	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per 1000 Building Sqft	2048.67	3	$6,252.70	10%	85%	$1.42	0.1	0
Education	Refrigeration	New	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per 1000 Building Sqft	2048.67	3	$6,252.70	5%	90%	$1.42	0.1	0
Education	Refrigeration	Existing	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	1007.19	4	$101.98	95%	78%	$0.04	2.4	94
Education	Refrigeration	New	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	1545.54	4	$101.98	95%	78%	$0.02	3.7	4
Education	Refrigeration	Existing	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	527.79	15	$319.49	75%	49%	$0.09	1.2	24
Education	Refrigeration	New	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	527.79	15	$319.49	95%	49%	$0.09	1.2	1
Education	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	1412.13	15	$319.49	75%	49%	$0.03	3.3	65

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	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	1412.13	15	$319.49	95%	49%	$0.03	3.3	2
Education	Refrigeration	Existing	eCube	eCube	No eCube	Per Walk-in	1561.65	9	$509.90	95%	95%	$0.06	1.5	177
Education	Refrigeration	New	eCube	eCube	No eCube	Per Walk-in	1561.65	9	$509.90	95%	95%	$0.06	1.5	4
Education	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.00	90%	100%	$0.09	1.0	0
Education	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.00	90%	100%	$0.09	1.0	0
Education	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.00	90%	100%	$0.10	1.0	16
Education	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.00	90%	100%	$0.10	1.0	1
Education	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	0
Education	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	0
Education	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	27318.40	15	######	25%	62%	$0.12	1.0	0
Education	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	16547.00	15	$11,890.94	25%	95%	$0.10	1.2	42
Education	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	16515.55	15	$11,890.94	75%	95%	$0.10	1.2	3
Education	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)	Per Building	0.03	12	$0.01	90%	100%	$0.04	3.0	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)
Education	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)	Per Building	0.03	12	$0.01	90%	100%	$0.04	3.0	0
Education	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.66	4	$7.32	95%	86%	$4.00	0.0	0
Education	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.66	4	$7.32	95%	86%	$4.02	0.0	0
Education	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.03	4	$0.04	90%	100%	$0.49	0.2	0
Education	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.03	4	$0.04	90%	100%	$0.49	0.2	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	28.1	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	2.9	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	1.9	0
Education	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	9793.30	10	$8,646.25	95%	65%	$0.16	0.6	0
Education	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	9793.30	10	$8,646.25	95%	65%	$0.16	0.6	0
Education	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	107788.85	15	######	25%	62%	$0.03	3.2	0
Education	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	65288.69	15	$11,890.94	25%	95%	$0.03	3.9	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	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	65288.69	15	$11,890.94	75%	95%	$0.03	3.9	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	1.0	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	1.9	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	129036.56	15	######	90%	100%	$0.23	0.4	0
Education	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	29379.91	7	######	95%	85%	$0.38	0.2	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	0.0	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	0.0	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	0.9	0
Education	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	91309.41	15	$4,225.62	10%	66%	$0.01	15.3	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	20.4	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	20.4	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	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	2.2	89
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	2.2	2
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	0.6	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	0.6	0
Education	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.02	90%	100%	$0.27	0.4	0
Education	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.02	90%	100%	$0.27	0.4	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	2.1	76
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	2.1	2
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	0.0	0
Education	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21522.43	15	$3,008.74	15%	95%	$0.02	5.4	370
Education	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	21522.43	15	$3,008.74	15%	95%	$0.02	5.4	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)
Education	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)	549.13	18	$3,020.92	75%	95%	$0.71	0.2	0
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)	549.13	18	$3,020.92	75%	95%	$0.71	0.2	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	0.0	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	0.0	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	95.4	177
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	95.4	4
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	48.7	88
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	48.7	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)
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	74.7	137
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	74.7	3
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	48.5	87
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	48.5	2
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	55.0	100
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	55.0	2
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	1.7	9
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	1.7	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	3.5	893

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	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	3.9	334
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	0.5	0
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	0.5	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	0.5	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	0.5	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	1.1	1
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	0.5	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	0.5	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 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	0.5	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	0.4	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 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	0.4	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 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	0.4	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	0.4	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	0.7	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	Per Residential Dishwasher	10.50	10	$8.75	100%	55%	$0.15	0.7	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)
					and 5.0 gal/cycle									
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	1.6	31
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	0.7	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	0.5	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	2.5	1
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	0.5	0
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	13.2	92
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	5.8	2
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	12.2	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	5.3	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	999.0	10
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	999.0	1
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	999.0	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	999.0	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	999.0	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 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	999.0	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	14.2	2
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	0.2	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	2.9	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	2.9	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	4.5	2
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	4.5	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	4.5	0
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	4.5	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	4.5	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	4.5	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	4.5	0
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	4.5	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	Per Building	0.08	15	$0.97	100%	100%	$6.11	0.0	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 GT 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Heat Pump Water Heater GT 55 Gal - EF 1.97	Per Building	0.08	15	$0.97	100%	100%	$6.11	0.0	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	0.2	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	0.2	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	Per Building	0.02	10	$0.01	90%	100%	$0.09	1.0	14
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	Per Building	0.02	10	$0.01	90%	100%	$0.09	1.0	0
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	4.4	14
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	1.0	1
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	1.0	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	1.0	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	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	1.0	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	1.0	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	1.0	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	0.5	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	0.5	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 8.0 (Electric DHW & Dryer)	Per Residential Clothes Washer	123.53	11	$174.28	100%	95%	$0.24	0.4	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 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	0.4	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	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	0.4	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	0.4	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	0.7	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	0.7	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	1.4	55
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	1.4	1
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	0.4	0
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	2.5	2
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	0.4	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	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	11.9	166
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	11.8	3
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	10.9	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	10.8	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	999.0	46
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	999.0	1
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	999.0	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	999.0	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	999.0	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	999.0	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	30.2	7
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	0.5	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	6.1	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	6.1	0
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	9.6	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)
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	9.6	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	9.6	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	9.6	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	9.6	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	9.6	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	9.6	2
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	9.6	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	Per Building	0.34	15	$0.75	100%	100%	$1.04	0.1	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	Per Building	0.34	15	$0.75	100%	100%	$1.04	0.1	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	0.3	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	0.3	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	Per Building	0.28	10	$0.12	90%	100%	$0.08	1.3	165
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	Per Building	0.28	10	$0.12	90%	100%	$0.08	1.3	6
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	4.0	26

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)
Grocery	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.15	4	$1.44	95%	86%	$3.38	0.0	0
Grocery	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.16	4	$1.44	95%	86%	$3.26	0.0	0
Grocery	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.07	4	$0.00	90%	100%	$0.00	2,996.0	44
Grocery	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.07	4	$0.00	90%	100%	$0.00	2,996.0	1
Grocery	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	776.50	5	$172.56	50%	80%	$0.07	1.3	92
Grocery	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	776.50	5	$172.56	50%	80%	$0.07	1.3	2
Grocery	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	108.13	12	$0.00	55%	95%	$0.00	105,867.3	22
Grocery	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	108.13	12	$0.00	55%	95%	$0.00	105,867.3	1
Grocery	Cooking	Existing	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	663.30	12	$12.50	5%	95%	$0.00	32.5	12
Grocery	Cooking	New	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	663.30	12	$12.50	5%	95%	$0.00	32.5	0
Grocery	Cooking	Existing	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	397.98	12	$0.00	90%	90%	$0.00	389,652.0	127

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)
Grocery	Cooking	New	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	397.98	12	$0.00	90%	90%	$0.00	389,652.0	3
Grocery	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	121.07	12	$0.00	20%	55%	$0.00	118,536.4	0
Grocery	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	121.07	12	$0.00	20%	55%	$0.00	118,536.4	0
Grocery	Cooking	Existing	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	59.48	12	$13.13	0%	95%	$0.04	2.8	0
Grocery	Cooking	New	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	59.48	12	$13.13	0%	95%	$0.04	2.8	0
Grocery	Cooking	Existing	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	59.66	12	$0.00	95%	95%	$0.00	116,818.7	21
Grocery	Cooking	New	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	59.66	12	$0.00	95%	95%	$0.00	116,818.7	1
Grocery	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	361.16	12	$187.13	95%	95%	$0.08	1.2	128
Grocery	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	361.16	12	$187.13	95%	95%	$0.08	1.2	3
Grocery	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	1977.36	10	$105.60	100%	86%	$0.01	11.1	0
Grocery	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	23.20	20	$6,528.00	95%	95%	$34.75	0.0	0
Grocery	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	23.12	20	$6,528.00	95%	95%	$34.87	0.0	0
Grocery	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	10.22	15	$1,685.00	95%	95%	$23.31	0.0	0
Grocery	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	5642.98	15	$8,192.00	25%	62%	$0.21	0.6	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)
Grocery	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	3418.01	15	$4,096.00	25%	95%	$0.17	0.7	0
Grocery	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	3406.33	15	$4,096.00	75%	95%	$0.17	0.7	0
Grocery	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)	Per Building	0.27	20	$0.69	90%	100%	$0.31	0.4	0
Grocery	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)	Per Building	0.27	20	$0.69	90%	100%	$0.31	0.4	0
Grocery	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)	Per Building	0.09	20	$0.23	90%	100%	$0.31	0.4	0
Grocery	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)	Per Building	0.09	20	$0.23	90%	100%	$0.31	0.4	0
Grocery	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)	Per Building	0.20	20	$0.51	90%	100%	$0.31	0.4	0
Grocery	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)	Per Building	0.20	20	$0.51	90%	100%	$0.31	0.4	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)
Grocery	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	2050.80	15	######	95%	75%	$1.15	0.1	0
Grocery	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	1532.85	7	$9,600.00	75%	85%	$1.45	0.1	0
Grocery	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	100.26	20	######	75%	99%	$194.63	0.0	0
Grocery	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	99.92	20	######	75%	99%	$195.30	0.0	0
Grocery	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1731.79	30	$199.01	20%	84%	$0.01	11.1	0
Grocery	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1725.87	30	$199.01	80%	84%	$0.01	11.1	0
Grocery	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	1640.64	7	$2,601.60	75%	75%	$0.37	0.3	0
Grocery	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1845.72	18	######	1%	98%	$1.02	0.1	0
Grocery	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	1839.42	18	######	1%	98%	$1.02	0.1	0
Grocery	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	6590.60	13	$2,157.73	75%	98%	$0.05	2.3	0
Grocery	Cooling Chillers	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	4780.25	15	$3,270.06	10%	66%	$0.10	1.2	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)
Grocery	Cooling Chillers	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	3906.29	15	$2,012.34	10%	95%	$0.07	1.6	0
Grocery	Cooling Chillers	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	3892.95	15	$2,012.34	50%	95%	$0.07	1.6	0
Grocery	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	512.70	5	$1,498.21	50%	95%	$0.88	0.1	0
Grocery	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	510.95	5	$1,498.21	50%	95%	$0.88	0.1	0
Grocery	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	2684.10	10	$105.60	100%	86%	$0.01	15.1	316
Grocery	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	214.73	20	$6,528.00	95%	95%	$3.75	0.0	0
Grocery	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	208.09	20	$6,528.00	95%	95%	$3.87	0.0	0
Grocery	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	13.49	15	$1,685.00	95%	95%	$17.66	0.0	0
Grocery	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	7659.89	15	$8,192.00	25%	62%	$0.15	0.8	0
Grocery	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	4639.67	15	$4,096.00	25%	95%	$0.12	0.9	0
Grocery	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	4496.31	15	$4,096.00	75%	95%	$0.13	0.9	0
Grocery	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	2783.80	15	$4,009.61	95%	95%	$0.20	0.6	0
Grocery	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	1263.83	5	$763.37	95%	45%	$0.18	0.6	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)
Grocery	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	Per Building	0.07	15	$0.19	90%	100%	$0.40	0.3	0
Grocery	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	Per Building	0.07	15	$0.19	90%	100%	$0.40	0.3	0
Grocery	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	Per Building	0.11	15	$0.31	90%	100%	$0.41	0.3	0
Grocery	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	Per Building	0.11	15	$0.31	90%	100%	$0.41	0.3	0
Grocery	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	1447.58	15	$2,400.00	5%	99%	$0.23	0.5	0
Grocery	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	1402.85	15	$1,280.00	5%	99%	$0.13	0.9	0
Grocery	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	257.67	15	$2,726.32	95%	55%	$1.50	0.1	0
Grocery	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	257.67	15	$2,072.01	45%	80%	$1.14	0.1	0
Grocery	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	6572.86	15	$60,671.15	90%	100%	$1.31	0.1	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)
Grocery	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	2023.34	7	$9,600.00	95%	85%	$1.10	0.1	0
Grocery	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	927.93	20	######	75%	99%	$21.03	0.0	0
Grocery	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	899.26	20	######	75%	99%	$21.70	0.0	0
Grocery	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	1263.83	10	$784.00	95%	24%	$0.11	1.0	0
Grocery	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	2350.76	30	$199.01	20%	84%	$0.01	15.1	38
Grocery	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	2278.13	30	$199.01	80%	84%	$0.01	14.6	4
Grocery	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	7482.20	10	$3,489.69	10%	45%	$0.08	1.3	35
Grocery	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	2227.04	7	$2,601.60	95%	75%	$0.27	0.4	0
Grocery	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	2505.42	18	######	1%	98%	$0.75	0.2	0
Grocery	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	2428.01	18	######	1%	98%	$0.77	0.2	0
Grocery	Cooling DX	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	6488.80	15	$3,270.06	10%	66%	$0.07	1.7	38

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)
Grocery	Cooling DX	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	5302.48	15	$2,012.34	10%	95%	$0.05	2.2	46
Grocery	Cooling DX	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	5138.64	15	$2,012.34	50%	95%	$0.06	2.1	6
Grocery	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	695.95	5	$1,498.21	50%	95%	$0.65	0.2	0
Grocery	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	674.45	5	$1,498.21	50%	95%	$0.67	0.2	0
Grocery	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	5
Grocery	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	0
Grocery	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.02	4	$0.00	90%	100%	$0.00	743.5	5
Grocery	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.02	4	$0.00	90%	100%	$0.00	743.5	0
Grocery	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.03	3.2	1
Grocery	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.03	3.2	0
Grocery	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	6974.59	10	$105.60	100%	86%	$0.00	35.6	386
Grocery	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	180.74	20	$6,528.00	95%	95%	$4.46	0.0	0
Grocery	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	173.44	20	$6,528.00	95%	95%	$4.65	0.0	0
Grocery	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	Per Building	0.16	15	$0.06	90%	100%	$0.05	1.9	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)
Grocery	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	Per Building	0.16	15	$0.06	90%	100%	$0.05	1.9	0
Grocery	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	Per Building	0.31	15	$0.12	90%	100%	$0.06	1.9	78
Grocery	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	Per Building	0.31	15	$0.12	90%	100%	$0.06	1.9	3
Grocery	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1100.25	15	$1,685.00	95%	95%	$0.22	0.5	0
Grocery	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	705.08	15	$1,685.00	95%	95%	$0.34	0.3	0
Grocery	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	23747.08	15	$8,192.00	25%	62%	$0.05	2.2	145
Grocery	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	14383.82	15	$4,096.00	25%	95%	$0.04	2.6	146
Grocery	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13803.23	15	$4,096.00	75%	95%	$0.04	2.5	11
Grocery	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	2343.16	15	$3,798.58	95%	95%	$0.23	0.5	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)
Grocery	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	1063.78	5	$763.37	95%	45%	$0.22	0.4	0
Grocery	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3984.78	15	$2,400.00	5%	99%	$0.09	1.3	9
Grocery	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3823.94	15	$1,280.00	5%	99%	$0.05	2.2	0
Grocery	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	216.89	15	$2,726.32	95%	55%	$1.78	0.1	0
Grocery	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	216.89	15	$2,072.01	45%	80%	$1.35	0.1	0
Grocery	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	6211.46	7	$9,600.00	95%	85%	$0.36	0.3	0
Grocery	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1561.57	20	######	75%	99%	$12.50	0.0	0
Grocery	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	1498.54	20	######	75%	99%	$13.02	0.0	0
Grocery	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	Per Building	1.17	15	$13.65	90%	100%	$1.64	0.1	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)
Grocery	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	Per Building	1.17	15	$13.65	90%	100%	$1.64	0.1	0
Grocery	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	1063.78	10	$742.74	95%	24%	$0.13	0.8	0
Grocery	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1978.67	30	$199.01	20%	84%	$0.01	11.4	15
Grocery	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	1898.80	30	$199.01	80%	84%	$0.01	10.9	2
Grocery	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	7482.20	10	$3,489.69	10%	45%	$0.08	1.2	15
Grocery	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	6904.23	7	$2,601.60	95%	75%	$0.09	1.1	211
Grocery	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	2108.84	18	######	1%	98%	$0.89	0.1	0
Grocery	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	2023.72	18	######	1%	98%	$0.93	0.1	0
Grocery	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	25631.60	15	######	50%	95%	$1.91	0.1	0
Grocery	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	24597.01	15	######	95%	95%	$1.99	0.1	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)
Grocery	Heat Pump	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	20116.47	15	$3,270.06	10%	66%	$0.02	4.6	59
Grocery	Heat Pump	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	16438.65	15	$2,012.34	10%	95%	$0.02	6.1	71
Grocery	Heat Pump	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	15775.13	15	$2,012.34	50%	95%	$0.02	5.9	10
Grocery	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	Per Building	1.00	15	$1.27	90%	100%	$0.18	0.6	0
Grocery	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	Per Building	1.00	15	$1.27	90%	100%	$0.18	0.6	0
Grocery	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2157.57	5	$1,498.21	50%	95%	$0.21	0.4	0
Grocery	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	2070.49	5	$1,498.21	50%	95%	$0.22	0.4	0
Grocery	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	556.80	10	$100.00	85%	45%	$0.03	3.0	16
Grocery	Lighting Exterior	Existing	LED or equivalent sign lighting	LED or equivalent sign lighting	Replace fluorescent sign lighting	Per Sign	1526.62	15	$17.36	100%	95%	$0.00	65.6	569
Grocery	Lighting Exterior	New	LED or equivalent sign lighting	LED or equivalent sign lighting	Replace fluorescent sign lighting	Per Sign	1526.62	15	$17.36	100%	95%	$0.00	65.6	14
Grocery	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	1559.04	8	$225.00	50%	45%	$0.03	3.1	27

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)
Grocery	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	1559.04	8	$225.00	50%	75%	$0.03	3.1	1
Grocery	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	1336.32	8	$205.02	10%	100%	$0.03	2.9	9
Grocery	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	4500.14	10	$100.00	85%	45%	$0.00	24.0	41
Grocery	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	139.80	13	$6.00	0%	85%	$0.01	15.5	0
Grocery	Lighting Interior Fluorescent	Existing	Fiber Optic Display Lighting	Fiber Optic Display Lighting	Existing Display Lighting	Per Case Door	3797.12	15	$4,951.69	50%	95%	$0.18	0.6	0
Grocery	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	5320.89	8	$4,678.78	65%	100%	$0.18	0.5	0
Grocery	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	12150.39	10	$2,304.00	10%	98%	$0.03	2.8	390
Grocery	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.36	13	$0.33	90%	100%	$0.14	0.7	0
Grocery	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.42	13	$1.05	90%	100%	$0.39	0.3	0
Grocery	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.53	13	$0.71	90%	100%	$0.21	0.5	0
Grocery	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.14	13	$0.27	90%	100%	$0.28	0.4	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)
Grocery	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.87	20	$3.22	90%	100%	$0.46	0.2	0
Grocery	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	10800.35	8	$876.19	45%	98%	$0.02	5.5	471
Grocery	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	10800.35	8	$205.02	10%	99%	$0.00	23.4	108
Grocery	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	240.46	10	$100.00	85%	45%	$0.07	1.3	6
Grocery	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	284.31	8	$4,678.78	65%	100%	$3.45	0.0	0
Grocery	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	649.23	10	$2,304.00	10%	98%	$0.64	0.2	0
Grocery	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	Per Building	0.03	15	$0.01	90%	100%	$0.04	2.6	0
Grocery	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	Per Building	0.11	15	$0.02	90%	100%	$0.03	3.7	120

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)
Grocery	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	Per Building	0.18	20	$0.03	90%	100%	$0.02	5.9	11
Grocery	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	Per Building	0.14	20	-$0.02	90%	100%	-$0.02	999.0	0
Grocery	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	577.10	8	$876.19	45%	98%	$0.32	0.3	0
Grocery	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	577.10	8	$205.02	10%	99%	$0.07	1.3	4
Grocery	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	76.04	10	$19.00	95%	25%	$0.04	2.1	2
Grocery	Lighting Interior Other	New	Fiber Optic Display Lighting	Fiber Optic Display Lighting	Existing Display Lighting	Per Case Door	3797.12	15	$4,951.69	50%	95%	$0.18	0.6	0
Grocery	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)	Per Building	0.70	15	$0.21	100%	100%	$0.04	2.4	0
Grocery	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)	Per Building	1.05	15	$0.31	100%	100%	$0.04	2.5	0
Grocery	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)	Per Building	2.10	15	$0.62	100%	100%	$0.04	2.5	201

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)
Grocery	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	7934.25	8	$4,678.78	65%	100%	$0.12	0.8	0
Grocery	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	56.41	16	$24.00	95%	50%	$0.06	1.8	9
Grocery	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	18118.08	10	$2,304.00	30%	98%	$0.02	4.2	33
Grocery	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	16104.96	8	$876.19	45%	98%	$0.01	8.2	10
Grocery	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	147.17	30	$15.00	75%	95%	$0.01	11.2	35
Grocery	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	147.17	30	$15.00	75%	95%	$0.01	11.2	1
Grocery	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	99.40	10	$100.00	85%	45%	$0.18	0.5	0
Grocery	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	117.53	8	$4,678.78	65%	100%	$8.36	0.0	0
Grocery	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	268.38	10	$2,304.00	10%	98%	$1.54	0.1	0
Grocery	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	Per Building	0.05	5	$0.00	90%	100%	$0.00	19.1	66
Grocery	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	Per Building	0.04	2	$0.00	90%	100%	$0.01	10.9	0
Grocery	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	Per Building	0.06	12	$0.01	90%	100%	$0.02	5.1	46

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)
Grocery	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	238.56	8	$876.19	45%	98%	$0.77	0.1	0
Grocery	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	238.56	8	$205.02	10%	99%	$0.18	0.5	0
Grocery	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	75%	75%	$0.01	7.7	1
Grocery	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	75%	75%	$0.01	7.7	0
Grocery	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	10.39	4	$1.03	100%	20%	$0.04	2.4	1
Grocery	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	10.39	4	$1.03	100%	20%	$0.04	2.4	0
Grocery	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	522.73	10	$0.00	95%	20%	$0.00	999.0	39
Grocery	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	522.73	10	$0.00	95%	20%	$0.00	999.0	1
Grocery	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	0.23	5	$0.96	95%	20%	$1.24	0.1	0
Grocery	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	0.23	5	$0.96	95%	20%	$1.24	0.1	0
Grocery	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	178.31	5	$30.20	95%	95%	$0.05	1.8	17
Grocery	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	178.31	5	$30.20	95%	95%	$0.05	1.8	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)
Grocery	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.01	6	$0.00	90%	100%	$0.00	1,630.0	0
Grocery	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.01	6	$0.00	90%	100%	$0.00	1,630.0	0
Grocery	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.03	5	$0.00	90%	100%	$0.00	4,559.7	3
Grocery	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.03	5	$0.00	90%	100%	$0.00	4,559.7	0
Grocery	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	7258.06	12	$496.82	95%	40%	$0.01	9.0	1,011
Grocery	Refrigeration	New	Anti-sweat heat (ASH) controls - Cooler	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per refrigerated/freezer case unit door	7258.06	12	$496.82	95%	40%	$0.01	9.0	25
Grocery	Refrigeration	Existing	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	13359.50	12	$496.82	95%	40%	$0.01	16.5	1,993
Grocery	Refrigeration	New	Anti-sweat heat (ASH) controls - Freezer	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per refrigerated/freezer case unit door	13359.50	12	$496.82	95%	40%	$0.01	16.5	49
Grocery	Refrigeration	Existing	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	1423.10	8	$231.01	95%	80%	$0.03	2.7	425
Grocery	Refrigeration	New	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	1423.10	8	$231.01	95%	80%	$0.03	2.7	10
Grocery	Refrigeration	Existing	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	3434.10	8	$231.01	95%	80%	$0.01	6.5	1,024
Grocery	Refrigeration	New	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	3434.10	8	$231.01	95%	80%	$0.01	6.5	25

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)
Grocery	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	5.02	12	$1.56	95%	81%	$0.05	2.0	2
Grocery	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	5.02	12	$1.56	95%	81%	$0.05	2.0	0
Grocery	Refrigeration	Existing	Compressor VSD retrofit	Compressor VSD retrofit	Base Refrigeration System - Grocery	Per Refrigerator/Freezer Compressor Motor HP	7245.31	15	$4,128.00	70%	86%	$0.08	1.3	1,326
Grocery	Refrigeration	Existing	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	552.37	10	$3,257.88	60%	60%	$1.06	0.1	0
Grocery	Refrigeration	New	Demand Defrost Electric	Demand Defrost Electric	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Fan	552.37	10	$3,257.88	60%	60%	$1.06	0.1	0
Grocery	Refrigeration	Existing	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	138.09	10	$3,257.88	90%	100%	$4.25	0.0	0
Grocery	Refrigeration	New	Demand Hot Gas Defrost	Demand Hot Gas Defrost	Base Refrigeration System - Grocery	Per Walk-in Refrigerator/Freezer Evaporator Coil	138.09	10	$3,257.88	90%	100%	$4.25	0.0	0
Grocery	Refrigeration	Existing	Door Gasket - Cooler	Door Gasket - Cooler	Existing Gasket	Per linear foot of gasket on walk-in or reach-in cooler	444.26	4	$118.47	95%	90%	$0.10	0.9	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)
Grocery	Refrigeration	Existing	Door Gasket - Freezer	Door Gasket - Freezer	Existing Gasket	Per linear foot of gasket on walk-in or reach-in freezer	2295.32	4	$118.47	95%	90%	$0.02	4.7	770
Grocery	Refrigeration	Existing	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	2220.36	15	$1,428.71	95%	93%	$0.09	1.1	767
Grocery	Refrigeration	New	ECM Case Motors	ECM Case Motors	Standard Case Motor	Per Refrigerator/Freezer Case Motor	2220.36	15	$1,428.71	95%	93%	$0.09	1.1	19
Grocery	Refrigeration	Existing	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	1912.54	15	$2,560.00	95%	95%	$0.19	0.6	0
Grocery	Refrigeration	New	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	1912.54	15	$2,560.00	80%	95%	$0.19	0.6	0
Grocery	Refrigeration	Existing	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	1874.76	15	$177.70	90%	100%	$0.01	7.8	0
Grocery	Refrigeration	New	Efficient compressor motor	Efficient compressor motor	Standard Compressor Motor	Per Refrigeration Equipment Compressor Motor	1874.76	15	$177.70	90%	100%	$0.01	7.8	0
Grocery	Refrigeration	Existing	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	5437.84	15	$2,515.20	65%	40%	$0.07	1.6	469

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)
Grocery	Refrigeration	New	Floating head pressure controller	Floating head pressure controller	Standard head pressure control	Per Refrigerator/Freezer Rated Horsepower of Compressor	5437.84	15	$2,515.20	95%	40%	$0.07	1.6	17
Grocery	Refrigeration	Existing	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	39.53	10	$88.00	75%	55%	$0.40	0.2	0
Grocery	Refrigeration	New	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	39.53	10	$88.00	95%	55%	$0.40	0.2	0
Grocery	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	531.68	15	$381.13	50%	85%	$0.10	1.0	89
Grocery	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	531.68	15	$381.13	95%	92%	$0.10	1.0	4
Grocery	Refrigeration	Existing	Insulation for bare suction lines	Insulation for bare suction lines	No Insulation	Per linear feet of walk-in cooler/freezer suction line	3302.67	11	$1,765.33	95%	50%	$0.09	1.1	459
Grocery	Refrigeration	Existing	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	2477.48	8	$1,887.91	95%	80%	$0.16	0.6	0
Grocery	Refrigeration	New	LED Refrigerated Case Door Lighting	LED Refrigerated Case Door Lighting	Standard Case Door Lighting	Per cooler or freezer display case door	2477.48	8	$1,887.91	95%	80%	$0.16	0.6	0
Grocery	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	531.68	15	$381.13	50%	95%	$0.10	1.0	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)
Grocery	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	531.68	15	$381.13	95%	95%	$0.10	1.0	0
Grocery	Refrigeration	Existing	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	10137.92	15	$5,442.13	95%	86%	$0.08	1.4	3,251
Grocery	Refrigeration	New	Quick acting freezer doors	Quick acting freezer doors	Standard Freezer Doors	Per Sqft of Freezer Door	10137.92	15	$5,442.13	95%	86%	$0.08	1.4	80
Grocery	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	851.78	15	$1,774.35	95%	49%	$0.29	0.4	0
Grocery	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	851.78	15	$1,774.35	0%	49%	$0.29	0.4	0
Grocery	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	3363.58	15	$1,774.35	95%	49%	$0.07	1.4	615
Grocery	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	3363.58	15	$1,774.35	0%	49%	$0.07	1.4	0
Grocery	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	2511.80	15	$1,774.35	95%	49%	$0.10	1.0	459
Grocery	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	2511.80	15	$1,774.35	0%	49%	$0.10	1.0	0
Grocery	Refrigeration	Existing	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per 1000 Building Sqft	12240.24	3	$1,230.76	95%	85%	$0.05	1.8	3,444
Grocery	Refrigeration	New	Refrigeration Commissioning	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per 1000 Building Sqft	12240.24	3	$1,230.76	80%	90%	$0.05	1.8	76

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)
Grocery	Refrigeration	Existing	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	11363.79	4	$236.34	95%	78%	$0.01	11.6	3,305
Grocery	Refrigeration	New	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	11363.79	4	$236.34	95%	78%	$0.01	11.6	81
Grocery	Refrigeration	Existing	Vertical night covers	Vertical night covers	No covers present	Per ft of vertical display case width	604.93	5	$518.48	95%	75%	$0.26	0.3	0
Grocery	Refrigeration	New	Vertical night covers	Vertical night covers	No covers present	Per ft of vertical display case width	604.93	5	$518.48	95%	75%	$0.26	0.3	0
Grocery	Refrigeration	Existing	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	1223.18	15	$740.43	75%	49%	$0.09	1.2	176
Grocery	Refrigeration	New	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	1223.18	15	$740.43	95%	49%	$0.09	1.2	5
Grocery	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	3272.68	15	$740.43	75%	49%	$0.03	3.3	472
Grocery	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	3272.68	15	$740.43	95%	49%	$0.03	3.3	15
Grocery	Refrigeration	Existing	eCube	eCube	No eCube	Per Walk-in	3619.20	9	$1,181.72	95%	95%	$0.06	1.5	1,282
Grocery	Refrigeration	New	eCube	eCube	No eCube	Per Walk-in	3619.20	9	$1,181.72	95%	95%	$0.06	1.5	32
Grocery	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.02	12	$0.01	90%	100%	$0.10	1.0	0
Grocery	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.02	12	$0.01	90%	100%	$0.10	1.0	0
Grocery	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.03	12	$0.02	90%	100%	$0.10	1.0	40
Grocery	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.03	12	$0.02	90%	100%	$0.10	1.0	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)
Grocery	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.01	90%	100%	$0.10	1.0	0
Grocery	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.01	12	$0.01	90%	100%	$0.10	1.0	0
Grocery	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	6781.85	15	$8,192.00	25%	62%	$0.17	0.7	0
Grocery	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	4107.83	15	$4,096.00	25%	95%	$0.14	0.8	0
Grocery	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	4100.02	15	$4,096.00	75%	95%	$0.14	0.8	0
Grocery	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)	Per Building	0.03	12	$0.01	90%	100%	$0.04	2.5	0
Grocery	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)	Per Building	0.03	12	$0.01	90%	100%	$0.04	2.5	0
Grocery	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.45	4	$1.44	95%	86%	$1.16	0.1	0
Grocery	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.45	4	$1.44	95%	86%	$1.17	0.1	0
Grocery	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.11	4	$0.15	90%	100%	$0.49	0.2	0
Grocery	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.11	4	$0.15	90%	100%	$0.49	0.2	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)
Grocery	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	5769.69	10	$105.60	100%	86%	$0.00	28.0	24
Grocery	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1346.26	15	$1,685.00	95%	95%	$0.18	0.6	0
Grocery	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	884.69	15	$1,685.00	95%	95%	$0.27	0.4	0
Grocery	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	21167.80	15	$8,192.00	25%	62%	$0.05	1.8	10
Grocery	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	12821.53	15	$4,096.00	25%	95%	$0.05	2.2	10
Grocery	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	12821.53	15	$4,096.00	75%	95%	$0.05	2.2	1
Grocery	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3384.88	15	$2,400.00	5%	99%	$0.10	1.0	1
Grocery	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3384.88	15	$1,280.00	5%	99%	$0.05	1.9	0
Grocery	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	25340.47	15	$60,671.15	90%	100%	$0.34	0.3	0
Grocery	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	5769.69	7	$9,600.00	95%	85%	$0.39	0.2	0
Grocery	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	955.04	20	######	75%	99%	$20.43	0.0	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)
Grocery	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	955.04	20	######	75%	99%	$20.43	0.0	0
Grocery	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	6154.33	7	$2,601.60	95%	75%	$0.10	0.9	0
Grocery	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	17931.53	15	$3,270.06	10%	66%	$0.03	3.9	4
Grocery	Space Heat	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	14653.18	15	$2,012.34	10%	95%	$0.02	5.2	5
Grocery	Space Heat	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	14653.18	15	$2,012.34	50%	95%	$0.02	5.2	1
Grocery	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	466.56	5	$61.72	100%	50%	$0.04	2.2	92
Grocery	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	466.56	5	$61.72	100%	50%	$0.04	2.2	2
Grocery	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	117.44	5	$54.86	100%	50%	$0.14	0.6	0
Grocery	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	117.44	5	$54.86	100%	50%	$0.14	0.6	0
Grocery	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.03	90%	100%	$0.27	0.4	0
Grocery	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.03	90%	100%	$0.27	0.4	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)
Grocery	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2814.24	5	$409.60	5%	85%	$0.04	2.0	47
Grocery	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2814.24	5	$409.60	5%	85%	$0.04	2.0	1
Grocery	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	198.59	20	$10,105.26	10%	95%	$6.28	0.0	0
Grocery	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	4509.94	15	$872.82	15%	95%	$0.03	3.8	242
Grocery	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	4509.94	15	$872.82	15%	95%	$0.03	3.8	6
Grocery	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)	243.87	18	$876.35	75%	95%	$0.46	0.2	0
Grocery	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)	243.87	18	$876.35	75%	95%	$0.46	0.2	0
Grocery	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	409.85	15	$3.05	95%	76%	$0.00	98.4	116
Grocery	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	409.85	15	$3.05	95%	76%	$0.00	98.4	3
Grocery	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	209.23	15	$3.05	95%	76%	$0.00	50.2	57

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)
Grocery	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	209.23	15	$3.05	95%	76%	$0.00	50.2	1
Grocery	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	321.22	15	$3.05	95%	76%	$0.00	77.1	90
Grocery	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	321.22	15	$3.05	95%	76%	$0.00	77.1	2
Grocery	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	208.36	15	$3.05	95%	76%	$0.00	50.0	57
Grocery	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	208.36	15	$3.05	95%	76%	$0.00	50.0	1
Grocery	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	236.37	15	$3.05	95%	76%	$0.00	56.7	65
Grocery	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	236.37	15	$3.05	95%	76%	$0.00	56.7	2
Grocery	Ventilation and Circulation	Existing	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	280.38	15	$124.25	25%	65%	$0.06	1.7	18
Grocery	Ventilation and Circulation	New	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	280.38	15	$124.25	25%	65%	$0.06	1.7	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)
Grocery	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	9175.47	13	$1,618.30	75%	98%	$0.03	3.7	2,472
Grocery	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	2383.44	13	$534.61	75%	98%	$0.03	2.9	470
Grocery	Water Heat GT 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	55.09	12	$71.78	50%	95%	$0.21	0.5	0
Grocery	Water Heat GT 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	55.09	12	$71.78	50%	95%	$0.21	0.5	0
Grocery	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	55.09	12	$71.78	50%	100%	$0.21	0.5	0
Grocery	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	55.09	12	$71.78	50%	100%	$0.21	0.5	0
Grocery	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	6818.47	25	$1,818.22	5%	100%	$0.03	3.8	2
Grocery	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	2976.59	25	$1,818.22	25%	100%	$0.07	1.7	0
Grocery	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	12.34	11	$14.13	100%	34%	$0.19	0.5	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)
Grocery	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	12.34	11	$14.13	100%	34%	$0.19	0.5	0
Grocery	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	24.31	11	$34.30	100%	95%	$0.24	0.4	0
Grocery	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	24.31	11	$34.30	100%	95%	$0.24	0.4	0
Grocery	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	12.53	11	$20.18	100%	95%	$0.27	0.4	0
Grocery	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	12.53	11	$20.18	100%	95%	$0.27	0.4	0
Grocery	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	6.00	10	$5.00	100%	25%	$0.15	0.6	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)
Grocery	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	6.00	10	$5.00	100%	55%	$0.15	0.6	0
Grocery	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	17148.44	14	$2,072.73	50%	95%	$0.02	5.7	52
Grocery	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	7486.12	14	$2,072.73	50%	95%	$0.04	2.5	2
Grocery	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	1025.56	8	$256.36	50%	75%	$0.05	1.8	2
Grocery	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	162.33	14	$47.43	100%	50%	$0.04	2.4	0
Grocery	Water Heat GT 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	170.46	15	$224.27	75%	90%	$0.19	0.6	0
Grocery	Water Heat GT 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	16685.17	7	$137.67	95%	100%	$0.00	47.5	212
Grocery	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	7283.88	7	$137.67	75%	100%	$0.00	20.7	4
Grocery	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	12203.09	7	$109.09	95%	90%	$0.00	43.8	0
Grocery	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	5327.24	7	$109.09	75%	90%	$0.00	19.1	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	420.21	12	$0.00	95%	75%	$0.00	999.0	4
Grocery	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	420.21	12	$0.00	95%	75%	$0.00	999.0	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	296.62	12	$0.00	95%	50%	$0.00	999.0	0
Grocery	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	296.62	12	$0.00	95%	50%	$0.00	999.0	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	173.03	12	$0.00	95%	35%	$0.00	999.0	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)
Grocery	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	173.03	12	$0.00	95%	35%	$0.00	999.0	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	197.75	12	$6.18	95%	25%	$0.01	19.6	1
Grocery	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	3.93	5	$5.27	95%	25%	$0.40	0.2	0
Grocery	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	35.62	5	$3.77	95%	75%	$0.03	2.8	0
Grocery	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	35.62	5	$3.77	95%	75%	$0.03	2.8	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	99.34	9	$1.54	75%	85%	$0.00	30.9	1
Grocery	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	99.34	9	$1.54	75%	85%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	74.50	9	$1.15	75%	75%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	74.50	9	$1.15	75%	75%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	49.67	9	$0.77	75%	50%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	49.67	9	$0.77	75%	50%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	49.67	9	$0.77	75%	35%	$0.00	30.9	0
Grocery	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	49.67	9	$0.77	75%	35%	$0.00	30.9	0
Grocery	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	Per Building	0.53	15	$1.68	100%	100%	$1.64	0.1	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)
Grocery	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	Per Building	0.53	15	$1.68	100%	100%	$1.64	0.1	0
Grocery	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	271.90	12	$748.38	75%	85%	$0.44	0.2	0
Grocery	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	271.90	12	$748.38	75%	85%	$0.44	0.2	0
Grocery	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	Per Building	0.16	10	$0.02	90%	100%	$0.03	3.7	25
Grocery	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	Per Building	0.16	10	$0.02	90%	100%	$0.03	3.7	1
Grocery	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	4772.93	2	$37.09	75%	94%	$0.01	16.1	24
Grocery	Water Heat LE 55 Gal	Existing	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	116.90	12	$71.78	50%	95%	$0.10	1.0	4
Grocery	Water Heat LE 55 Gal	New	Dishwashing - Commercial - High Temp	High Efficiency Dishwasher (ENERGY STAR)	Standard High Temp Commercial Dishwasher	Per Commercial Dishwasher	116.90	12	$71.78	50%	95%	$0.10	1.0	0
Grocery	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	116.90	12	$71.78	50%	100%	$0.10	1.0	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)
Grocery	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	116.90	12	$71.78	50%	100%	$0.10	1.0	0
Grocery	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	6197.06	25	$1,818.22	5%	100%	$0.03	3.5	8
Grocery	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	6172.51	25	$1,818.22	25%	100%	$0.03	3.5	1
Grocery	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	12.34	11	$14.13	100%	34%	$0.19	0.5	0
Grocery	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	12.34	11	$14.13	100%	34%	$0.19	0.5	0
Grocery	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	24.31	11	$34.30	100%	95%	$0.24	0.4	0
Grocery	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	24.31	11	$34.30	100%	95%	$0.24	0.4	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)
Grocery	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	12.53	11	$20.18	100%	95%	$0.27	0.4	0
Grocery	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	12.53	11	$20.18	100%	95%	$0.27	0.4	0
Grocery	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	6.00	10	$5.00	100%	25%	$0.15	0.6	0
Grocery	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	6.00	10	$5.00	100%	55%	$0.15	0.6	0
Grocery	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	15585.59	14	$2,072.73	50%	95%	$0.02	5.2	242
Grocery	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	15523.85	14	$2,072.73	50%	95%	$0.02	5.2	6
Grocery	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	932.10	8	$256.36	50%	75%	$0.06	1.6	9
Grocery	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	162.33	14	$47.43	100%	50%	$0.04	2.4	2
Grocery	Water Heat LE 55 Gal	Existing	Hot Water Circulation Pump Time-Clock	Hot Water Circulation Pump Time-Clock	No Time Clock	Per 1000 sqft	154.93	15	$224.27	75%	90%	$0.20	0.5	0
Grocery	Water Heat LE 55 Gal	Existing	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	15008.19	7	$137.67	95%	100%	$0.00	42.7	969

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)
Grocery	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	14948.73	7	$137.67	75%	100%	$0.00	42.5	15
Grocery	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	10894.33	7	$109.09	95%	90%	$0.00	39.1	0
Grocery	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	10851.17	7	$109.09	75%	90%	$0.00	39.0	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	891.65	12	$0.00	95%	75%	$0.00	999.0	44
Grocery	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	891.65	12	$0.00	95%	75%	$0.00	999.0	1
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	629.40	12	$0.00	95%	50%	$0.00	999.0	0
Grocery	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	629.40	12	$0.00	95%	50%	$0.00	999.0	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	367.15	12	$0.00	95%	35%	$0.00	999.0	0
Grocery	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	367.15	12	$0.00	95%	35%	$0.00	999.0	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	419.60	12	$6.18	95%	25%	$0.00	41.5	7
Grocery	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	8.34	5	$5.27	95%	25%	$0.19	0.5	0
Grocery	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	75.58	5	$3.77	95%	75%	$0.02	5.9	4
Grocery	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	75.58	5	$3.77	95%	75%	$0.02	5.9	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	210.79	9	$1.54	75%	85%	$0.00	65.7	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)
Grocery	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	210.79	9	$1.54	75%	85%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	158.09	9	$1.15	75%	75%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	158.09	9	$1.15	75%	75%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	105.39	9	$0.77	75%	50%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	105.39	9	$0.77	75%	50%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	105.39	9	$0.77	75%	35%	$0.00	65.7	2
Grocery	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	105.39	9	$0.77	75%	35%	$0.00	65.7	0
Grocery	Water Heat LE 55 Gal	Existing	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	Per Building	2.20	15	$1.30	100%	100%	$0.28	0.4	0
Grocery	Water Heat LE 55 Gal	New	Solar Water Heater	Solar Water Heater	Federal Standard 2015 Storage Water Heater LE 55 Gal - EF 0.95	Per Building	2.20	15	$1.30	100%	100%	$0.28	0.4	0
Grocery	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	576.95	12	$748.38	75%	85%	$0.21	0.5	0
Grocery	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	576.95	12	$748.38	75%	85%	$0.21	0.5	0
Grocery	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	Per Building	1.83	10	$0.21	90%	100%	$0.02	4.5	726
Grocery	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	Per Building	1.83	10	$0.21	90%	100%	$0.02	4.5	25
Grocery	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	4337.94	2	$37.09	75%	94%	$0.01	14.7	112

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	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.80	4	$3.24	95%	86%	$1.47	0.1	0
Healthcare	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.83	4	$3.24	95%	86%	$1.42	0.1	0
Healthcare	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.17	4	$0.00	90%	100%	$0.00	2,996.0	442
Healthcare	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.17	4	$0.00	90%	100%	$0.00	2,996.0	13
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	4008.50	5	$890.78	50%	80%	$0.07	1.3	927
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	4008.50	5	$890.78	50%	80%	$0.07	1.3	22
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	119,645.0	4
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	119,645.0	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	1.2	37
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	1.2	1
Healthcare	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	2987.82	10	$237.31	100%	63%	$0.01	7.3	74
Healthcare	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design	Per Building	5063.64	15	######	60%	100%	$3.24	0.0	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)
					and Cooling System									
Healthcare	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	36.80	20	$7,793.55	95%	95%	$26.16	0.0	0
Healthcare	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	36.67	20	$7,793.55	95%	95%	$26.25	0.0	0
Healthcare	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	25.32	15	$1,685.00	95%	95%	$9.41	0.0	0
Healthcare	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1270.25	10	$6,240.73	95%	93%	$0.88	0.1	0
Healthcare	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	1265.91	10	$6,240.73	95%	93%	$0.89	0.1	0
Healthcare	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	13980.86	15	$9,780.14	25%	62%	$0.10	1.2	54
Healthcare	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	8468.34	15	$4,890.07	25%	95%	$0.08	1.4	55
Healthcare	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	8439.40	15	$4,890.07	75%	95%	$0.08	1.4	4
Healthcare	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	508.10	10	$14,699.19	95%	81%	$5.21	0.0	0
Healthcare	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	2032.40	10	$5,205.28	25%	24%	$0.46	0.2	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)	Per Building	0.30	20	$0.71	90%	100%	$0.30	0.4	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	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)	Per Building	0.30	20	$0.71	90%	100%	$0.30	0.4	0
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)	Per Building	0.10	20	$0.24	90%	100%	$0.30	0.4	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)	Per Building	0.10	20	$0.24	90%	100%	$0.30	0.4	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)	Per Building	0.22	20	$0.53	90%	100%	$0.30	0.4	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)	Per Building	0.22	20	$0.53	90%	100%	$0.30	0.4	0
Healthcare	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	5081.00	15	######	95%	75%	$1.09	0.1	0
Healthcare	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	79.14	8	$954.30	10%	90%	$2.53	0.0	0
Healthcare	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	3797.73	7	######	75%	85%	$1.32	0.1	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	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	260.72	20	######	75%	99%	$89.36	0.0	0
Healthcare	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	259.83	20	######	75%	99%	$89.66	0.0	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	4290.62	30	$309.67	20%	84%	$0.01	17.3	24
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	4275.96	30	$309.67	80%	84%	$0.01	17.3	2
Healthcare	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4064.80	7	$5,846.51	75%	75%	$0.33	0.3	0
Healthcare	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4572.90	18	$36,178.12	1%	98%	$1.02	0.1	0
Healthcare	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	4557.28	18	$36,178.12	1%	98%	$1.03	0.1	0
Healthcare	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	1399.16	13	$242.45	75%	98%	$0.03	4.2	36
Healthcare	Cooling Chillers	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	11843.38	15	$3,020.49	10%	66%	$0.04	3.2	22
Healthcare	Cooling Chillers	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	9678.10	15	$1,858.77	10%	95%	$0.03	4.2	28
Healthcare	Cooling Chillers	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	9645.03	15	$1,858.77	50%	95%	$0.03	4.2	3
Healthcare	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1270.25	5	$2,331.29	50%	95%	$0.55	0.2	0
Healthcare	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1265.91	5	$2,331.29	50%	95%	$0.56	0.2	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 DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	4055.72	10	$237.31	100%	63%	$0.01	9.9	706
Healthcare	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	324.46	20	$7,793.55	95%	95%	$2.97	0.0	0
Healthcare	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	314.43	20	$7,793.55	95%	95%	$3.06	0.0	0
Healthcare	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	33.42	15	$1,685.00	95%	95%	$7.13	0.0	0
Healthcare	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1724.26	10	$6,240.73	95%	93%	$0.65	0.2	0
Healthcare	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	1670.99	10	$6,240.73	95%	93%	$0.67	0.2	0
Healthcare	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	18977.89	15	$9,780.14	25%	62%	$0.07	1.6	540
Healthcare	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	11495.08	15	$4,890.07	25%	95%	$0.06	1.9	546
Healthcare	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	11139.91	15	$4,890.07	75%	95%	$0.06	1.9	35
Healthcare	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	6897.05	15	$9,976.36	95%	95%	$0.20	0.6	0
Healthcare	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	1909.67	5	$1,899.35	95%	45%	$0.30	0.3	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 Package 240 to 760 kBtuh	Per Building	0.07	15	$0.21	90%	100%	$0.40	0.3	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 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	Per Building	0.07	15	$0.21	90%	100%	$0.40	0.3	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	Per Building	0.12	15	$0.34	90%	100%	$0.41	0.3	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	Per Building	0.12	15	$0.34	90%	100%	$0.41	0.3	0
Healthcare	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3586.47	15	$5,393.46	5%	99%	$0.21	0.5	0
Healthcare	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3475.65	15	$2,876.51	5%	99%	$0.12	1.0	0
Healthcare	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	389.35	15	$6,783.40	95%	75%	$2.46	0.1	0
Healthcare	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	389.35	15	$5,155.38	45%	80%	$1.87	0.1	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	16284.70	15	######	90%	100%	$1.31	0.1	0
Healthcare	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	5012.96	7	######	95%	85%	$1.00	0.1	0
Healthcare	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2299.02	20	######	75%	99%	$10.13	0.0	0
Healthcare	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2227.98	20	######	75%	99%	$10.46	0.0	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 DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	1909.67	10	$1,950.68	95%	24%	$0.18	0.6	0
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	5824.18	30	$309.67	20%	84%	$0.01	23.5	233
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	5644.22	30	$309.67	80%	84%	$0.01	22.8	23
Healthcare	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	16814.55	10	$8,682.75	10%	45%	$0.09	1.1	154
Healthcare	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	5517.64	7	$5,846.51	95%	75%	$0.25	0.4	0
Healthcare	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	6207.34	18	$36,178.12	1%	98%	$0.75	0.2	0
Healthcare	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	6015.55	18	$36,178.12	1%	98%	$0.78	0.2	0
Healthcare	Cooling DX	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	16076.43	15	$3,020.49	10%	66%	$0.03	4.3	220
Healthcare	Cooling DX	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	13137.24	15	$1,858.77	10%	95%	$0.02	5.8	267
Healthcare	Cooling DX	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	12731.33	15	$1,858.77	50%	95%	$0.02	5.6	32
Healthcare	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1724.26	5	$2,331.29	50%	95%	$0.41	0.2	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 DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1670.99	5	$2,331.29	50%	95%	$0.42	0.2	0
Healthcare	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	40
Healthcare	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	1
Healthcare	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.04	4	$0.00	90%	100%	$0.00	743.5	55
Healthcare	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.04	4	$0.00	90%	100%	$0.00	743.5	0
Healthcare	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.03	3.2	6
Healthcare	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.03	3.2	0
Healthcare	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	11447.53	10	$237.31	100%	63%	$0.00	26.5	1,740
Healthcare	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	278.50	20	$7,793.55	95%	95%	$3.46	0.0	0
Healthcare	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	268.03	20	$7,793.55	95%	95%	$3.59	0.0	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	Per Building	0.14	15	$0.07	90%	100%	$0.07	1.6	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	Per Building	0.14	15	$0.07	90%	100%	$0.07	1.6	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	Per Building	0.28	15	$0.14	90%	100%	$0.07	1.6	606

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	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	Per Building	0.28	15	$0.14	90%	100%	$0.07	1.6	21
Healthcare	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1858.79	15	$1,685.00	95%	95%	$0.13	0.9	0
Healthcare	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1204.04	15	$1,685.00	95%	95%	$0.20	0.6	0
Healthcare	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	4135.46	10	$6,240.73	95%	93%	$0.27	0.4	0
Healthcare	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	3979.92	10	$6,240.73	95%	93%	$0.28	0.4	0
Healthcare	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	45516.42	15	$9,780.14	25%	62%	$0.03	3.6	1,104
Healthcare	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	27569.71	15	$4,890.07	25%	95%	$0.03	4.3	1,116
Healthcare	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	26532.80	15	$4,890.07	75%	95%	$0.03	4.2	75
Healthcare	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	5920.16	15	$9,451.29	95%	95%	$0.23	0.5	0
Healthcare	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	1639.19	5	$1,899.35	95%	45%	$0.35	0.3	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	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	7752.02	15	$5,393.46	5%	99%	$0.10	1.1	66
Healthcare	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	7460.46	15	$2,876.51	5%	99%	$0.05	2.0	1
Healthcare	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	334.20	15	$6,783.40	95%	75%	$2.87	0.0	0
Healthcare	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	334.20	15	$5,155.38	45%	80%	$2.18	0.1	0
Healthcare	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	11939.76	7	######	95%	85%	$0.42	0.2	0
Healthcare	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	7657.63	20	######	75%	99%	$3.04	0.0	0
Healthcare	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	7369.63	20	######	75%	99%	$3.16	0.0	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	Per Building	1.08	15	$15.12	90%	100%	$1.98	0.1	0
Healthcare	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	Per Building	1.08	15	$15.12	90%	100%	$1.98	0.1	0
Healthcare	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	1639.19	10	$1,848.02	95%	24%	$0.20	0.5	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	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	4999.25	30	$309.67	20%	84%	$0.01	18.9	155
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	4811.23	30	$309.67	80%	84%	$0.01	18.2	16
Healthcare	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	16814.55	10	$8,682.75	10%	45%	$0.09	1.1	130
Healthcare	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	13233.46	7	$5,846.51	95%	75%	$0.10	0.9	0
Healthcare	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5328.15	18	$36,178.12	1%	98%	$0.88	0.1	0
Healthcare	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5127.75	18	$36,178.12	1%	98%	$0.91	0.1	0
Healthcare	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	49128.52	15	######	50%	95%	$2.24	0.1	0
Healthcare	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	47280.77	15	######	95%	95%	$2.33	0.1	0
Healthcare	Heat Pump	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	38557.58	15	$3,020.49	10%	66%	$0.01	9.8	449
Healthcare	Heat Pump	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	31508.24	15	$1,858.77	10%	95%	$0.01	13.0	546
Healthcare	Heat Pump	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	30323.20	15	$1,858.77	50%	95%	$0.01	12.5	70

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	Per Building	0.84	15	$1.40	90%	100%	$0.24	0.5	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	Per Building	0.84	15	$1.40	90%	100%	$0.24	0.5	0
Healthcare	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	4135.46	5	$2,331.29	50%	95%	$0.17	0.6	0
Healthcare	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	3979.92	5	$2,331.29	50%	95%	$0.18	0.5	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	6.7	93
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	7.0	163
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	7.0	7
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	3.5	56
Healthcare	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	5221.54	10	$100.00	85%	45%	$0.00	28.1	0
Healthcare	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	96.39	13	$6.00	0%	85%	$0.01	10.8	0
Healthcare	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	5398.67	8	$9,832.27	65%	100%	$0.38	0.3	0
Healthcare	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	14098.16	10	$2,750.66	10%	98%	$0.04	2.8	745

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	Per Building	0.20	13	$0.15	90%	100%	$0.11	0.9	0
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	Per Building	0.21	13	$0.63	90%	100%	$0.46	0.2	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.23	13	$0.33	90%	100%	$0.21	0.5	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.06	13	$0.11	90%	100%	$0.28	0.4	0
Healthcare	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.38	20	$1.94	90%	100%	$0.63	0.2	0
Healthcare	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	12531.70	8	$1,969.04	90%	98%	$0.03	2.9	1,500
Healthcare	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	12531.70	8	$385.91	10%	99%	$0.01	14.5	221
Healthcare	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	43.20	10	$100.00	85%	45%	$0.42	0.2	0
Healthcare	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	44.66	8	$9,832.27	65%	100%	$46.22	0.0	0
Healthcare	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	116.63	10	$2,750.66	10%	98%	$4.24	0.0	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	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	Per Building	0.00	15	$0.00	90%	100%	$0.07	1.4	0
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	Per Building	0.01	15	$0.00	90%	100%	$0.05	2.3	43
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	Per Building	0.01	20	$0.00	90%	100%	$0.03	3.8	4
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	Per Building	0.01	20	$0.00	90%	100%	-$0.02	999.0	0
Healthcare	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	103.67	8	$1,969.04	90%	98%	$3.99	0.0	0
Healthcare	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	103.67	8	$385.91	10%	99%	$0.78	0.1	0
Healthcare	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	456.22	10	$114.00	95%	25%	$0.04	2.2	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)
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)	Per Building	0.32	15	$0.11	100%	100%	$0.05	2.3	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)	Per Building	0.48	15	$0.16	100%	100%	$0.05	2.3	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)	Per Building	0.96	15	$0.32	100%	100%	$0.05	2.3	378
Healthcare	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	7166.81	8	$9,832.27	65%	100%	$0.29	0.3	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	1.9	105
Healthcare	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	18715.52	10	$2,750.66	30%	98%	$0.03	3.7	62
Healthcare	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	16636.01	8	$1,969.04	90%	98%	$0.02	3.8	35
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	11.3	413
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	11.3	7
Healthcare	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	725.33	10	$100.00	85%	45%	$0.02	3.9	25
Healthcare	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	749.94	8	$9,832.27	65%	100%	$2.75	0.0	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	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	1958.40	10	$2,750.66	10%	98%	$0.25	0.4	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	Per Building	0.32	5	$0.01	90%	100%	$0.01	13.5	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	Per Building	0.26	2	$0.00	90%	100%	$0.01	7.7	0
Healthcare	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	Per Building	0.34	12	$0.05	90%	100%	$0.03	3.6	937
Healthcare	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	1740.80	8	$1,969.04	90%	98%	$0.24	0.4	0
Healthcare	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	1740.80	8	$385.91	10%	99%	$0.05	2.0	16
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	7.7	13
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	7.7	0
Healthcare	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	43.92	4	$4.36	100%	20%	$0.04	2.4	7
Healthcare	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	43.92	4	$4.36	100%	20%	$0.04	2.4	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	999.0	144
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	999.0	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)
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	0.1	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	0.1	0
Healthcare	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	920.47	5	$155.89	95%	95%	$0.05	1.8	172
Healthcare	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	920.47	5	$155.89	95%	95%	$0.05	1.8	4
Healthcare	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.01	6	$0.00	90%	100%	$0.00	1,630.0	3
Healthcare	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.01	6	$0.00	90%	100%	$0.00	1,630.0	0
Healthcare	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.07	5	$0.00	90%	100%	$0.00	4,559.7	35
Healthcare	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.07	5	$0.00	90%	100%	$0.00	4,559.7	0
Healthcare	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.04	12	$0.03	90%	100%	$0.10	1.0	0
Healthcare	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.04	12	$0.03	90%	100%	$0.10	1.0	0
Healthcare	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.06	12	$0.03	90%	100%	$0.10	1.0	361
Healthcare	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.06	12	$0.03	90%	100%	$0.10	1.0	21
Healthcare	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.02	12	$0.01	90%	100%	$0.09	1.0	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	Per Building	0.02	12	$0.01	90%	100%	$0.09	1.0	0
Healthcare	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	16802.48	15	$9,780.14	25%	62%	$0.08	1.4	37
Healthcare	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	10177.42	15	$4,890.07	25%	95%	$0.07	1.7	37
Healthcare	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	10158.07	15	$4,890.07	75%	95%	$0.07	1.7	3
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)	Per Building	0.04	12	$0.01	90%	100%	$0.05	2.4	2
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)	Per Building	0.04	12	$0.01	90%	100%	$0.05	2.4	0
Healthcare	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	1.28	4	$3.24	95%	86%	$0.92	0.1	0
Healthcare	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	1.28	4	$3.24	95%	86%	$0.92	0.1	0
Healthcare	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.14	4	$0.20	90%	100%	$0.49	0.2	0
Healthcare	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.14	4	$0.20	90%	100%	$0.49	0.2	0
Healthcare	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	9558.41	10	$237.31	100%	63%	$0.00	21.0	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	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	2230.29	15	$1,685.00	95%	95%	$0.11	1.0	0
Healthcare	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	1465.62	15	$1,685.00	95%	95%	$0.16	0.6	0
Healthcare	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	3186.14	10	$6,240.73	95%	93%	$0.35	0.3	0
Healthcare	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	3186.14	10	$6,240.73	95%	93%	$0.35	0.3	0
Healthcare	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	35067.82	15	$9,780.14	25%	62%	$0.04	2.6	0
Healthcare	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	21240.90	15	$4,890.07	25%	95%	$0.03	3.1	0
Healthcare	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	21240.90	15	$4,890.07	75%	95%	$0.03	3.1	0
Healthcare	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5607.60	15	$5,393.46	5%	99%	$0.14	0.8	0
Healthcare	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	5607.60	15	$2,876.51	5%	99%	$0.07	1.4	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	41980.52	15	######	90%	100%	$0.51	0.2	0
Healthcare	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	9558.41	7	######	95%	85%	$0.52	0.2	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	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6820.32	20	######	75%	99%	$3.42	0.0	0
Healthcare	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6820.32	20	######	75%	99%	$3.42	0.0	0
Healthcare	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	10195.63	7	$5,846.51	95%	75%	$0.13	0.7	0
Healthcare	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	29706.43	15	$3,020.49	10%	66%	$0.01	7.1	0
Healthcare	Space Heat	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	24275.32	15	$1,858.77	10%	95%	$0.01	9.4	0
Healthcare	Space Heat	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	24275.32	15	$1,858.77	50%	95%	$0.01	9.4	0
Healthcare	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	736.51	5	$97.43	100%	50%	$0.04	2.2	283
Healthcare	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	736.51	5	$97.43	100%	50%	$0.04	2.2	7
Healthcare	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	185.40	5	$86.60	100%	50%	$0.14	0.6	0
Healthcare	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	185.40	5	$86.60	100%	50%	$0.14	0.6	0
Healthcare	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.02	90%	100%	$0.27	0.4	0
Healthcare	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.01	14	$0.02	90%	100%	$0.27	0.4	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	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	2.0	827
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	2.0	20
Healthcare	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	102.11	20	######	10%	95%	$27.47	0.0	0
Healthcare	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	2318.80	15	$2,171.66	15%	95%	$0.13	0.8	0
Healthcare	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	2318.80	15	$2,171.66	15%	95%	$0.13	0.8	0
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)	502.39	18	$2,180.46	75%	95%	$0.56	0.2	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 85% eff. ECPM motor	Per Air Handler Recirculating Fan Motor (1 HP or less)	502.39	18	$2,180.46	75%	95%	$0.56	0.2	0
Healthcare	Ventilation and Circulation	Existing	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	16.10	13	$3,050.87	65%	59%	$28.99	0.0	0
Healthcare	Ventilation and Circulation	New	Energy Efficient Laboratory Fume Hood	Energy Efficient Laboratory Fume Hood	Standard Fume Hood	Per Building	16.10	13	$3,050.87	65%	59%	$28.99	0.0	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	210.72	15	$6.86	95%	76%	$0.00	22.7	117

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 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	210.72	15	$6.86	95%	76%	$0.00	22.7	3
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	107.58	15	$6.86	95%	76%	$0.01	11.6	58
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	107.58	15	$6.86	95%	76%	$0.01	11.6	1
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	165.16	15	$6.86	95%	76%	$0.01	17.8	90
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	165.16	15	$6.86	95%	76%	$0.01	17.8	2
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	107.13	15	$6.86	95%	76%	$0.01	11.5	57
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	107.13	15	$6.86	95%	76%	$0.01	11.5	1
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	121.53	15	$6.86	95%	76%	$0.01	13.1	66
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	121.53	15	$6.86	95%	76%	$0.01	13.1	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	Ventilation and Circulation	Existing	VFD on HVAC Fan	VFD on HVAC Fan	Standard Motor	Per HVAC Fan Motor VFD (assuming 50 HP average)	1646.15	13	$181.84	75%	98%	$0.02	6.0	863
Healthcare	Ventilation and Circulation	Existing	VFD on HVAC Pump	VFD on HVAC Pump	Standard Motor	Per HVAC Pump Motor VFD (assuming 50 HP average)	570.13	13	$60.07	75%	98%	$0.02	6.3	309
Healthcare	Water Heat GT 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	96.58	25	$1,969.74	5%	100%	$2.32	0.1	0
Healthcare	Water Heat GT 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	42.16	25	$1,969.74	25%	100%	$5.31	0.0	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	0.5	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	0.5	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	0.4	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 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	0.4	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	0.4	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 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	0.4	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	5.65	10	$4.71	100%	25%	$0.15	0.6	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	5.65	10	$4.71	100%	55%	$0.15	0.6	0
Healthcare	Water Heat GT 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	242.90	14	$2,245.45	50%	95%	$1.36	0.1	0
Healthcare	Water Heat GT 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	106.04	14	$2,245.45	50%	95%	$3.11	0.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	14.53	8	$277.73	50%	75%	$4.01	0.0	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	175.85	14	$51.38	100%	58%	$0.04	2.4	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)
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	2.41	15	$224.27	75%	90%	$13.13	0.0	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	236.34	7	$149.15	95%	92%	$0.15	0.6	0
Healthcare	Water Heat GT 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	103.17	7	$149.15	75%	92%	$0.33	0.3	0
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	172.85	7	$118.18	95%	83%	$0.16	0.6	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	75.46	7	$118.18	75%	83%	$0.36	0.3	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	90.05	12	$0.00	95%	75%	$0.00	999.0	6
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	90.05	12	$0.00	95%	75%	$0.00	999.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	63.56	12	$0.00	95%	50%	$0.00	999.0	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	63.56	12	$0.00	95%	50%	$0.00	999.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	37.08	12	$0.00	95%	35%	$0.00	999.0	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	37.08	12	$0.00	95%	35%	$0.00	999.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	42.37	12	$6.95	95%	25%	$0.03	3.8	1
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	$8.63	75%	85%	$0.05	2.0	2
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	35.48	9	$8.63	75%	85%	$0.05	2.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	$6.47	75%	75%	$0.05	2.0	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	26.61	9	$6.47	75%	75%	$0.05	2.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	$4.31	75%	50%	$0.05	2.0	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	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	17.74	9	$4.31	75%	50%	$0.05	2.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	$4.31	75%	35%	$0.05	2.0	0
Healthcare	Water Heat GT 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	17.74	9	$4.31	75%	35%	$0.05	2.0	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	Per Building	0.00	15	$0.81	100%	100%	$125.22	0.0	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	Per Building	0.00	15	$0.81	100%	100%	$125.22	0.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	58.26	12	$840.90	75%	85%	$2.31	0.0	0
Healthcare	Water Heat GT 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	58.26	12	$840.90	75%	85%	$2.31	0.0	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	Per Building	0.00	10	$0.01	90%	100%	$1.94	0.0	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	Per Building	0.00	10	$0.01	90%	100%	$1.94	0.0	0
Healthcare	Water Heat GT 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	67.61	2	$40.18	75%	94%	$0.40	0.2	0
Healthcare	Water Heat LE 55 Gal	Existing	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	87.78	25	$1,969.74	5%	100%	$2.55	0.1	0
Healthcare	Water Heat LE 55 Gal	New	Drainwater Heat Recovery Water Heater	Drainwater Heat Recovery Water Heater	No Heat Exchanger	Per Water Heater	87.43	25	$1,969.74	25%	100%	$2.56	0.1	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	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	0.5	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	0.5	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	0.4	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 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	0.4	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 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	0.4	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	0.4	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	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	5.65	10	$4.71	100%	25%	$0.15	0.6	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	5.65	10	$4.71	100%	55%	$0.15	0.6	0
Healthcare	Water Heat LE 55 Gal	Existing	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	220.76	14	$2,245.45	50%	95%	$1.49	0.1	0
Healthcare	Water Heat LE 55 Gal	New	Heat Recovery Unit	Heat Recovery Unit (De-superheater)	Base Water Heating	Per Water Heater	219.89	14	$2,245.45	50%	95%	$1.50	0.1	0
Healthcare	Water Heat LE 55 Gal	Existing	Heat Trap	Heat Trap	No Heat Trap on Water Heater	Per Water Heater	13.20	8	$277.73	50%	75%	$4.42	0.0	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	175.85	14	$51.38	100%	58%	$0.04	2.4	17
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	2.19	15	$224.27	75%	90%	$14.45	0.0	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	212.59	7	$149.15	95%	92%	$0.16	0.6	0
Healthcare	Water Heat LE 55 Gal	New	Insulating Blanket (R=11)	Insulating Blanket (R=11)	No Insulating Blanket on Water Heater	Per Tank Wrap	211.74	7	$149.15	75%	92%	$0.16	0.6	0
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	154.31	7	$118.18	95%	83%	$0.18	0.5	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	153.70	7	$118.18	75%	83%	$0.18	0.5	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	191.07	12	$0.00	95%	75%	$0.00	999.0	44
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	0.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	191.07	12	$0.00	95%	75%	$0.00	999.0	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	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	134.87	12	$0.00	95%	50%	$0.00	999.0	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.0 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	134.87	12	$0.00	95%	50%	$0.00	999.0	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	78.68	12	$0.00	95%	35%	$0.00	999.0	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Faucet Aerators	1.5 GPM	2.2 GPM (Federal Code)	Per Faucet Aerator	78.68	12	$0.00	95%	35%	$0.00	999.0	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Faucet Aerators	2.2 GPM (Federal Code)	3.0 GPM	Per Faucet Aerator	89.91	12	$6.95	95%	25%	$0.01	8.0	7
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	$8.63	75%	85%	$0.02	4.2	15
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.5 GPM	2.5 GPM (Federal Code)	Per Showerhead	75.28	9	$8.63	75%	85%	$0.02	4.2	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	$6.47	75%	75%	$0.02	4.2	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	1.75 GPM	2.5 GPM (Federal Code)	Per Showerhead	56.46	9	$6.47	75%	75%	$0.02	4.2	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	$4.31	75%	50%	$0.02	4.2	0
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.0 GPM	2.5 GPM (Federal Code)	Per Showerhead	37.64	9	$4.31	75%	50%	$0.02	4.2	0
Healthcare	Water Heat LE 55 Gal	Existing	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	$4.31	75%	35%	$0.02	4.2	3
Healthcare	Water Heat LE 55 Gal	New	Low-Flow Showerheads	2.5 GPM (Federal Code)	3.0 GPM	Per Showerhead	37.64	9	$4.31	75%	35%	$0.02	4.2	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	Per Building	0.01	15	$0.63	100%	100%	$21.28	0.0	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	Per Building	0.01	15	$0.63	100%	100%	$21.28	0.0	0
Healthcare	Water Heat LE 55 Gal	Existing	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	123.63	12	$840.90	75%	85%	$1.09	0.1	0
Healthcare	Water Heat LE 55 Gal	New	Ultrasonic Faucet Control	Ultrasonic Faucet Control	Manual Faucet Control	Per Faucet Aerator	123.63	12	$840.90	75%	85%	$1.09	0.1	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	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	Per Building	0.01	10	$0.10	90%	100%	$1.60	0.1	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	Per Building	0.01	10	$0.10	90%	100%	$1.60	0.1	0
Healthcare	Water Heat LE 55 Gal	Existing	Water Heater Thermostat Setback	Water Heater Thermostat Setback	Constant setpoint	Per Building	61.45	2	$40.18	75%	94%	$0.44	0.2	0
Lodging	Computers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.20	4	$5.19	95%	86%	$9.36	0.0	0
Lodging	Computers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.21	4	$5.19	95%	86%	$9.02	0.0	0
Lodging	Computers	Existing	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.03	4	$0.00	90%	100%	$0.00	2,996.0	36
Lodging	Computers	New	Computer - ENERGY STAR	ENERGY STAR Computer	Standard Computer	Per Building	0.03	4	$0.00	90%	100%	$0.00	2,996.0	1
Lodging	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	1011.03	5	$224.67	50%	80%	$0.07	1.3	76
Lodging	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	1011.03	5	$224.67	50%	80%	$0.07	1.3	2
Lodging	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	151.38	12	$0.00	55%	95%	$0.00	104,046.6	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)
Lodging	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	151.38	12	$0.00	55%	95%	$0.00	104,046.6	0
Lodging	Cooking	Existing	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	928.62	12	$17.50	3%	95%	$0.00	31.9	7
Lodging	Cooking	New	Electric Steam cooker (Energy Star)	ENERGY STAR Steam Cooker	Standard Steam Cooker	Per Steam Cooker	928.62	12	$17.50	3%	95%	$0.00	31.9	0
Lodging	Cooking	Existing	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	557.18	12	$0.00	90%	90%	$0.00	382,950.9	113
Lodging	Cooking	New	Electric combination oven (Energy Star)	ENERGY STAR Combination Oven	Standard Combination Oven	Per Combination Oven	557.18	12	$0.00	90%	90%	$0.00	382,950.9	3
Lodging	Cooking	Existing	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	169.50	12	$0.00	20%	55%	$0.00	116,497.9	0
Lodging	Cooking	New	Electric convection oven (Energy Star)	ENERGY STAR Convection Oven	Standard Convection Oven	Per Convection Oven	169.50	12	$0.00	20%	55%	$0.00	116,497.9	0
Lodging	Cooking	Existing	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	83.27	12	$18.38	0%	95%	$0.04	2.7	0
Lodging	Cooking	New	High Efficiency Fryers (Energy Star)	ENERGY STAR Fryer	Standard Fryer	Per Fryer	83.27	12	$18.38	0%	95%	$0.04	2.7	0
Lodging	Cooking	Existing	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	83.52	12	$0.00	95%	95%	$0.00	114,809.7	19
Lodging	Cooking	New	High Efficiency Griddle (Energy Star)	ENERGY STAR Griddle	Standard Griddle	Per Griddle	83.52	12	$0.00	95%	95%	$0.00	114,809.7	0
Lodging	Cooking	Existing	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	505.62	12	$261.98	20%	95%	$0.08	1.2	24
Lodging	Cooking	New	High Efficiency Induction Cooking	High Efficiency Induction Cooking	Standard Stovetop	Per Induction Stovetop	505.62	12	$261.98	20%	95%	$0.08	1.2	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)
Lodging	Cooling Chillers	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	5622.16	10	$380.29	100%	69%	$0.01	8.4	0
Lodging	Cooling Chillers	New	Active chilled beam cooling	Active chilled beam cooling	Standard Building Design and Cooling System	Per Building	5811.06	15	######	60%	100%	$4.52	0.0	0
Lodging	Cooling Chillers	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	69.24	20	$7,052.57	95%	95%	$12.58	0.0	0
Lodging	Cooling Chillers	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	69.00	20	$7,052.57	95%	95%	$12.62	0.0	0
Lodging	Cooling Chillers	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	29.06	15	$1,685.00	95%	95%	$8.20	0.0	0
Lodging	Cooling Chillers	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1457.74	10	$2,512.61	95%	100%	$0.31	0.3	0
Lodging	Cooling Chillers	New	Automated control system	Automated control system	Baseline DX	Per Building	1452.76	10	$2,512.61	95%	100%	$0.31	0.3	0
Lodging	Cooling Chillers	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	16044.50	15	$8,850.29	25%	62%	$0.08	1.5	0
Lodging	Cooling Chillers	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	9718.30	15	$4,425.14	25%	95%	$0.06	1.8	0
Lodging	Cooling Chillers	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	9685.09	15	$4,425.14	75%	95%	$0.06	1.8	0
Lodging	Cooling Chillers	Existing	Chilled Water Reset, Optimizer System for Chiller(s)	Chilled Water Reset, Optimizer System for Chiller(s)	0	Per Building	583.10	10	######	95%	81%	$7.27	0.0	0
Lodging	Cooling Chillers	Existing	Chiller Tuneup/Diagnostics	Chiller Tuneup/Diagnostics	Existing Conditions	Per Building	2332.39	10	$1,983.73	25%	24%	$0.15	0.7	0
Lodging	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)	Per Building	0.21	20	$0.17	90%	100%	$0.10	1.2	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)
Lodging	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)	Per Building	0.21	20	$0.17	90%	100%	$0.10	1.2	0
Lodging	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)	Per Building	0.07	20	$0.06	90%	100%	$0.10	1.2	0
Lodging	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)	Per Building	0.07	20	$0.06	90%	100%	$0.10	1.2	0
Lodging	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)	Per Building	0.16	20	$0.13	90%	100%	$0.10	1.2	0
Lodging	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)	Per Building	0.16	20	$0.13	90%	100%	$0.10	1.2	0
Lodging	Cooling Chillers	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	5830.98	15	######	95%	75%	$0.36	0.3	0
Lodging	Cooling Chillers	Existing	Cooling Tower Optimization	Cooling Tower Optimization	Existing Conditions	Per Building	90.82	8	$363.68	10%	90%	$0.84	0.1	0
Lodging	Cooling Chillers	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	4358.29	7	######	75%	85%	$1.84	0.1	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)
Lodging	Cooling Chillers	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	299.21	20	######	75%	99%	$70.46	0.0	0
Lodging	Cooling Chillers	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	298.19	20	######	75%	99%	$70.70	0.0	0
Lodging	Cooling Chillers	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	4923.94	30	$576.98	20%	84%	$0.01	10.5	0
Lodging	Cooling Chillers	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	4907.11	30	$576.98	80%	84%	$0.01	10.5	0
Lodging	Cooling Chillers	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	4664.78	7	$9,368.86	75%	75%	$0.47	0.2	0
Lodging	Cooling Chillers	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5247.88	18	######	1%	98%	$0.36	0.3	0
Lodging	Cooling Chillers	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5229.95	18	######	1%	98%	$0.36	0.3	0
Lodging	Cooling Chillers	Existing	VFD on cooling tower fans	VFD on cooling tower fans	Base single-speed fan	Per Cooling Tower Motor VFD	2358.23	13	$388.52	75%	98%	$0.03	4.3	0
Lodging	Cooling Chillers	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	13591.51	15	$4,172.45	10%	66%	$0.04	2.6	0
Lodging	Cooling Chillers	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	11106.63	15	$2,567.66	10%	95%	$0.03	3.5	0
Lodging	Cooling Chillers	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	11068.68	15	$2,567.66	50%	95%	$0.03	3.5	0
Lodging	Cooling Chillers	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1457.74	5	$4,343.62	50%	95%	$0.90	0.1	0
Lodging	Cooling Chillers	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1452.76	5	$4,343.62	50%	95%	$0.90	0.1	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)
Lodging	Cooling DX	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	7631.62	10	$380.29	100%	69%	$0.01	11.5	177
Lodging	Cooling DX	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	610.53	20	$7,052.57	95%	95%	$1.43	0.1	0
Lodging	Cooling DX	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	591.67	20	$7,052.57	95%	95%	$1.47	0.1	0
Lodging	Cooling DX	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	38.35	15	$1,685.00	95%	95%	$6.21	0.0	0
Lodging	Cooling DX	Existing	Automated control system	Automated control system	Baseline DX	Per Building	1978.77	10	$2,512.61	95%	100%	$0.23	0.5	0
Lodging	Cooling DX	New	Automated control system	Automated control system	Baseline DX	Per Building	1917.63	10	$2,512.61	95%	100%	$0.24	0.4	0
Lodging	Cooling DX	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	21779.11	15	$8,850.29	25%	62%	$0.06	2.0	68
Lodging	Cooling DX	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13191.81	15	$4,425.14	25%	95%	$0.05	2.4	70
Lodging	Cooling DX	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	12784.21	15	$4,425.14	75%	95%	$0.05	2.3	5
Lodging	Cooling DX	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	7915.08	15	$4,016.63	95%	95%	$0.07	1.6	159
Lodging	Cooling DX	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	3593.40	5	$764.71	95%	45%	$0.06	1.5	28
Lodging	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	Per Building	0.05	15	$0.05	90%	100%	$0.14	0.8	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)
Lodging	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	Per Building	0.05	15	$0.05	90%	100%	$0.14	0.8	0
Lodging	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	Per Building	0.08	15	$0.09	90%	100%	$0.15	0.8	0
Lodging	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	Per Building	0.08	15	$0.09	90%	100%	$0.15	0.8	0
Lodging	Cooling DX	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	4115.84	15	$8,642.86	50%	99%	$0.30	0.4	0
Lodging	Cooling DX	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	3988.67	15	$4,609.52	50%	99%	$0.16	0.7	0
Lodging	Cooling DX	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	732.64	15	$2,731.09	95%	89%	$0.53	0.2	0
Lodging	Cooling DX	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	732.64	15	$2,075.63	45%	80%	$0.40	0.3	0
Lodging	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	18688.39	15	######	90%	100%	$0.46	0.3	0
Lodging	Cooling DX	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	5752.90	7	######	95%	85%	$1.39	0.1	0
Lodging	Cooling DX	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2638.36	20	######	75%	99%	$7.99	0.0	0
Lodging	Cooling DX	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	2556.84	20	######	75%	99%	$8.25	0.0	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)
Lodging	Cooling DX	Existing	HVAC Diagnostic/Air Conditioner Tune Up	HVAC Diagnostic/Air Conditioner Tune Up	No Tune Up	Per Building	3593.40	10	$785.37	95%	24%	$0.04	2.6	23
Lodging	Cooling DX	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6683.85	30	$576.98	20%	84%	$0.01	14.3	33
Lodging	Cooling DX	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	6477.33	30	$576.98	80%	84%	$0.01	13.9	3
Lodging	Cooling DX	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	12748.64	10	$3,495.80	10%	45%	$0.05	2.1	14
Lodging	Cooling DX	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	6332.07	7	$9,368.86	95%	75%	$0.34	0.3	0
Lodging	Cooling DX	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	7123.58	18	######	1%	98%	$0.26	0.5	0
Lodging	Cooling DX	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	6903.47	18	######	1%	98%	$0.27	0.4	0
Lodging	Cooling DX	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	18449.38	15	$4,172.45	10%	66%	$0.03	3.6	29
Lodging	Cooling DX	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	15076.35	15	$2,567.66	10%	95%	$0.02	4.7	35
Lodging	Cooling DX	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	14610.53	15	$2,567.66	50%	95%	$0.02	4.6	5
Lodging	Cooling DX	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1978.77	5	$4,343.62	50%	95%	$0.66	0.2	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)
Lodging	Cooling DX	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	1917.63	5	$4,343.62	50%	95%	$0.68	0.1	0
Lodging	Fax	Existing	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	2
Lodging	Fax	New	Fax - ENERGY STAR	ENERGY STAR Fax	Standard Fax	Per Building	0.00	4	$0.00	90%	100%	$0.00	379.4	0
Lodging	Flat Screen Monitors	Existing	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.01	4	$0.00	90%	100%	$0.00	743.5	5
Lodging	Flat Screen Monitors	New	Monitor - ENERGY STAR	ENERGY STAR Monitor	Standard Monitor	Per Building	0.01	4	$0.00	90%	100%	$0.00	743.5	0
Lodging	Freezer	Existing	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.00	3.2	0
Lodging	Freezer	New	Freezer (Residential) - ENERGY STAR	ENERGY STAR Freezer	Federal Standard 2015 Freezer	Per Building	0.00	12	$0.00	90%	100%	$0.00	3.2	0
Lodging	Heat Pump	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	24412.80	10	$380.29	100%	69%	$0.00	34.1	625
Lodging	Heat Pump	Existing	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	507.17	20	$7,052.57	95%	95%	$1.72	0.1	0
Lodging	Heat Pump	New	Adding reflective roof treatment	Adding reflective roof treatment	Standard Roofing	Per Building	485.74	20	$7,052.57	95%	95%	$1.79	0.1	0
Lodging	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	Per Building	0.15	15	$0.02	90%	100%	$0.02	6.5	0
Lodging	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	Per Building	0.15	15	$0.02	90%	100%	$0.02	6.5	0
Lodging	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	Per Building	0.29	15	$0.03	90%	100%	$0.02	6.3	119

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)
Lodging	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	Per Building	0.29	15	$0.03	90%	100%	$0.02	6.3	4
Lodging	Heat Pump	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	4217.08	15	$1,685.00	95%	95%	$0.06	1.8	98
Lodging	Heat Pump	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	2685.64	15	$1,685.00	95%	95%	$0.09	1.2	1
Lodging	Heat Pump	Existing	Automated control system	Automated control system	Baseline DX	Per Building	7668.17	10	$2,512.61	95%	100%	$0.06	1.6	0
Lodging	Heat Pump	New	Automated control system	Automated control system	Baseline DX	Per Building	7344.22	10	$2,512.61	95%	100%	$0.06	1.6	4
Lodging	Heat Pump	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	84398.82	15	$8,850.29	25%	62%	$0.01	7.0	308
Lodging	Heat Pump	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	51121.14	15	$4,425.14	25%	95%	$0.01	8.5	311
Lodging	Heat Pump	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	48961.48	15	$4,425.14	75%	95%	$0.01	8.1	22
Lodging	Heat Pump	Existing	Commercial energy recovery ventilation systems	Commercial energy recovery ventilation systems	No energy recovery ventilation system	Per Building	6575.05	15	$3,805.22	95%	95%	$0.08	1.3	149
Lodging	Heat Pump	Existing	DX Coil Cleaning	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	Per Building	2985.04	5	$764.71	95%	45%	$0.08	1.2	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)
Lodging	Heat Pump	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	14021.98	15	$8,642.86	50%	99%	$0.09	1.2	167
Lodging	Heat Pump	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	13429.61	15	$4,609.52	50%	99%	$0.05	2.1	4
Lodging	Heat Pump	Existing	Duct Insulation, Add R8	R-8	No Insulation	Per Building	608.60	15	$2,731.09	95%	89%	$0.63	0.2	0
Lodging	Heat Pump	Existing	Duct Testing & Sealing	Duct Testing & Sealing	Existing Conditions	Per Building	608.60	15	$2,075.63	45%	80%	$0.48	0.2	0
Lodging	Heat Pump	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	22032.67	7	######	95%	85%	$0.36	0.3	0
Lodging	Heat Pump	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6875.05	20	######	75%	99%	$3.07	0.0	0
Lodging	Heat Pump	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	6584.61	20	######	75%	99%	$3.20	0.0	0
Lodging	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	Per Building	1.10	15	$3.80	90%	100%	$0.49	0.2	0
Lodging	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	Per Building	1.10	15	$3.80	90%	100%	$0.49	0.2	0
Lodging	Heat Pump	Existing	HVAC Diagnostic/Heat Pump Tune Up	HVAC Diagnostic/Heat Pump Tune Up	No Tune Up	Per Building	2985.04	10	$744.04	95%	24%	$0.04	2.1	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)
Lodging	Heat Pump	Existing	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5552.27	30	$576.98	20%	84%	$0.01	10.8	24
Lodging	Heat Pump	New	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	High Efficiency Energy Star Windows & Skylights, .32 U-Factor	0	Per Building	5317.71	30	$576.98	80%	84%	$0.01	10.3	2
Lodging	Heat Pump	Existing	Outside Air Economizer	Outside Air Economizer	No Economizer	Per Building Sqft for Outside Economizer	12748.64	10	$3,495.80	10%	45%	$0.05	1.9	15
Lodging	Heat Pump	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	24538.15	7	$9,368.86	95%	75%	$0.09	1.0	400
Lodging	Heat Pump	Existing	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5917.55	18	######	1%	98%	$0.32	0.3	0
Lodging	Heat Pump	New	Solid-state temperature controls	Solid-state temperature controls	0	Per Building	5667.56	18	######	1%	98%	$0.33	0.3	0
Lodging	Heat Pump	Existing	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	91096.56	15	######	50%	95%	$1.94	0.1	0
Lodging	Heat Pump	New	Variable Refrigerant Flow Heat Pump	Variable Refrigerant Flow Heat Pump	Existing HVAC system	Per Building	87248.11	15	######	95%	95%	$2.02	0.1	0
Lodging	Heat Pump	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	71495.40	15	$4,172.45	10%	66%	$0.01	12.6	126
Lodging	Heat Pump	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	58424.16	15	$2,567.66	10%	95%	$0.01	16.7	153
Lodging	Heat Pump	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	55955.98	15	$2,567.66	50%	95%	$0.01	16.0	21

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)
Lodging	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	Per Building	0.99	15	$0.35	90%	100%	$0.05	2.1	149
Lodging	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	Per Building	0.99	15	$0.35	90%	100%	$0.05	2.1	5
Lodging	Heat Pump	Existing	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	7668.17	5	$4,343.62	50%	95%	$0.17	0.5	0
Lodging	Heat Pump	New	Window Shade	Window Shade - Film or Screen	No Shade	Per Building	7344.22	5	$4,343.62	50%	95%	$0.18	0.5	0
Lodging	Lighting Exterior	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	2005.14	10	$100.00	85%	45%	$0.01	10.4	43
Lodging	Lighting Exterior	Existing	LED or equivalent sign lighting	LED or equivalent sign lighting	Replace fluorescent sign lighting	Per Sign	2582.80	15	$17.36	100%	95%	$0.00	107.8	617
Lodging	Lighting Exterior	New	LED or equivalent sign lighting	LED or equivalent sign lighting	Replace fluorescent sign lighting	Per Sign	2582.80	15	$17.36	100%	95%	$0.00	107.8	15
Lodging	Lighting Exterior	Existing	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	5614.40	8	$225.00	50%	45%	$0.01	10.8	75
Lodging	Lighting Exterior	New	Photocell Controls (outdoor)	Photocell Controls (outdoor)	No Outdoor Photocell Lighting Control	Per Building	5614.40	8	$225.00	50%	75%	$0.01	10.8	3
Lodging	Lighting Exterior	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	4812.34	8	$683.39	10%	100%	$0.03	3.0	26
Lodging	Lighting Interior Fluorescent	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	4476.30	10	$100.00	85%	45%	$0.00	23.2	0
Lodging	Lighting Interior Fluorescent	Existing	Delamping fixtures	Delamping fixtures	0	Per Delamped Fixture	48.33	13	$6.00	0%	85%	$0.02	5.2	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)
Lodging	Lighting Interior Fluorescent	Existing	Fiber Optic Display Lighting	Fiber Optic Display Lighting	Existing Display Lighting	Per Case Door	426.32	15	$555.95	50%	95%	$0.18	0.6	0
Lodging	Lighting Interior Fluorescent	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	4994.75	8	######	65%	100%	$0.69	0.1	0
Lodging	Lighting Interior Fluorescent	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	12086.02	10	$2,489.14	10%	98%	$0.04	2.5	238
Lodging	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent High Performance - Above Standard	Above Standard Fluorescent High Performance T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.10	13	$0.15	90%	100%	$0.22	0.4	0
Lodging	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent Reduced Wattage - Above Standard	Above Standard Fluorescent Reduced Wattage T-8	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.11	13	$0.52	90%	100%	$0.70	0.1	0
Lodging	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T5 - Above Standard	Above Standard Fluorescent T-5	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.11	13	$0.29	90%	100%	$0.39	0.3	0
Lodging	Lighting Interior Fluorescent	Existing	Lighting Interior - Fluorescent T8 - Above Standard	Above Standard Fluorescent T8 Interior Lighting	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.03	13	$0.11	90%	100%	$0.63	0.2	0
Lodging	Lighting Interior Fluorescent	Existing	Lighting Interior - LED Tube - Above Standard	Above Standard LED Tube	Standard Fluorescent EISA T12 Interior Lighting	Per Building	0.19	20	$1.50	90%	100%	$0.99	0.1	0
Lodging	Lighting Interior Fluorescent	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	10743.13	8	$3,155.33	90%	98%	$0.06	1.5	389
Lodging	Lighting Interior Fluorescent	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	10743.13	8	$683.39	10%	99%	$0.01	6.8	59

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)
Lodging	Lighting Interior HID	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	0.88	10	$100.00	85%	45%	$20.44	0.0	0
Lodging	Lighting Interior HID	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	0.98	8	######	65%	100%	$3,497.49	0.0	0
Lodging	Lighting Interior HID	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	2.38	10	$2,489.14	10%	98%	$188.43	0.0	0
Lodging	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	Per Building	0.00	15	$0.00	90%	100%	$0.00	1.0	0
Lodging	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	Per Building	0.00	15	$0.00	90%	100%	$0.00	1.6	0
Lodging	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	Per Building	0.00	20	$0.00	90%	100%	$0.00	2.6	0
Lodging	Lighting Interior HID	Existing	Lighting Interior - Induction - Above Standard	Induction	Standard HID Baseline - represents a mix of Mercury Vapor, High Pressure Sodium, Metal Halide	Per Building	0.00	20	$0.00	90%	100%	-$0.08	999.0	0
Lodging	Lighting Interior HID	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	2.11	8	$3,155.33	90%	98%	$313.46	0.0	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)
Lodging	Lighting Interior HID	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	2.11	8	$683.39	10%	99%	$67.89	0.0	0
Lodging	Lighting Interior Other	Existing	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Exit Sign Retrofit: Compact Fluorescent, replacing incandescent	Incandescent Exit Sign	Per Exit Sign	304.15	10	$76.00	95%	25%	$0.04	2.1	5
Lodging	Lighting Interior Other	New	Fiber Optic Display Lighting	Fiber Optic Display Lighting	Existing Display Lighting	Per Case Door	426.32	15	$555.95	50%	95%	$0.18	0.6	0
Lodging	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)	Per Building	0.23	15	$0.01	100%	100%	$0.01	12.0	0
Lodging	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)	Per Building	0.35	15	$0.02	100%	100%	$0.01	11.6	0
Lodging	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)	Per Building	0.69	15	$0.06	100%	100%	$0.01	7.8	143
Lodging	Lighting Interior Other	New	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	8903.23	8	######	65%	100%	$0.39	0.2	0
Lodging	Lighting Interior Other	Existing	LED exit sign	LED exit sign	CFL Exit Sign	Per Exit Sign	225.66	16	$96.00	95%	50%	$0.06	1.8	23
Lodging	Lighting Interior Other	New	Light Pipes	Light Pipes	Standard lighting system	Per Building	21543.53	10	$2,489.14	30%	98%	$0.02	4.5	27
Lodging	Lighting Interior Other	New	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	19149.81	8	$3,155.33	90%	98%	$0.03	2.6	12
Lodging	Lighting Interior Other	Existing	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	588.67	30	$60.00	75%	95%	$0.01	10.9	90

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)
Lodging	Lighting Interior Other	New	Photoluminescent Exit Sign	Photoluminescent Exit Sign	Incandescent exit sign	Per Exit Sign	588.67	30	$60.00	75%	95%	$0.01	10.9	2
Lodging	Lighting Interior Screw Base	Existing	Central lighting control system	Central lighting control system	Replace manual switches or no control	Per Building	4563.63	10	$100.00	85%	45%	$0.00	23.6	0
Lodging	Lighting Interior Screw Base	Existing	Hotel Room Controls	Hotel Occupancy/Keycard Controls	No prior control	Per Building	30170.88	10	$7,778.57	90%	100%	$0.05	2.0	1,155
Lodging	Lighting Interior Screw Base	Existing	Indoor Daylight Sensors	Indoor Daylight Sensors	No Indoor Daylighting Controls	Per Building	5092.20	8	######	65%	100%	$0.67	0.1	0
Lodging	Lighting Interior Screw Base	Existing	Light Pipes	Light Pipes	Standard lighting system	Per Building	12321.81	10	$2,489.14	10%	98%	$0.04	2.6	66
Lodging	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base CFL - Above Standard	CFL	EISA Standard Incandescent	Per Building	0.60	5	$0.02	90%	100%	$0.01	9.2	2,084
Lodging	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base Incandescent - Backstop EISA Standard	Backstop EISA Standard Incandescent	EISA Standard Incandescent	Per Building	0.48	2	$0.01	90%	100%	$0.02	5.2	0
Lodging	Lighting Interior Screw Base	Existing	Lighting Interior - Screw Base LED - Above Standard	LED	EISA Standard Incandescent	Per Building	0.63	12	$0.12	90%	100%	$0.04	2.4	3,281
Lodging	Lighting Interior Screw Base	Existing	Occupancy sensor, wall or ceiling mounted	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Per Occupancy Sensor	10952.72	8	$3,155.33	90%	98%	$0.06	1.5	56
Lodging	Lighting Interior Screw Base	Existing	Time clock control	Time clock control	No Time Clock	Per Time Clock	10952.72	8	$683.39	10%	99%	$0.01	6.9	16
Lodging	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	7.7	4
Lodging	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	7.7	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)
Lodging	Other Plug Load	Existing	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	######	75%	90%	$6.49	0.0	0
Lodging	Other Plug Load	New	Elevators	Elevators	Standard Elevator	Per Elevator Cab	6960.00	16	######	100%	90%	$6.49	0.0	0
Lodging	Other Plug Load	Existing	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	7.09	4	$0.70	100%	20%	$0.04	2.4	0
Lodging	Other Plug Load	New	Energy Star - Scanners	Energy Star - Scanners	Standard Scanner	Per Scanner	7.09	4	$0.70	100%	20%	$0.04	2.4	0
Lodging	Other Plug Load	Existing	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	1742.43	10	$0.00	95%	20%	$0.00	999.0	83
Lodging	Other Plug Load	New	Energy Star - Water Cooler	Energy Star - Water Cooler	Std Water Cooler	Per Water Cooler	1742.43	10	$0.00	95%	20%	$0.00	999.0	2
Lodging	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	0.84	5	$3.46	95%	20%	$1.24	0.1	0
Lodging	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	0.84	5	$3.46	95%	20%	$1.24	0.1	0
Lodging	Other Plug Load	Existing	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	232.16	5	$39.32	95%	95%	$0.05	1.8	14
Lodging	Other Plug Load	New	Occupancy sensor controls/Smart Strip	Occupancy sensor controls/Smart Strip	Computers, other plug loads	Per Advanced Power Strip	232.16	5	$39.32	95%	95%	$0.05	1.8	0
Lodging	Package Terminal Air Conditioning	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	7859.94	10	$380.29	100%	69%	$0.01	10.9	215
Lodging	Package Terminal Air Conditioning	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	22430.67	15	$8,850.29	25%	62%	$0.06	1.9	45
Lodging	Package Terminal Air Conditioning	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13586.46	15	$4,425.14	25%	95%	$0.05	2.3	93

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)
Lodging	Package Terminal Air Conditioning	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	13586.46	15	$4,425.14	75%	95%	$0.05	2.3	8
Lodging	Package Terminal Air Conditioning	Existing	Hotel Room Controls	Hotel Occupancy/Keycard Controls	No prior control	Per Building	28566.03	10	$7,778.57	90%	100%	$0.05	1.9	655
Lodging	Package Terminal Air Conditioning	New	Hotel Room Controls	Hotel Occupancy/Keycard Controls	No prior control	Per Building	28566.03	10	$7,778.57	90%	100%	$0.05	1.9	15
Lodging	Package Terminal Air Conditioning	Existing	PTAC (12.0 EER/10,000 BTU)	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	Per Building	0.16	12	$0.06	100%	100%	$0.06	1.6	92
Lodging	Package Terminal Air Conditioning	New	PTAC (12.0 EER/10,000 BTU)	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	Per Building	0.16	12	$0.06	100%	100%	$0.06	1.6	2
Lodging	Photo Copiers	Existing	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.00	6	$0.00	90%	100%	$0.00	1,630.0	0
Lodging	Photo Copiers	New	Copiers - ENERGY STAR	ENERGY STAR Copiers	Standard Copiers	Per Building	0.00	6	$0.00	90%	100%	$0.00	1,630.0	0
Lodging	Pool Pump	Existing	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	Per Building	0.02	10	$0.00	100%	100%	$0.01	7.6	0
Lodging	Pool Pump	New	Pool Pump - Two Speed	Pool Pump - Two Speed	Pool Pump - Constant Speed	Per Building	0.02	10	$0.00	100%	100%	$0.01	7.6	0
Lodging	Pool Pump	Existing	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	Per Building	0.04	10	$0.01	100%	100%	$0.03	3.6	133
Lodging	Pool Pump	New	Pool Pump - VSD	Pool Pump - VSD	Pool Pump - Constant Speed	Per Building	0.04	10	$0.01	100%	100%	$0.03	3.6	7
Lodging	Printers	Existing	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.01	5	$0.00	90%	100%	$0.00	4,559.7	3
Lodging	Printers	New	Printers - ENERGY STAR	ENERGY STAR Printers	Standard Printers	Per Building	0.01	5	$0.00	90%	100%	$0.00	4,559.7	0
Lodging	Refrigeration	Existing	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	202.77	8	$32.92	95%	80%	$0.03	2.7	39
Lodging	Refrigeration	New	Auto-closer: Walk-In Cooler	Auto-closer: Walk-In Cooler	No Auto-closer on Walk-in Cooler	Per Walk-in Cooler Door	202.77	8	$32.92	95%	80%	$0.03	2.7	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)
Lodging	Refrigeration	Existing	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	489.31	8	$32.92	95%	80%	$0.01	6.5	93
Lodging	Refrigeration	New	Auto-closer:Walk-In Freezer	Auto-closer:Walk-In Freezer	No Auto-closer on Walk-in Freezer	Per Walk-in Freezer Door	489.31	8	$32.92	95%	80%	$0.01	6.5	2
Lodging	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	7.02	12	$2.19	95%	81%	$0.05	2.0	1
Lodging	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	7.02	12	$2.19	95%	81%	$0.05	2.0	0
Lodging	Refrigeration	Existing	Door Gasket - Cooler	Door Gasket - Cooler	Existing Gasket	Per linear foot of gasket on walk-in or reach-in cooler	75.96	4	$16.88	95%	90%	$0.08	1.1	16
Lodging	Refrigeration	Existing	Door Gasket - Freezer	Door Gasket - Freezer	Existing Gasket	Per linear foot of gasket on walk-in or reach-in freezer	265.86	4	$16.88	95%	90%	$0.02	3.8	57
Lodging	Refrigeration	Existing	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	306.14	15	$409.78	10%	95%	$0.19	0.6	0
Lodging	Refrigeration	New	Economizer for Walk-in Coolers	Economizer for Walk-in Coolers	No Economizer	Per Walk-in	306.14	15	$409.78	5%	95%	$0.19	0.6	0
Lodging	Refrigeration	Existing	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	55.35	10	$123.20	75%	55%	$0.40	0.2	0
Lodging	Refrigeration	New	High Efficiency Ice Makers	High Efficiency Ice Makers	Standard Ice Maker	Per Air-cooled Ice Maker	55.35	10	$123.20	95%	55%	$0.40	0.2	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)
Lodging	Refrigeration	Existing	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	332.59	4	$33.68	95%	78%	$0.04	2.4	62
Lodging	Refrigeration	New	Strip curtains for walk-ins	Strip curtains for walk-ins	Base Refrigeration System - Grocery	Per square foot of strip curtain area	510.37	4	$33.68	95%	78%	$0.02	3.7	2
Lodging	Refrigeration	Existing	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	174.29	15	$105.50	75%	49%	$0.09	1.2	16
Lodging	Refrigeration	New	Walk-in PSC to ECM	Walk-in PSC to ECM	Walk-in PSC Motor	Per walk-in cooler or freezer motor	174.29	15	$105.50	95%	49%	$0.09	1.2	1
Lodging	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	466.31	15	$105.50	75%	49%	$0.03	3.3	43
Lodging	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	466.31	15	$105.50	95%	49%	$0.03	3.3	1
Lodging	Refrigeration	Existing	eCube	eCube	No eCube	Per Walk-in	515.69	9	$168.38	95%	95%	$0.06	1.5	117
Lodging	Refrigeration	New	eCube	eCube	No eCube	Per Walk-in	515.69	9	$168.38	95%	95%	$0.06	1.5	3
Lodging	Refrigerator	Existing	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	0
Lodging	Refrigerator	New	Refrigerator - CEE Tier 2	CEE Tier 2 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	0
Lodging	Refrigerator	Existing	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	14
Lodging	Refrigerator	New	Refrigerator - CEE Tier 3	CEE Tier 3 Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.09	1.0	1
Lodging	Refrigerator	Existing	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.10	1.0	0
Lodging	Refrigerator	New	Refrigerator - ENERGY STAR	ENERGY STAR Refrigerator	Federal Standard 2015 Refrigerator	Per Building	0.00	12	$0.00	90%	100%	$0.10	1.0	0
Lodging	Room Cooling	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	19282.60	15	$8,850.29	25%	62%	$0.06	1.8	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)
Lodging	Room Cooling	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	11679.65	15	$4,425.14	25%	95%	$0.05	2.1	0
Lodging	Room Cooling	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	11657.45	15	$4,425.14	75%	95%	$0.05	2.1	0
Lodging	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)	Per Building	0.03	12	$0.00	90%	100%	$0.02	6.8	0
Lodging	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)	Per Building	0.03	12	$0.00	90%	100%	$0.02	6.8	0
Lodging	Servers	Existing	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.10	4	$5.19	95%	86%	$19.37	0.0	0
Lodging	Servers	New	80 Plus	80 Plus - Server/Desktop	Standard personal computer, desktop	Per Building	0.10	4	$5.19	95%	86%	$19.46	0.0	0
Lodging	Servers	Existing	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.01	4	$0.01	90%	100%	$0.50	0.2	0
Lodging	Servers	New	Server - High Efficiency	High Efficiency Server	Standard Server	Per Building	0.01	4	$0.01	90%	100%	$0.50	0.2	0
Lodging	Space Heat	Existing	7 day, two stage setback thermostat	Setback Thermostat with 7 day, two stage	Manual Thermostat	Per Building	22407.52	10	$380.29	100%	69%	$0.00	29.5	0
Lodging	Space Heat	Existing	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	5228.42	15	$1,685.00	95%	95%	$0.05	2.2	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)
Lodging	Space Heat	New	Air curtain technology	Air curtain technology	No Air Curtain	Per air curtain installed on entrance to building	3435.82	15	$1,685.00	95%	95%	$0.07	1.4	0
Lodging	Space Heat	Existing	Automated control system	Automated control system	Baseline DX	Per Building	7469.17	10	$2,512.61	95%	100%	$0.06	1.5	0
Lodging	Space Heat	New	Automated control system	Automated control system	Baseline DX	Per Building	7469.17	10	$2,512.61	95%	100%	$0.06	1.5	0
Lodging	Space Heat	Existing	Ceiling Insulation	R-20	Average Existing Insulation	Per SqFt ofCeiling Insulation	82208.59	15	$8,850.29	25%	62%	$0.02	6.5	0
Lodging	Space Heat	Existing	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	49794.49	15	$4,425.14	25%	95%	$0.01	7.8	0
Lodging	Space Heat	New	Ceiling Insulation	R-30	R-20	Per SqFt ofCeiling Insulation	49794.49	15	$4,425.14	75%	95%	$0.01	7.8	0
Lodging	Space Heat	Existing	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	13145.75	15	$8,642.86	50%	99%	$0.09	1.1	0
Lodging	Space Heat	New	Demand controlled Ventilation and Circulating Systems	Demand controlled Ventilation and Circulating Systems	Standard Circulating System	Per Building	13145.75	15	$4,609.52	50%	99%	$0.05	2.0	0
Lodging	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	98413.83	15	######	90%	100%	$0.09	1.1	0
Lodging	Space Heat	New	Facility Commissioning (New Construction)	Facility Commissioning	No Commissioning	Per Building	22407.52	7	######	95%	85%	$0.36	0.2	0
Lodging	Space Heat	Existing	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	5806.53	20	######	75%	99%	$3.63	0.0	0
Lodging	Space Heat	New	Green Roof (New construction or roof replacement)	Green Roof	Standard Roofing	Per Building	5806.53	20	######	75%	99%	$3.63	0.0	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)
Lodging	Space Heat	Existing	Hotel Room Controls	Hotel Occupancy/Keycard Controls	No prior control	Per Building	104694.73	10	$7,778.57	90%	100%	$0.01	6.8	0
Lodging	Space Heat	New	Hotel Room Controls	Hotel Occupancy/Keycard Controls	No prior control	Per Building	104694.73	10	$7,778.57	90%	100%	$0.01	6.8	0
Lodging	Space Heat	Existing	Re-commissioning (Existing Construction)	Re-commissioning (Existing Construction)	No Re-commissioning	Per Building	23901.36	7	$9,368.86	95%	75%	$0.09	1.0	0
Lodging	Space Heat	Existing	Wall Insulation	R-13	Average Existing Insulation	Per SqFt of Wall Insulation	69640.02	15	$4,172.45	10%	66%	$0.01	11.6	0
Lodging	Space Heat	Existing	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	56907.99	15	$2,567.66	10%	95%	$0.01	15.4	0
Lodging	Space Heat	New	Wall Insulation	R-21	R-13	Per SqFt of Wall Insulation	56907.99	15	$2,567.66	50%	95%	$0.01	15.4	0
Lodging	Vending Machines	Existing	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	529.80	5	$70.08	100%	50%	$0.04	2.2	67
Lodging	Vending Machines	New	Beverage machine control	Beverage machine control	Vending machine with no sensor	Per Beverage Vending Machine	529.80	5	$70.08	100%	50%	$0.04	2.2	2
Lodging	Vending Machines	Existing	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	133.36	5	$62.30	100%	50%	$0.14	0.6	0
Lodging	Vending Machines	New	Non-cooled snack control	Non-cooled snack control	Vending machine with no sensor	Per Snack Vending Machine	133.36	5	$62.30	100%	50%	$0.14	0.6	0
Lodging	Vending Machines	Existing	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.00	14	$0.01	90%	100%	$0.27	0.4	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)
Lodging	Vending Machines	New	Vending Machines - ENERGY STAR - High Efficiency	ENERGY STAR Vending Machines - High Efficiency	Standard Vending Machines	Per Building	0.00	14	$0.01	90%	100%	$0.27	0.4	0
Lodging	Ventilation and Circulation	Existing	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2026.92	5	$295.01	20%	85%	$0.04	2.0	87
Lodging	Ventilation and Circulation	New	CO sensors for parking garage exhaust fans	CO sensors for parking garage exhaust fans	Standard Ventilation	Per Fan Motor HP	2026.92	5	$295.01	20%	85%	$0.04	2.0	2
Lodging	Ventilation and Circulation	Existing	Downsizing motor during retrofit	Downsizing motor during retrofit	Larger hp standard motor	Per Motor	40.22	20	######	10%	95%	$111.74	0.0	0
Lodging	Ventilation and Circulation	Existing	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	913.37	15	$874.34	15%	95%	$0.14	0.8	0
Lodging	Ventilation and Circulation	New	ECM Motors for split systems	ECM Motors for split systems	Standard Motor	Per Building	913.37	15	$874.34	15%	95%	$0.14	0.8	0
Lodging	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)	543.13	18	$877.88	75%	95%	$0.21	0.5	0
Lodging	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)	543.13	18	$877.88	75%	95%	$0.21	0.5	0
Lodging	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	83.00	15	$2.20	95%	76%	$0.00	27.2	15
Lodging	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	83.00	15	$2.20	95%	76%	$0.00	27.2	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)
Lodging	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	42.37	15	$2.20	95%	76%	$0.01	13.9	7
Lodging	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	42.37	15	$2.20	95%	76%	$0.01	13.9	0
Lodging	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	65.05	15	$2.20	95%	76%	$0.00	21.3	12
Lodging	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	65.05	15	$2.20	95%	76%	$0.00	21.3	0
Lodging	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	42.20	15	$2.20	95%	76%	$0.01	13.8	7
Lodging	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	42.20	15	$2.20	95%	76%	$0.01	13.8	0
Lodging	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	47.87	15	$2.20	95%	76%	$0.01	15.7	8
Lodging	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	47.87	15	$2.20	95%	76%	$0.01	15.7	0
Lodging	Ventilation and Circulation	Existing	High Efficiency Ventilation Hoods	High Efficiency Ventilation Hoods	Standard Ventilation Hood	Per Kitchen Exhaust Hood HP	392.53	15	$173.95	25%	45%	$0.06	1.6	11