

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Miscellaneous	Electric	Pool Heater	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Miscellaneous	Electric	Pool Pump	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Miscellaneous	Electric	Hot Tub / Spa	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Miscellaneous	Electric	Well Pump	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Furnace Fan	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Bathroom Exhaust Fan	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Miscellaneous	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%

Table E-8 Multi Family Electric Only Customer Non-Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measures	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Ducting	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Insulation - Foundation	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Infiltration Control	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Radiant Barrier	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Cavity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Sheathing	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Ducting - Repair and Sealing	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Windows - High Efficiency/ENERGY STAR	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Windows - Install Reflective Film	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Doors - Storm and Thermal	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Roofs - High Reflectivity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Attic Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Attic Fan - Photovoltaic - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Whole-House Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Ceiling Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Thermostat - Clock/Programmable	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Home Energy Management System	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Central AC - Early Replacement	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Central AC - Maintenance and Tune-Up	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Central Heat Pump - Maintenance	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Room AC - Removal of Second Unit	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Boiler - Hot Water Reset	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Furnace - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Water Heater - Drainwater Heat Recovery	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Faucet Aerators	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Low-Flow Showerheads	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Tank Blanket/Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Thermostat Setback	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Desuperheater	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Measures	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Solar System	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Interior Lighting - Occupancy Sensors	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photosensor Control	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photovoltaic Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Timeclock Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Refrigerator - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Electronics - Smart Power Strip	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Pool Pump - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Pool Heater - Solar System	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
ENERGY STAR Home Design	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Information Based Energy Efficiency Programs	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Combined Boiler & Water Htg. Unit	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Pool/Spa cover	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%

Table E-9 Single Family Gas/Electric Customer Equipment Measures— Electric (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Central AC	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Cooling	Electric	Room AC	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Cooling	Electric	Air-Source Heat Pump	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Cooling	Electric	Geothermal Heat Pump	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Cooling	Electric	PTHP	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Heating	Electric	Electric Room Heat	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Electric	Furnace	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Electric	Air-Source Heat Pump	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Heating	Electric	Geothermal Heat Pump	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Heating	Electric	PTHP	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Water Heating	Electric	Water Heater <= 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heating	Electric	Water Heater > 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Interior Lighting	Electric	Screw-in	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Interior Lighting	Electric	Linear Fluorescent	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Interior Lighting	Electric	Specialty	12%	12%	12%	12%	12%	13%	13%	13%	13%	13%	13%
Exterior Lighting	Electric	Screw-in	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Appliances	Electric	Refrigerator	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Appliances	Electric	Second Refrigerator	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Appliances	Electric	Freezer	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Appliances	Electric	Clothes Washer	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Appliances	Electric	Clothes Dryer	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Appliances	Electric	Dishwasher	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Appliances	Electric	Stove	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Appliances	Electric	Microwave	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Electronics	Electric	Personal Computers	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Electronics	Electric	Monitor	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Electronics	Electric	Laptops	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Electronics	Electric	TVs	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Electronics	Electric	Printer/Fax/Copier	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Electronics	Electric	Set-top Boxes/DVR	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Electronics	Electric	Devices and Gadgets	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Miscellaneous	Electric	Air Purifier/Cleaner	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Miscellaneous	Electric	Dehumidifier	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Miscellaneous	Electric	Pool Heater	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Electric	Pool Pump	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Miscellaneous	Electric	Hot Tub / Spa	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Electric	Well Pump	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Miscellaneous	Electric	Furnace Fan	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Miscellaneous	Electric	Bathroom Exhaust Fan	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Miscellaneous	Electric	Miscellaneous	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%

Table E-10 Single Family Gas/Electric Customer Equipment Measures — Gas (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Natural Gas	Boiler	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Natural Gas	Other Heating	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Water Heating	Natural Gas	Water Heater <= 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heating	Natural Gas	Water Heater > 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Appliances	Natural Gas	Clothes Dryer	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Appliances	Natural Gas	Stove	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Miscellaneous	Natural Gas	Pool Heater	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Natural Gas	Hot Tub / Spa	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Natural Gas	Miscellaneous	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%

Table E-11 Single Family Gas/Electric Customer Non-Equipment Measures—(Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Ducting	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Insulation - Foundation	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Infiltration Control	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Radiant Barrier	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Wall Cavity	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Wall Sheathing	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Ducting - Repair and Sealing	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Windows - High Efficiency/ENERGY STAR	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Windows - Install Reflective Film	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Doors - Storm and Thermal	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Roofs - High Reflectivity	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Attic Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Attic Fan - Photovoltaic - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Whole-House Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Ceiling Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Thermostat - Clock/Programmable	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Home Energy Management System	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Central AC - Early Replacement	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Central AC - Maintenance and Tune-Up	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Central Heat Pump - Maintenance	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Room AC - Removal of Second Unit	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Boiler - Hot Water Reset	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Boiler - Pipe Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Boiler - Maintenance	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Furnace - Maintenance	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Drainwater Heat Recovery	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Faucet Aerators	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water Heater - Low-Flow Showerheads	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water Heater - Pipe Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Tank Blanket/Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Thermostat Setback	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Water Heater - Timer	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Water Heater - Desuperheater	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heater - Solar System	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Occupancy Sensors	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Photosensor Control	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Photovoltaic Installation	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Timeclock Installation	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigerator - Early Replacement	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Refrigerator - Maintenance	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Refrigerator - Remove Second Unit	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Remove Second Unit	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Early Replacement	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Maintenance	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Electronics - Smart Power Strip	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Pool Pump - Timer	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Pool Heater - Solar System	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
ENERGY STAR Home Design	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Information Based Energy Efficiency Programs	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Combined Boiler & Water Htg. Unit	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pool/Spa cover	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%

Table E-12 Single Family Gas/Electric Customer Equipment Measures— Electric (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Central AC	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Cooling	Electric	Room AC	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Cooling	Electric	Air-Source Heat Pump	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Cooling	Electric	Geothermal Heat Pump	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Cooling	Electric	PTHP	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Heating	Electric	Electric Room Heat	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Electric	Furnace	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Electric	Air-Source Heat Pump	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Heating	Electric	Geothermal Heat Pump	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Heating	Electric	PTHP	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Water Heating	Electric	Water Heater <= 55 gal	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Water Heating	Electric	Water Heater > 55 gal	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Interior Lighting	Electric	Screw-in	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Interior Lighting	Electric	Linear Fluorescent	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Interior Lighting	Electric	Specialty	10%	10%	10%	10%	10%	10%	11%	11%	11%	11%	11%
Exterior Lighting	Electric	Screw-in	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Appliances	Electric	Refrigerator	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Appliances	Electric	Second Refrigerator	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Appliances	Electric	Freezer	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Appliances	Electric	Clothes Washer	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Appliances	Electric	Clothes Dryer	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Appliances	Electric	Dishwasher	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Appliances	Electric	Stove	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Appliances	Electric	Microwave	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Electronics	Electric	Personal Computers	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Electronics	Electric	Monitor	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Electronics	Electric	Laptops	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Electronics	Electric	TVs	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Electronics	Electric	Printer/Fax/Copier	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Electronics	Electric	Set-top Boxes/DVR	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Electronics	Electric	Devices and Gadgets	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Miscellaneous	Electric	Air Purifier/Cleaner	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Miscellaneous	Electric	Dehumidifier	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Miscellaneous	Electric	Pool Heater	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Miscellaneous	Electric	Pool Pump	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Miscellaneous	Electric	Hot Tub / Spa	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Miscellaneous	Electric	Well Pump	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Miscellaneous	Electric	Furnace Fan	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Miscellaneous	Electric	Bathroom Exhaust Fan	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Miscellaneous	Electric	Miscellaneous	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%

Table E-13 Single Family Gas/Electric Customer Equipment Measures— Gas (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Boiler	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Other Heating	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Water Heating	Natural Gas	Water Heater <= 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heating	Natural Gas	Water Heater > 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Appliances	Natural Gas	Clothes Dryer	33%	33%	34%	34%	35%	35%	35%	36%	36%	37%	37%
Appliances	Natural Gas	Stove	26%	26%	27%	27%	27%	28%	28%	29%	29%	30%	30%
Miscellaneous	Natural Gas	Pool Heater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Hot Tub / Spa	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Miscellaneous	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Heating	Natural Gas	Furnace	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Boiler	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Other Heating	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Water Heating	Natural Gas	Water Heater <= 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heating	Natural Gas	Water Heater > 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Appliances	Natural Gas	Clothes Dryer	33%	33%	34%	34%	35%	35%	35%	36%	36%	37%	37%
Appliances	Natural Gas	Stove	26%	26%	27%	27%	27%	28%	28%	29%	29%	30%	30%
Miscellaneous	Natural Gas	Pool Heater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Hot Tub / Spa	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%

Table E-14 Single Family Gas/Electric Customer Non-Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Ducting	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Insulation - Foundation	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Infiltration Control	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Radiant Barrier	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Wall Cavity	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Wall Sheathing	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Ducting - Repair and Sealing	30%	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%
Windows - High Efficiency/ENERGY STAR	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Windows - Install Reflective Film	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Doors - Storm and Thermal	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Roofs - High Reflectivity	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Attic Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Attic Fan - Photovoltaic - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Whole-House Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Ceiling Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Thermostat - Clock/Programmable	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Home Energy Management System	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Central AC - Early Replacement	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Central AC - Maintenance and Tune-Up	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Central Heat Pump - Maintenance	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Room AC - Removal of Second Unit	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Boiler - Hot Water Reset	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Boiler - Pipe Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Boiler - Maintenance	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%
Furnace - Maintenance	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%
Water Heater - Drainwater Heat Recovery	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Faucet Aerators	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Water Heater - Low-Flow Showerheads	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Water Heater - Pipe Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Tank Blanket/Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Thermostat Setback	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Timer	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Desuperheater	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Solar System	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Interior Lighting - Occupancy Sensors	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Photosensor Control	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Photovoltaic Installation	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Timeclock Installation	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Refrigerator - Early Replacement	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Refrigerator - Maintenance	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Refrigerator - Remove Second Unit	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Remove Second Unit	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Early Replacement	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Maintenance	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Electronics - Smart Power Strip	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Pool Pump - Timer	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Pool Heater - Solar System	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
ENERGY STAR Home Design	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Information Based Energy Efficiency Programs	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Combined Boiler & Water Htg. Unit	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Pool/Spa cover	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%

Table E-15 Multi Family Gas/Electric Customer Equipment Measures—Electric (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Central AC	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Cooling	Electric	Room AC	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Cooling	Electric	Air-Source Heat Pump	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Cooling	Electric	Geothermal Heat Pump	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Cooling	Electric	PTHP	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Heating	Electric	Electric Room Heat	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Electric	Furnace	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Electric	Air-Source Heat Pump	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Heating	Electric	Geothermal Heat Pump	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Heating	Electric	PTHP	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Water Heating	Electric	Water Heater <= 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heating	Electric	Water Heater > 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Interior Lighting	Electric	Screw-in	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Interior Lighting	Electric	Linear Fluorescent	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Interior Lighting	Electric	Specialty	12%	12%	12%	13%	13%	13%	13%	13%	13%	13%	13%
Exterior Lighting	Electric	Screw-in	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Appliances	Electric	Refrigerator	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Appliances	Electric	Second Refrigerator	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Appliances	Electric	Freezer	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Appliances	Electric	Clothes Washer	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%	48%
Appliances	Electric	Clothes Dryer	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%	48%
Appliances	Electric	Dishwasher	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Appliances	Electric	Stove	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Appliances	Electric	Microwave	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Electronics	Electric	Personal Computers	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Electronics	Electric	Monitor	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Electronics	Electric	Laptops	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Electronics	Electric	TVs	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%
Electronics	Electric	Printer/Fax/Copier	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Electronics	Electric	Set-top Boxes/DVR	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Electronics	Electric	Devices and Gadgets	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Miscellaneous	Electric	Air Purifier/Cleaner	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Miscellaneous	Electric	Dehumidifier	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Miscellaneous	Electric	Pool Heater	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Electric	Pool Pump	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Miscellaneous	Electric	Hot Tub / Spa	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Electric	Well Pump	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Miscellaneous	Electric	Furnace Fan	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Miscellaneous	Electric	Bathroom Exhaust Fan	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Miscellaneous	Electric	Miscellaneous	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Table E-16 Multi Family Gas/Electric Customer Equipment Measures — Gas (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Natural Gas	Boiler	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Natural Gas	Other Heating	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heating	Natural Gas	Water Heater <= 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heating	Natural Gas	Water Heater > 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Appliances	Natural Gas	Clothes Dryer	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%	48%
Appliances	Natural Gas	Stove	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Miscellaneous	Natural Gas	Pool Heater	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Natural Gas	Hot Tub / Spa	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Natural Gas	Miscellaneous	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Table E-17 Multi Family Gas/Electric Customer Non-Equipment Measures— (Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Ducting	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Insulation - Foundation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Infiltration Control	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Radiant Barrier	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Wall Cavity	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Wall Sheathing	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Ducting - Repair and Sealing	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Windows - High Efficiency/ENERGY STAR	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Windows - Install Reflective Film	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Doors - Storm and Thermal	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Roofs - High Reflectivity	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Attic Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Attic Fan - Photovoltaic - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Whole-House Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Ceiling Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Thermostat - Clock/Programmable	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Home Energy Management System	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Central AC - Early Replacement	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Central AC - Maintenance and Tune-Up	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Central Heat Pump - Maintenance	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Room AC - Removal of Second Unit	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Boiler - Hot Water Reset	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Boiler - Pipe Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Boiler - Maintenance	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%	29%
Furnace - Maintenance	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%	29%
Water Heater - Drainwater Heat Recovery	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Faucet Aerators	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Water Heater - Low-Flow Showerheads	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Water Heater - Pipe Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Tank Blanket/Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Thermostat Setback	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Water Heater - Timer	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Water Heater - Desuperheater	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heater - Solar System	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Occupancy Sensors	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Photosensor Control	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Photovoltaic Installation	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Timeclock Installation	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Refrigerator - Early Replacement	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Refrigerator - Maintenance	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Refrigerator - Remove Second Unit	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Remove Second Unit	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Early Replacement	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Maintenance	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Electronics - Smart Power Strip	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Pool Pump - Timer	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Pool Heater - Solar System	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
ENERGY STAR Home Design	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Information Based Energy Efficiency Programs	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Combined Boiler & Water Htg. Unit	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Pool/Spa cover	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%

Table E-18 Multi Family Gas/Electric Customer Equipment Measures— Electric (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Central AC	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Cooling	Electric	Room AC	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Cooling	Electric	Air-Source Heat Pump	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Cooling	Electric	Geothermal Heat Pump	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Cooling	Electric	PTHP	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Heating	Electric	Electric Room Heat	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Heating	Electric	Furnace	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Heating	Electric	Air-Source Heat Pump	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Heating	Electric	Geothermal Heat Pump	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Heating	Electric	PTHP	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Water Heating	Electric	Water Heater <= 55 gal	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Water Heating	Electric	Water Heater > 55 gal	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Interior Lighting	Electric	Screw-in	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Interior Lighting	Electric	Linear Fluorescent	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Interior Lighting	Electric	Specialty	10%	10%	10%	10%	11%	11%	11%	11%	11%	11%	11%
Exterior Lighting	Electric	Screw-in	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Appliances	Electric	Refrigerator	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Appliances	Electric	Second Refrigerator	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Appliances	Electric	Freezer	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Appliances	Electric	Clothes Washer	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Appliances	Electric	Clothes Dryer	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Appliances	Electric	Dishwasher	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Appliances	Electric	Stove	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Appliances	Electric	Microwave	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Electronics	Electric	Personal Computers	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Electronics	Electric	Monitor	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Electronics	Electric	Laptops	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Electronics	Electric	TVs	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Electronics	Electric	Printer/Fax/Copier	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Electronics	Electric	Set-top Boxes/DVR	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Electronics	Electric	Devices and Gadgets	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Miscellaneous	Electric	Air Purifier/Cleaner	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Miscellaneous	Electric	Dehumidifier	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Miscellaneous	Electric	Pool Heater	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Miscellaneous	Electric	Pool Pump	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Miscellaneous	Electric	Hot Tub / Spa	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Miscellaneous	Electric	Well Pump	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Furnace Fan	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Bathroom Exhaust Fan	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Miscellaneous	Electric	Miscellaneous	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%

Table E-19 Multi Family Gas/Electric Customer Equipment Measures—Gas (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Heating	Natural Gas	Boiler	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Heating	Natural Gas	Other Heating	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heating	Natural Gas	Water Heater <= 55 gal	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heating	Natural Gas	Water Heater > 55 gal	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Appliances	Natural Gas	Clothes Dryer	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Appliances	Natural Gas	Stove	20%	20%	21%	21%	22%	22%	23%	23%	23%	24%	24%
Miscellaneous	Natural Gas	Pool Heater	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Miscellaneous	Natural Gas	Hot Tub / Spa	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Miscellaneous	Natural Gas	Miscellaneous	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%

Table E-20 Multi Family Gas/Electric Customer Non-Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Ducting	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Insulation - Foundation	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Infiltration Control	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Radiant Barrier	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Cavity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Sheathing	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Ducting - Repair and Sealing	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Windows - High Efficiency/ENERGY STAR	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Windows - Install Reflective Film	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Doors - Storm and Thermal	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Roofs - High Reflectivity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Attic Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Attic Fan - Photovoltaic - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Whole-House Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Ceiling Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Thermostat - Clock/Programmable	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Home Energy Management System	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Central AC - Early Replacement	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Central AC - Maintenance and Tune-Up	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Central Heat Pump - Maintenance	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Room AC - Removal of Second Unit	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Boiler - Hot Water Reset	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Furnace - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Water Heater - Drainwater Heat Recovery	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Faucet Aerators	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Low-Flow Showerheads	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Tank Blanket/Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Thermostat Setback	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Desuperheater	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Solar System	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Interior Lighting - Occupancy Sensors	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photosensor Control	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photovoltaic Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Timeclock Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Refrigerator - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Electronics - Smart Power Strip	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Pool Pump - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Pool Heater - Solar System	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
ENERGY STAR Home Design	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Information Based Energy Efficiency Programs	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Combined Boiler & Water Htg. Unit	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Pool/Spa cover	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%

Table E-21 Single Family Gas Only Customer Equipment Measures—(Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Natural Gas	Boiler	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Heating	Natural Gas	Other Heating	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Water Heating	Natural Gas	Water Heater <= 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heating	Natural Gas	Water Heater > 55 gal	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Appliances	Natural Gas	Clothes Dryer	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Appliances	Natural Gas	Stove	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Miscellaneous	Natural Gas	Pool Heater	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Natural Gas	Hot Tub / Spa	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Miscellaneous	Natural Gas	Miscellaneous	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%

Table E-22 Single Family Gas Only Customer Non-Equipment Measures—(Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Ducting	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Insulation - Foundation	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Infiltration Control	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Radiant Barrier	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Wall Cavity	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Insulation - Wall Sheathing	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Ducting - Repair and Sealing	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Windows - High Efficiency/ENERGY STAR	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Windows - Install Reflective Film	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Doors - Storm and Thermal	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%
Roofs - High Reflectivity	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Attic Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Attic Fan - Photovoltaic - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Whole-House Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Ceiling Fan - Installation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Thermostat - Clock/Programmable	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Home Energy Management System	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Central AC - Early Replacement	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Central AC - Maintenance and Tune-Up	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Central Heat Pump - Maintenance	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Room AC - Removal of Second Unit	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Boiler - Hot Water Reset	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Boiler - Pipe Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Boiler - Maintenance	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Furnace - Maintenance	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Drainwater Heat Recovery	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Faucet Aerators	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water Heater - Low-Flow Showerheads	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water Heater - Pipe Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Tank Blanket/Insulation	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water Heater - Thermostat Setback	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Water Heater - Timer	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Water Heater - Desuperheater	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heater - Solar System	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Occupancy Sensors	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Photosensor Control	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Photovoltaic Installation	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Exterior Lighting - Timeclock Installation	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigerator - Early Replacement	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Refrigerator - Maintenance	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Refrigerator - Remove Second Unit	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Remove Second Unit	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Early Replacement	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Freezer - Maintenance	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Electronics - Smart Power Strip	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Pool Pump - Timer	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Pool Heater - Solar System	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
ENERGY STAR Home Design	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Information Based Energy Efficiency Programs	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Combined Boiler & Water Htg. Unit	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pool/Spa cover	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%

Table E-23 Single Family Gas Only Customer Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Boiler	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Heating	Natural Gas	Other Heating	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Water Heating	Natural Gas	Water Heater <= 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heating	Natural Gas	Water Heater > 55 gal	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Appliances	Natural Gas	Clothes Dryer	33%	33%	34%	34%	35%	35%	35%	36%	36%	37%	37%
Appliances	Natural Gas	Stove	26%	26%	27%	27%	27%	28%	28%	29%	29%	30%	30%
Miscellaneous	Natural Gas	Pool Heater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Hot Tub / Spa	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Miscellaneous	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%

Table E-24 Single Family Gas Only Customer Non-Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Ducting	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Insulation - Foundation	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Infiltration Control	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Radiant Barrier	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Wall Cavity	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Insulation - Wall Sheathing	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Ducting - Repair and Sealing	30%	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%
Windows - High Efficiency/ENERGY STAR	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Windows - Install Reflective Film	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Doors - Storm and Thermal	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Roofs - High Reflectivity	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Attic Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Attic Fan - Photovoltaic - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Whole-House Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Ceiling Fan - Installation	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%
Thermostat - Clock/Programmable	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Home Energy Management System	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Central AC - Early Replacement	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Central AC - Maintenance and Tune-Up	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Central Heat Pump - Maintenance	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Room AC - Removal of Second Unit	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Boiler - Hot Water Reset	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Boiler - Pipe Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Boiler - Maintenance	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%
Furnace - Maintenance	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%
Water Heater - Drainwater Heat Recovery	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Faucet Aerators	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Water Heater - Low-Flow Showerheads	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Water Heater - Pipe Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Tank Blanket/Insulation	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Thermostat Setback	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Timer	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Desuperheater	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Solar System	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%
Interior Lighting - Occupancy Sensors	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Photosensor Control	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Photovoltaic Installation	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Exterior Lighting - Timeclock Installation	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Refrigerator - Early Replacement	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Refrigerator - Maintenance	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Refrigerator - Remove Second Unit	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Remove Second Unit	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Early Replacement	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Freezer - Maintenance	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Electronics - Smart Power Strip	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Pool Pump - Timer	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Pool Heater - Solar System	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
ENERGY STAR Home Design	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%
Information Based Energy Efficiency Programs	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%
Combined Boiler & Water Htg. Unit	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Pool/Spa cover	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%	34%

Table E-25 Multi Family Gas Only Customer Equipment Measures—(Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Natural Gas	Boiler	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Heating	Natural Gas	Other Heating	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Water Heating	Natural Gas	Water Heater <= 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heating	Natural Gas	Water Heater > 55 gal	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Appliances	Natural Gas	Clothes Dryer	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%	48%
Appliances	Natural Gas	Stove	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Miscellaneous	Natural Gas	Pool Heater	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Natural Gas	Hot Tub / Spa	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Miscellaneous	Natural Gas	Miscellaneous	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Table E-26 Multi Family Gas Only Customer Non-Equipment Measures—(Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Ducting	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Insulation - Foundation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Infiltration Control	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Radiant Barrier	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Wall Cavity	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Insulation - Wall Sheathing	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Ducting - Repair and Sealing	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Windows - High Efficiency/ENERGY STAR	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Windows - Install Reflective Film	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Doors - Storm and Thermal	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Roofs - High Reflectivity	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Attic Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Attic Fan - Photovoltaic - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Whole-House Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Ceiling Fan - Installation	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Thermostat - Clock/Programmable	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Home Energy Management System	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Central AC - Early Replacement	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Central AC - Maintenance and Tune-Up	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Central Heat Pump - Maintenance	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%
Room AC - Removal of Second Unit	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Boiler - Hot Water Reset	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Boiler - Pipe Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Boiler - Maintenance	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%	29%
Furnace - Maintenance	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%	29%
Water Heater - Drainwater Heat Recovery	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Faucet Aerators	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Water Heater - Low-Flow Showerheads	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Water Heater - Pipe Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Tank Blanket/Insulation	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heater - Thermostat Setback	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Water Heater - Timer	30%	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%
Water Heater - Desuperheater	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heater - Solar System	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Occupancy Sensors	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Photosensor Control	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Photovoltaic Installation	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Exterior Lighting - Timeclock Installation	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
Refrigerator - Early Replacement	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Refrigerator - Maintenance	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Refrigerator - Remove Second Unit	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Remove Second Unit	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Early Replacement	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Freezer - Maintenance	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Electronics - Smart Power Strip	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Pool Pump - Timer	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Pool Heater - Solar System	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
ENERGY STAR Home Design	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Information Based Energy Efficiency Programs	49%	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%
Combined Boiler & Water Htg. Unit	48%	48%	49%	49%	50%	50%	51%	51%	52%	52%	53%
Pool/Spa cover	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%

Table E-27 Multi Family Gas Only Customer Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Heating	Natural Gas	Boiler	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Heating	Natural Gas	Other Heating	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%
Water Heating	Natural Gas	Water Heater <= 55 gal	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heating	Natural Gas	Water Heater > 55 gal	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Appliances	Natural Gas	Clothes Dryer	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%
Appliances	Natural Gas	Stove	20%	20%	21%	21%	22%	22%	23%	23%	23%	24%	24%
Miscellaneous	Natural Gas	Pool Heater	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Miscellaneous	Natural Gas	Hot Tub / Spa	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Miscellaneous	Natural Gas	Miscellaneous	24%	24%	25%	25%	26%	26%	27%	27%	28%	28%	29%

Table E-28 Multi Family Gas Only Customer Non-Equipment Measures—(Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Ducting	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Insulation - Foundation	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Infiltration Control	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Radiant Barrier	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Cavity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Insulation - Wall Sheathing	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Ducting - Repair and Sealing	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%
Windows - High Efficiency/ENERGY STAR	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Windows - Install Reflective Film	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Doors - Storm and Thermal	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Roofs - High Reflectivity	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Attic Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Attic Fan - Photovoltaic - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Whole-House Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Ceiling Fan - Installation	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Thermostat - Clock/Programmable	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Home Energy Management System	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Central AC - Early Replacement	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Central AC - Maintenance and Tune-Up	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Central Heat Pump - Maintenance	26%	27%	27%	28%	28%	29%	29%	30%	30%	31%	31%
Room AC - Removal of Second Unit	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Boiler - Hot Water Reset	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Boiler - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Furnace - Maintenance	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%	28%
Water Heater - Drainwater Heat Recovery	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Faucet Aerators	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Low-Flow Showerheads	28%	29%	29%	30%	30%	31%	31%	32%	32%	33%	33%
Water Heater - Pipe Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Tank Blanket/Insulation	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Thermostat Setback	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Water Heater - Desuperheater	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Solar System	32%	32%	33%	33%	34%	34%	35%	35%	36%	36%	37%
Interior Lighting - Occupancy Sensors	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photosensor Control	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Photovoltaic Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Exterior Lighting - Timeclock Installation	20%	20%	21%	21%	22%	22%	23%	23%	24%	24%	25%
Refrigerator - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Refrigerator - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Remove Second Unit	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Early Replacement	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Freezer - Maintenance	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Electronics - Smart Power Strip	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Pool Pump - Timer	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
Pool Heater - Solar System	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%
ENERGY STAR Home Design	21%	21%	22%	22%	23%	23%	24%	24%	25%	25%	26%
Information Based Energy Efficiency Programs	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Combined Boiler & Water Htg. Unit	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Pool/Spa cover	22%	23%	23%	24%	24%	25%	25%	26%	26%	27%	27%

Table E-29 Commercial Electric Equipment Measures (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Air-Cooled Chiller	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Water-Cooled Chiller	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Roof top AC	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Air Source Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Geothermal Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	PTAC	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	PTHP	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Evaporative AC	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Air Source Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Geothermal Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Electric Room Heat	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Electric	Electric Furnace	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Electric	PTAC	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	PTHP	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Ventilation	Electric	Ventilation	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%
Water Heating	Electric	Water Heating	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Interior Lighting	Electric	Screw-in	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Interior Lighting	Electric	High-Bay Fixtures	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Interior Lighting	Electric	Linear Fluorescent	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	Screw-in	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	HID	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	Linear Fluorescent	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Refrigeration	Electric	Walk-in Refrigerator	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigeration	Electric	Reach-in Refrigerator	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigeration	Electric	Glass Door Display	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigeration	Electric	Open Display Case	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigeration	Electric	Icemaker	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigeration	Electric	Vending Machine	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Food Preparation	Electric	Oven	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Electric	Fryer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Electric	Dishwasher	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Electric	Hot Food Container	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Electric	Other	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Office Equipment	Electric	Desktop Computer	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Office Equipment	Electric	Laptop	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Office Equipment	Electric	Server	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Office Equipment	Electric	Monitor	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Office Equipment	Electric	Printer/Copier/Fax	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Office Equipment	Electric	POS Terminal	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Miscellaneous	Electric	Non-HVAC Motors	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Miscellaneous	Electric	Pool Pump	65%	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%
Miscellaneous	Electric	Pool Heater	65%	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%
Miscellaneous	Electric	Miscellaneous	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%

Table E-30 Commercial Electric Non-Equipment Measures (Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Insulation - Ducting	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Insulation - Radiant Barrier	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Insulation - Wall Cavity	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
HVAC - Duct Repair and Sealing	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Doors - High Efficiency	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Windows - High Efficiency	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Roof - High Reflectivity	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Air-Cooled Chiller - Condenser Air Temperature Reset	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - Economizer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - Thermal Energy Storage	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - VSD on fans	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - Chilled Water Reset	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - Chilled Water Variable-Flow System	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Air-Cooled Chiller - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Water-Cooled Chiller - Condenser Water Temperature Reset	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - Economizer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - Thermal Energy Storage	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - VSD on Fans	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - Chilled Water Reset	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - Chilled Water Variable-Flow System	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water-Cooled Chiller - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
RTU - Evaporative Precooler	53%	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%
RTU - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Gas Boiler - High Efficiency Hot Water Circulation	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Gas Boiler - Hot Water Reset	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Gas Boiler - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Gas Furnace - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Space Heating - Heat Recovery Ventilator	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Heat Pump - Maintenance	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Ventilation - ECM on VAV Boxes	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Ventilation - Variable Speed Control	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Ventilation - CO2 Controlled	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Drainwater Heat Recovery	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water Heater - Faucet Aerators	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Water Heater - Low Flow Showerheads	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Water Heater - High Efficiency Circulation Pump	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Water Heater - Desuperheater	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water Heater - Solar System	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Water Heater - Install Timer	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Water Heater - Pipe Insulation	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Water Heater - Tank Blanket/Insulation	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Water Heater - Pre-Rinse Spray Valve	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Combined Boiler & Water Htg. Unit	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Interior Lighting - Daylighting Controls	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Interior Lighting - LED Exit Lighting	62%	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%
Interior Lighting - Occupancy Sensors	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Interior Lighting - Task Lighting	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Interior Lighting - Timers and Timers	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Interior Fluorescent - Bi-Level Fixture	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Interior Fluorescent - Delamp and Install Reflectors	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Exterior Lighting - Bi-Level Fixture	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Exterior Lighting - Daylighting Controls	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Exterior Lighting - Photovoltaic Installation	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Refrigerator - Anti-Sweat Door Heater	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Auto Door Closer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Decommissioning	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Demand Defrost	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Door Gasket Replacement	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Economizer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Evaporator Fan Controls	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Floating Head Pressure	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Strip Curtain	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - High Efficiency Compressor	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigerator - Variable Speed Compressor	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Vending Machine - Controller	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Grocery - Display Case - LED Lighting	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Grocery - Display Case Motion Sensors	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Grocery - ECMs for Display Cases	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Grocery - Open Display Case - Night Covers	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Cooking - Exhaust Hoods with Sensor Control	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Office Equipment - ENERGY STAR Power Supplies	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Office Equipment - Plug Load Occupancy Sensors	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Pool Pump - Timer	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Pool Heater - Solar	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Non-HVAC Motors - Variable Speed Control	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Energy Management System	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Thermostat - Clock/Programmable	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Lodging - Guest Room Controls	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
HVAC - Occupancy Sensors	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Commissioning - HVAC	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Commissioning - Lighting	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Retrocommissioning - HVAC	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Retrocommissioning - Lighting	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Advanced New Construction Designs	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Custom Measures	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Refrigerator - eCube	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Electronics - Smart Power Strip	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Electronics - Monitor Power Management	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Insulation - Foundation	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%	61%
Water Heating - Booster Water Heater	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Refrigeration - High Efficiency Evaporator Fan Motors	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Boiler O2 Trim Controls	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Boiler Parallel Positioning Control	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Boiler blowdown heat exchanger (steam)	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Repair malfunctioning steam traps	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Insulate steam lines/condensate tank	61%	61%	62%	62%	63%	63%	64%	64%	65%	65%	66%
Destratification Fans (HVLS)	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Exhaust Hood Makeup Air	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Optimizing Kitchen Ventilation	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%

Table E-31 Commercial Electric Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Air-Cooled Chiller	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Water-Cooled Chiller	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Roof top AC	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Air Source Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Geothermal Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	PTAC	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	PTHP	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Evaporative AC	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Air Source Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Geothermal Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Electric Room Heat	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Electric	Electric Furnace	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Electric	PTAC	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	PTHP	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Ventilation	Electric	Ventilation	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Water Heating	Electric	Water Heating	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Interior Lighting	Electric	Screw-in	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Interior Lighting	Electric	High-Bay Fixtures	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Interior Lighting	Electric	Linear Fluorescent	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	Screw-in	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	HID	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	Linear Fluorescent	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Refrigeration	Electric	Walk-in Refrigerator	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigeration	Electric	Reach-in Refrigerator	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigeration	Electric	Glass Door Display	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigeration	Electric	Open Display Case	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigeration	Electric	Icemaker	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigeration	Electric	Vending Machine	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Food Preparation	Electric	Oven	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Electric	Fryer	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Electric	Dishwasher	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Electric	Hot Food Container	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Electric	Other	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Office Equipment	Electric	Desktop Computer	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Office Equipment	Electric	Laptop	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%

Market Adoption Factors

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Office Equipment	Electric	Server	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%
Office Equipment	Electric	Monitor	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Office Equipment	Electric	Printer/Copier/Fax	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%	40%
Office Equipment	Electric	POS Terminal	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Miscellaneous	Electric	Non-HVAC Motors	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Miscellaneous	Electric	Pool Pump	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Miscellaneous	Electric	Pool Heater	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Miscellaneous	Electric	Miscellaneous	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%

Table E-32 Commercial Electric Non-Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Insulation - Ducting	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Insulation - Radiant Barrier	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Insulation - Wall Cavity	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
HVAC - Duct Repair and Sealing	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Doors - High Efficiency	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Windows - High Efficiency	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Roof - High Reflectivity	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Air-Cooled Chiller - Condenser Air Temperature Reset	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Air-Cooled Chiller - Economizer	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Air-Cooled Chiller - Thermal Energy Storage	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Air-Cooled Chiller - VSD on fans	39%	39%	40%	40%	40%	41%	41%	42%	42%	43%	43%
Air-Cooled Chiller - Chilled Water Reset	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Air-Cooled Chiller - Chilled Water Variable-Flow System	39%	39%	40%	40%	40%	41%	41%	42%	42%	43%	43%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	37%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Air-Cooled Chiller - Maintenance	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Water-Cooled Chiller - Condenser Water Temperature Reset	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Water-Cooled Chiller - Economizer	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Water-Cooled Chiller - Thermal Energy Storage	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Water-Cooled Chiller - VSD on Fans	39%	39%	40%	40%	40%	41%	41%	42%	42%	43%	43%
Water-Cooled Chiller - Chilled Water Reset	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Water-Cooled Chiller - Chilled Water Variable-Flow System	39%	39%	40%	40%	40%	41%	41%	42%	42%	43%	43%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	37%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Water-Cooled Chiller - Maintenance	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
RTU - Evaporative Precooler	27%	28%	28%	29%	29%	30%	30%	31%	31%	32%	32%
RTU - Maintenance	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%	40%
Gas Boiler - High Efficiency Hot Water Circulation	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Gas Boiler - Hot Water Reset	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Gas Boiler - Maintenance	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Gas Furnace - Maintenance	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Space Heating - Heat Recovery Ventilator	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Heat Pump - Maintenance	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Ventilation - ECM on VAV Boxes	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Ventilation - Variable Speed Control	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Ventilation - CO2 Controlled	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Drainwater Heat Recovery	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Water Heater - Faucet Aerators	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heater - Low Flow Showerheads	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heater - High Efficiency Circulation Pump	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%	46%
Water Heater - Desuperheater	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Water Heater - Solar System	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Water Heater - Install Timer	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Water Heater - Pipe Insulation	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Tank Blanket/Insulation	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Water Heater - Pre-Rinse Spray Valve	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Combined Boiler & Water Htg. Unit	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Interior Lighting - Daylighting Controls	46%	47%	47%	48%	48%	48%	49%	49%	50%	50%	51%
Interior Lighting - LED Exit Lighting	43%	44%	44%	45%	45%	46%	46%	46%	47%	47%	48%
Interior Lighting - Occupancy Sensors	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Interior Lighting - Task Lighting	46%	47%	47%	48%	48%	48%	49%	49%	50%	50%	51%
Interior Lighting - Timers and Timers	46%	47%	47%	48%	48%	48%	49%	49%	50%	50%	51%
Interior Fluorescent - Bi-Level Fixture	46%	47%	47%	48%	48%	48%	49%	49%	50%	50%	51%
Interior Fluorescent - Delamp and Install Reflectors	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Exterior Lighting - Bi-Level Fixture	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	37%
Exterior Lighting - Daylighting Controls	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	37%
Exterior Lighting - Photovoltaic Installation	33%	33%	34%	34%	35%	35%	36%	36%	37%	37%	37%
Refrigerator - Anti-Sweat Door Heater	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Auto Door Closer	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Decommissioning	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Refrigerator - Demand Defrost	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Door Gasket Replacement	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Economizer	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Refrigerator - Evaporator Fan Controls	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Floating Head Pressure	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Refrigerator - Strip Curtain	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - High Efficiency Compressor	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Refrigerator - Variable Speed Compressor	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Vending Machine - Controller	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Grocery - Display Case - LED Lighting	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Grocery - Display Case Motion Sensors	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Grocery - ECMs for Display Cases	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Grocery - Open Display Case - Night Covers	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%	42%
Cooking - Exhaust Hoods with Sensor Control	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Office Equipment - ENERGY STAR Power Supplies	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Office Equipment - Plug Load Occupancy Sensors	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Pool Pump - Timer	33%	33%	34%	34%	35%	35%	36%	36%	36%	37%	37%
Pool Heater - Solar	33%	33%	34%	34%	35%	35%	36%	36%	36%	37%	37%
Non-HVAC Motors - Variable Speed Control	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%
Energy Management System	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Thermostat - Clock/Programmable	49%	49%	50%	50%	51%	51%	51%	52%	52%	53%	53%
Lodging - Guest Room Controls	46%	47%	47%	48%	48%	48%	49%	49%	50%	50%	51%
HVAC - Occupancy Sensors	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Commissioning - HVAC	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%
Commissioning - Lighting	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Retrocommissioning - HVAC	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%
Retrocommissioning - Lighting	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%	45%
Advanced New Construction Designs	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%
Custom Measures	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%	55%
Refrigerator - eCube	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Electronics - Smart Power Strip	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Electronics - Monitor Power Management	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Foundation	45%	45%	46%	46%	47%	47%	48%	49%	49%	50%	50%
Water Heating - Booster Water Heater	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Refrigeration - High Efficiency Evaporator Fan Motors	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Boiler O2 Trim Controls	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Boiler Parallel Positioning Control	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Boiler blowdown heat exchanger (steam)	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Repair malfunctioning steam traps	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Insulate steam lines/condensate tank	31%	31%	32%	32%	33%	33%	34%	34%	35%	35%	36%
Destratification Fans (HVLS)	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Exhaust Hood Makeup Air	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Optimizing Kitchen Ventilation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%

Table E-33 Commercial Gas Equipment Measures (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Natural Gas	Boiler	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Natural Gas	Unit Heater	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Water Heating	Natural Gas	Water Heating	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Food Preparation	Natural Gas	Oven	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Fryer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Broiler	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Griddle	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Range	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Steamer	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Food Preparation	Natural Gas	Other	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Miscellaneous	Natural Gas	Pool Heater	65%	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%
Miscellaneous	Natural Gas	Miscellaneous	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%

Table E-34 Commercial Gas Non-Equipment Measures (Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Ducting	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Radiant Barrier	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Wall Cavity	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
HVAC - Duct Repair and Sealing	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Doors - High Efficiency	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Windows - High Efficiency	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Roof - High Reflectivity	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Air-Cooled Chiller - Condenser Air Temperature Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Economizer	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Thermal Energy Storage	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - VSD on fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Air-Cooled Chiller - Chilled Water Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Chilled Water Variable-Flow System	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Air-Cooled Chiller - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Water-Cooled Chiller - Condenser Water Temperature Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Economizer	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Thermal Energy Storage	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - VSD on Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - Chilled Water Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Chilled Water Variable-Flow System	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
RTU - Evaporative Precooler	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
RTU - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Gas Boiler - High Efficiency Hot Water Circulation	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Gas Boiler - Hot Water Reset	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Gas Boiler - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Gas Furnace - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Space Heating - Heat Recovery Ventilator	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Heat Pump - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Ventilation - ECM on VAV Boxes	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Ventilation - Variable Speed Control	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%
Ventilation - CO2 Controlled	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Drainwater Heat Recovery	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Water Heater - Faucet Aerators	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Water Heater - Low Flow Showerheads	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Water Heater - High Efficiency Circulation Pump	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Water Heater - Desuperheater	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Water Heater - Solar System	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Water Heater - Install Timer	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Water Heater - Pipe Insulation	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Water Heater - Tank Blanket/Insulation	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Water Heater - Pre-Rinse Spray Valve	62%	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%
Combined Boiler & Water Htg. Unit	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Interior Lighting - Daylighting Controls	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Lighting - LED Exit Lighting	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Interior Lighting - Occupancy Sensors	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Interior Lighting - Task Lighting	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Lighting - Timerclocks and Timers	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Fluorescent - Bi-Level Fixture	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Fluorescent - Delamp and Install Reflectors	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Exterior Lighting - Bi-Level Fixture	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Exterior Lighting - Daylighting Controls	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Exterior Lighting - Photovoltaic Installation	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Refrigerator - Anti-Sweat Door Heater	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Auto Door Closer	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Decommissioning	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigerator - Demand Defrost	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Door Gasket Replacement	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Economizer	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigerator - Evaporator Fan Controls	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Floating Head Pressure	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Refrigerator - Strip Curtain	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - High Efficiency Compressor	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Refrigerator - Variable Speed Compressor	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Vending Machine - Controller	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Grocery - Display Case - LED Lighting	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Grocery - Display Case Motion Sensors	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Grocery - ECMs for Display Cases	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Grocery - Open Display Case - Night Covers	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Cooking - Exhaust Hoods with Sensor Control	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Office Equipment - ENERGY STAR Power Supplies	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Office Equipment - Plug Load Occupancy Sensors	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Pool Pump - Timer	65%	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%
Pool Heater - Solar	65%	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%
Non-HVAC Motors - Variable Speed Control	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%
Energy Management System	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Thermostat - Clock/Programmable	73%	74%	74%	75%	75%	76%	76%	77%	77%	78%	78%
Lodging - Guest Room Controls	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
HVAC - Occupancy Sensors	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Commissioning - HVAC	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Commissioning - Lighting	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Retrocommissioning - HVAC	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Retrocommissioning - Lighting	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Advanced New Construction Designs	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Custom Measures	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Refrigerator - eCube	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Electronics - Smart Power Strip	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Electronics - Monitor Power Management	59%	59%	60%	60%	61%	61%	62%	62%	63%	63%	64%
Insulation - Foundation	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Water Heating - Booster Water Heater	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Refrigeration - High Efficiency Evaporator Fan Motors	54%	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%
Boiler O2 Trim Controls	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Boiler Parallel Positioning Control	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Boiler blowdown heat exchanger (steam)	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Repair malfunctioning steam traps	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Insulate steam lines/condensate tank	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Destratification Fans (HVLS)	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%
Exhaust Hood Makeup Air	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%
Optimizing Kitchen Ventilation	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%

Table E-35 Commercial Gas Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Natural Gas	Boiler	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Natural Gas	Unit Heater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Water Heating	Natural Gas	Water Heating	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Food Preparation	Natural Gas	Oven	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Fryer	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Broiler	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Griddle	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Range	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Steamer	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Food Preparation	Natural Gas	Other	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Miscellaneous	Natural Gas	Pool Heater	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Miscellaneous	Natural Gas	Miscellaneous	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%

Table E-36 Commercial Gas Non-Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Insulation - Ducting	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Insulation - Radiant Barrier	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Insulation - Wall Cavity	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
HVAC - Duct Repair and Sealing	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Doors - High Efficiency	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Windows - High Efficiency	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Roof - High Reflectivity	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Air-Cooled Chiller - Condenser Air Temperature Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Economizer	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Thermal Energy Storage	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - VSD on fans	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Air-Cooled Chiller - Chilled Water Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Chilled Water Variable-Flow System	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Air-Cooled Chiller - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water-Cooled Chiller - Condenser Water Temperature Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Economizer	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Thermal Energy Storage	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - VSD on Fans	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water-Cooled Chiller - Chilled Water Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Chilled Water Variable-Flow System	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Water-Cooled Chiller - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
RTU - Evaporative Precooler	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
RTU - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Gas Boiler - High Efficiency Hot Water Circulation	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Gas Boiler - Hot Water Reset	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Gas Boiler - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Gas Furnace - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Space Heating - Heat Recovery Ventilator	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Heat Pump - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Ventilation - ECM on VAV Boxes	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Ventilation - Variable Speed Control	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Ventilation - CO2 Controlled	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water Heater - Drainwater Heat Recovery	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Water Heater - Faucet Aerators	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Water Heater - Low Flow Showerheads	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Water Heater - High Efficiency Circulation Pump	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Water Heater - Desuperheater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Water Heater - Solar System	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Water Heater - Install Timer	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%	48%
Water Heater - Pipe Insulation	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Water Heater - Tank Blanket/Insulation	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Water Heater - Pre-Rinse Spray Valve	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Combined Boiler & Water Htg. Unit	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Interior Lighting - Daylighting Controls	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Lighting - LED Exit Lighting	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Interior Lighting - Occupancy Sensors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Interior Lighting - Task Lighting	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Lighting - Timers and Timers	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Fluorescent - Bi-Level Fixture	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Fluorescent - Delamp and Install Reflectors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Exterior Lighting - Bi-Level Fixture	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Exterior Lighting - Daylighting Controls	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Exterior Lighting - Photovoltaic Installation	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Refrigerator - Anti-Sweat Door Heater	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Auto Door Closer	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Decommissioning	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigerator - Demand Defrost	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Door Gasket Replacement	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Economizer	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigerator - Evaporator Fan Controls	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Floating Head Pressure	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Refrigerator - Strip Curtain	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - High Efficiency Compressor	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Refrigerator - Variable Speed Compressor	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Vending Machine - Controller	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Grocery - Display Case - LED Lighting	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Grocery - Display Case Motion Sensors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Grocery - ECMs for Display Cases	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Grocery - Open Display Case - Night Covers	38%	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%
Cooking - Exhaust Hoods with Sensor Control	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%	47%
Office Equipment - ENERGY STAR Power Supplies	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Office Equipment - Plug Load Occupancy Sensors	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Pool Pump - Timer	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Pool Heater - Solar	40%	40%	41%	41%	42%	42%	43%	43%	44%	44%	45%
Non-HVAC Motors - Variable Speed Control	45%	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%
Energy Management System	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Thermostat - Clock/Programmable	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%
Lodging - Guest Room Controls	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
HVAC - Occupancy Sensors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Commissioning - HVAC	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Commissioning - Lighting	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Retrocommissioning - HVAC	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Retrocommissioning - Lighting	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Advanced New Construction Designs	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Custom Measures	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Refrigerator - eCube	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Electronics - Smart Power Strip	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Electronics - Monitor Power Management	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Insulation - Foundation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Water Heating - Booster Water Heater	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Refrigeration - High Efficiency Evaporator Fan Motors	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Boiler O2 Trim Controls	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Boiler Parallel Positioning Control	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Boiler blowdown heat exchanger (steam)	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Repair malfunctioning steam traps	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Insulate steam lines/condensate tank	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Destratification Fans (HVLS)	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Exhaust Hood Makeup Air	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Optimizing Kitchen Ventilation	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%

Table E-37 Industrial Electric Equipment Measures (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Air-Cooled Chiller	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Water-Cooled Chiller	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Roof top AC	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Air Source Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Geothermal Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Cooling	Electric	Other Cooling	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Air Source Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Geothermal Heat Pump	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Heating	Electric	Electric Resistance	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Electric	Electric Furnace	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Ventilation	Electric	Ventilation	58%	58%	59%	59%	60%	60%	61%	61%	62%	62%	63%
Interior Lighting	Electric	Screw-in	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Interior Lighting	Electric	High-Bay Fixtures	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Interior Lighting	Electric	Linear Fluorescent	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	Screw-in	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	HID	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Exterior Lighting	Electric	Linear Fluorescent	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%
Motors	Electric	Pumps	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Motors	Electric	Fans & Blowers	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Motors	Electric	Compressed Air	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Motors	Electric	Matl Handling	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Motors	Electric	Matl Processing	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Motors	Electric	Other Motors	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Process	Electric	Process Heating	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Process	Electric	Process Cooling and Refrig	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Process	Electric	Electro-Chemical Processes	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Process	Electric	Other Process	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%
Miscellaneous	Electric	Miscellaneous	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%

Table E-38 Industrial Natural Gas Equipment Measures (Maximum Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Natural Gas	Boiler	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Heating	Natural Gas	Other Heating	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process	Natural Gas	Process Heating	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process	Natural Gas	Process Boiler	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process	Natural Gas	Process Cooling	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process	Natural Gas	Other Process	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Miscellaneous	Natural Gas	Miscellaneous	57%	57%	58%	58%	59%	59%	60%	60%	61%	61%	62%

Table E-39 Industrial Non-Equipment Measures (Maximum Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Ducting	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Insulation - Wall Cavity	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
HVAC - Duct Repair and Sealing	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Air-Cooled Chiller - Economizer	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Efficient Mechanical Layout	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Air-Cooled Chiller - Chilled Water Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - Chilled Water Variable-Flow System	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Air-Cooled Chiller - Condenser Water Temperature Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Air-Cooled Chiller - VSD on Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - Economizer	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Efficient Mechanical Layout	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Water-Cooled Chiller - Chilled Water Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - Chilled Water Variable-Flow System	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - Condenser Water Temperature Reset	77%	77%	78%	78%	79%	79%	80%	80%	81%	81%	82%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
Water-Cooled Chiller - VSD on Fans	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%
RTU - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Heat Pump - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Process Boilers - Hot Water Reset	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process Boiler - Combustion Controls (O2 Trim)	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process Boiler - Condensate Return Lines	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process Boiler - Condensing Economizer	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process Boiler - Pipe Insulation	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Process Boiler - Steam Trap Maintenance	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Roofs - High Reflectivity	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%	57%
Energy Management System	51%	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%
Thermostat - Clock/Programmable	73%	74%	74%	75%	75%	76%	76%	77%	77%	78%	78%
Interior Lighting - Occupancy Sensors	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Interior Lighting - Skylights	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Lighting - Time Clocks and Timers	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Interior Lighting - LED Exit Lighting	71%	71%	72%	72%	73%	73%	74%	74%	75%	75%	76%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Daylighting Controls	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Screw-in - Task Lighting	54%	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%
Interior Fluorescent - Bi-Level Fixture	55%	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%
Interior Fluorescent - Delamp and Install Reflectors	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Exterior Lighting - Bi-Level Fixture	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Exterior Lighting - Daylighting Controls	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Exterior Lighting - Photovoltaic Installation	66%	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%
Process - Conductivity Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Process - Controls on Fume Hoods	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Process - Timers and Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Refrigeration - Floating Head Pressure	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Refrigeration - System Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Refrigeration - System Maintenance	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Refrigeration - System Optimization	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Compressed Air - Air Usage Reduction	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Compressed Air - Compressor Replacement	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Compressed Air - System Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Compressed Air - System Maintenance	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Compressed Air - System Optimization and Improvements	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pumping System - Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pumping System - Maintenance	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pumping System - Optimization	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pumps - Variable Speed Control	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Pump Equipment Upgrade	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Fan Equipment Upgrade	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Fan System - Controls	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Fan System - Maintenance	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Fan System - Optimization	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Fans - Variable Speed Control	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Motors - Magnetic Adjustable Speed Drives	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Motors - Efficient Rewind	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Motors - Variable Frequency Drive	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Commissioning - HVAC	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Commissioning - Lighting	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%
Retrocommissioning - HVAC	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Retrocommissioning - Lighting	64%	65%	65%	66%	66%	67%	67%	68%	68%	69%	69%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ventilation - CO2 Controlled	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Gas Boiler - High Efficiency Hot Water Circulation	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Gas Boiler - Hot Water Reset	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Gas Boiler - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Gas Furnace - Maintenance	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%	72%
Custom Measures	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Boiler Blowdown Heat Exchanger (Steam)	62%	63%	63%	64%	64%	65%	65%	66%	66%	67%	67%
Insulate Steam Lines / Condensate Tank	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Direct Fired Make-up Air System	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
Direct Contact Water Heater	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%
HVAC - Infrared Heater	55%	56%	56%	57%	57%	58%	58%	59%	59%	60%	60%

Table E-40 Industrial Electric Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Cooling	Electric	Air-Cooled Chiller	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Water-Cooled Chiller	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Roof top AC	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Air Source Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Geothermal Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Cooling	Electric	Other Cooling	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Air Source Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Geothermal Heat Pump	33%	34%	34%	35%	35%	36%	36%	37%	37%	38%	38%
Heating	Electric	Electric Resistance	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Electric	Electric Furnace	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Ventilation	Electric	Ventilation	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Interior Lighting	Electric	Screw-in	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Interior Lighting	Electric	High-Bay Fixtures	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Interior Lighting	Electric	Linear Fluorescent	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	Screw-in	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	HID	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Exterior Lighting	Electric	Linear Fluorescent	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%
Motors	Electric	Pumps	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors	Electric	Fans & Blowers	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors	Electric	Compressed Air	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors	Electric	Matl Handling	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors	Electric	Matl Processing	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors	Electric	Other Motors	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process	Electric	Process Heating	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process	Electric	Process Cooling and Refrig	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process	Electric	Electro-Chemical Processes	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process	Electric	Other Process	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Miscellaneous	Electric	Miscellaneous	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%

Table E-41 Industrial Natural Gas Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

End Use	Fuel	Technology	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Heating	Natural Gas	Furnace	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Natural Gas	Boiler	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Heating	Natural Gas	Other Heating	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process	Natural Gas	Process Heating	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process	Natural Gas	Process Boiler	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process	Natural Gas	Process Cooling	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process	Natural Gas	Other Process	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Miscellaneous	Natural Gas	Miscellaneous	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%

Table E-42 Industrial Non-Equipment Measures (Maximum Achievable Potential factor x Realistic Achievable Potential factor)

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Insulation - Ceiling	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Insulation - Ducting	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Insulation - Wall Cavity	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
HVAC - Duct Repair and Sealing	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Air-Cooled Chiller - Economizer	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Efficient Mechanical Layout	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Air-Cooled Chiller - Chilled Water Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - Chilled Water Variable-Flow System	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Air-Cooled Chiller - Condenser Water Temperature Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Air-Cooled Chiller - High Efficiency Cooling Tower Fans	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Air-Cooled Chiller - VSD on Fans	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water-Cooled Chiller - Economizer	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Efficient Mechanical Layout	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Water-Cooled Chiller - Chilled Water Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - Chilled Water Variable-Flow System	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
Water-Cooled Chiller - Condenser Water Temperature Reset	51%	52%	52%	53%	53%	54%	54%	55%	55%	56%	56%
Water-Cooled Chiller - High Efficiency Cooling Tower Fans	44%	44%	45%	45%	46%	46%	47%	47%	48%	48%	49%
Water-Cooled Chiller - VSD on Fans	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%
RTU - Maintenance	38%	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%
Heat Pump - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Process Boilers - Hot Water Reset	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process Boiler - Combustion Controls (O2 Trim)	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process Boiler - Condensate Return Lines	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process Boiler - Condensing Economizer	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process Boiler - Pipe Insulation	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Process Boiler - Steam Trap Maintenance	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Roofs - High Reflectivity	42%	42%	43%	43%	44%	44%	45%	45%	46%	46%	47%
Energy Management System	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Thermostat - Clock/Programmable	66%	67%	67%	68%	68%	69%	69%	70%	70%	71%	71%
Interior Lighting - Occupancy Sensors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Interior Lighting - Skylights	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Lighting - Time Clocks and Timers	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Interior Lighting - LED Exit Lighting	49%	50%	50%	51%	51%	52%	52%	53%	53%	54%	54%

Market Adoption Factors

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Interior Lighting - Daylighting Controls	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Screw-in - Task Lighting	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Interior Fluorescent - Bi-Level Fixture	47%	47%	48%	48%	49%	49%	50%	50%	51%	51%	52%
Interior Fluorescent - Delamp and Install Reflectors	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Exterior Lighting - Bi-Level Fixture	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Exterior Lighting - Daylighting Controls	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Exterior Lighting - Photovoltaic Installation	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Process - Conductivity Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process - Controls on Fume Hoods	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Process - Timers and Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Refrigeration - Floating Head Pressure	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Refrigeration - System Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Refrigeration - System Maintenance	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Refrigeration - System Optimization	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Compressed Air - Air Usage Reduction	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Compressed Air - Compressor Replacement	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Compressed Air - System Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Compressed Air - System Maintenance	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Compressed Air - System Optimization and Improvements	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Pumping System - Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Pumping System - Maintenance	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Pumping System - Optimization	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Pumps - Variable Speed Control	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Pump Equipment Upgrade	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Fan Equipment Upgrade	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Fan System - Controls	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Fan System - Maintenance	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Fan System - Optimization	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Fans - Variable Speed Control	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors - Magnetic Adjustable Speed Drives	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors - Efficient Rewind	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Motors - Variable Frequency Drive	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Commissioning - HVAC	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Commissioning - Lighting	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%
Retrocommissioning - HVAC	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Retrocommissioning - Lighting	45%	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ventilation - CO2 Controlled	39%	39%	40%	40%	41%	41%	42%	42%	43%	43%	44%
Gas Boiler - High Efficiency Hot Water Circulation	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Gas Boiler - Hot Water Reset	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Gas Boiler - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Gas Furnace - Maintenance	34%	35%	35%	36%	36%	37%	37%	38%	38%	39%	39%
Custom Measures	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Boiler Blowdown Heat Exchanger (Steam)	36%	37%	37%	38%	38%	39%	39%	40%	40%	41%	41%
Insulate Steam Lines / Condensate Tank	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Direct Fired Make-up Air System	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
Direct Contact Water Heater	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%
HVAC - Infrared Heater	46%	46%	47%	47%	48%	48%	49%	49%	50%	50%	51%

APPENDIX | F

ANNUAL MEASURE-LEVEL SAVINGS

This section presents the estimates of annual savings. Selected years are shown in Chapter 6 and 7 of the report. Table F-1 and Table F-2 show the overall annual savings for electric energy and peak demand, respectively. Table F-4 through Table F-12 show the annual savings for each sector.

Table F-1 Annual Electric Energy Savings, All Sectors

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	36,571	36,019	35,827	35,865	35,810	35,999	35,850	35,806	35,795	35,791	35,824	35,880	36,012
Cumulative Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	483	803	1,093	1,371	1,686	1,989	2,362	2,743	3,147	3,513
Maximum Achievable Potential	-	-	-	630	1,051	1,432	1,788	2,186	2,565	3,041	3,520	4,037	4,509
Economic Potential	-	-	-	1,149	1,958	2,650	3,265	3,851	4,363	5,013	5,707	6,420	7,054
Technical Potential	-	-	-	1,584	2,604	3,516	4,322	5,105	5,806	6,564	7,301	8,049	8,704
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.3%	2.2%	3.0%	3.8%	4.7%	5.6%	6.6%	7.7%	8.8%	9.8%
Maximum Achievable Potential	-	-	-	1.8%	2.9%	4.0%	5.0%	6.1%	7.2%	8.5%	9.8%	11.3%	12.5%
Economic Potential	-	-	-	3.2%	5.5%	7.4%	9.1%	10.8%	12.2%	14.0%	15.9%	17.9%	19.6%
Technical Potential	-	-	-	4.4%	7.3%	9.8%	12.1%	14.3%	16.2%	18.3%	20.4%	22.4%	24.2%
Incremental Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	483	320	290	279	314	303	373	381	404	367
Maximum Achievable Potential	-	-	-	630	421	381	356	398	380	475	480	517	472
Economic Potential	-	-	-	1,149	810	692	614	586	513	650	694	713	634
Technical Potential	-	-	-	1,584	1,020	912	806	783	701	758	737	748	655
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.3%	0.9%	0.8%	0.8%	0.9%	0.8%	1.0%	1.1%	1.1%	1.0%
Maximum Achievable Potential	-	-	-	1.8%	1.2%	1.1%	1.0%	1.1%	1.1%	1.3%	1.3%	1.4%	1.3%
Economic Potential	-	-	-	3.2%	2.3%	1.9%	1.7%	1.6%	1.4%	1.8%	1.9%	2.0%	1.8%
Technical Potential	-	-	-	4.4%	2.8%	2.5%	2.2%	2.2%	2.0%	2.1%	2.1%	2.1%	1.8%

Table F-2 Annual Electric Peak Demand Savings, All Sectors

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	7,534	7,398	7,315	7,282	7,251	7,248	7,198	7,166	7,145	7,133	7,127	7,126	7,142
Peak Demand Savings (GWh)													
Realistic Achievable Potential	-	-	-	92	146	205	269	340	411	492	573	658	742
Maximum Achievable Potential	-	-	-	128	205	287	375	471	567	675	782	896	1,008
Economic Potential	-	-	-	239	378	522	673	828	976	1,139	1,300	1,464	1,624
Technical Potential	-	-	-	353	551	756	964	1,173	1,371	1,574	1,768	1,961	2,145
Peak Demand Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.3%	2.0%	2.8%	3.7%	4.7%	5.8%	6.9%	8.0%	9.2%	10.4%
Maximum Achievable Potential	-	-	-	1.8%	2.8%	4.0%	5.2%	6.6%	7.9%	9.5%	11.0%	12.6%	14.1%
Economic Potential	-	-	-	3.3%	5.2%	7.2%	9.4%	11.6%	13.7%	16.0%	18.2%	20.5%	22.7%
Technical Potential	-	-	-	4.8%	7.6%	10.4%	13.4%	16.4%	19.2%	22.1%	24.8%	27.5%	30.0%
Peak Demand Incremental Savings (GWh)													
Realistic Achievable Potential	-	-	-	92	54	59	64	71	71	81	81	85	84
Maximum Achievable Potential	-	-	-	128	77	82	88	96	95	109	107	113	112
Economic Potential	-	-	-	239	139	144	151	155	148	163	161	164	160
Technical Potential	-	-	-	353	198	206	208	208	198	204	194	193	184
Peak Demand Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.3%	0.8%	0.8%	0.9%	1.0%	1.0%	1.1%	1.1%	1.2%	1.2%
Maximum Achievable Potential	-	-	-	1.8%	1.1%	1.1%	1.2%	1.3%	1.3%	1.5%	1.5%	1.6%	1.6%
Economic Potential	-	-	-	3.3%	1.9%	2.0%	2.1%	2.2%	2.1%	2.3%	2.3%	2.3%	2.2%
Technical Potential	-	-	-	4.8%	2.7%	2.8%	2.9%	2.9%	2.8%	2.9%	2.7%	2.7%	2.6%

Table F-3 Annual Natural Gas Energy Savings, All Sectors

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	1,105	1,100	1,100	1,102	1,109	1,109	1,104	1,099	1,093	1,089	1,085	1,082	1,081
Cumulative Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	6	10	14	20	26	31	37	42	47	54
Maximum Achievable Potential	-	-	-	9	14	21	29	37	45	53	60	68	77
Economic Potential	-	-	-	17	27	40	54	70	83	96	108	119	133
Technical Potential	-	-	-	29	45	65	88	112	133	153	170	188	207
Cumulative Savings % of Baseline													

Realistic Achievable Potential	-	-	-	0.5%	0.9%	1.3%	1.8%	2.3%	2.9%	3.4%	3.9%	4.4%	5.0%
Maximum Achievable Potential	-	-	-	0.8%	1.3%	1.9%	2.6%	3.4%	4.1%	4.9%	5.5%	6.3%	7.1%
Economic Potential	-	-	-	1.6%	2.4%	3.6%	4.9%	6.3%	7.6%	8.8%	9.9%	11.0%	12.3%
Technical Potential	-	-	-	2.6%	4.1%	5.9%	8.0%	10.2%	12.2%	14.0%	15.7%	17.4%	19.1%
Incremental Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	6	3	5	5	6	6	5	5	5	7
Maximum Achievable Potential	-	-	-	9	5	7	8	8	8	8	7	8	9
Economic Potential	-	-	-	17	10	13	15	15	14	13	12	12	14
Technical Potential	-	-	-	29	16	20	23	23	22	19	18	18	18
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.5%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%
Maximum Achievable Potential	-	-	-	0.8%	0.5%	0.6%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%
Economic Potential	-	-	-	1.6%	0.9%	1.1%	1.3%	1.4%	1.3%	1.1%	1.1%	1.1%	1.3%
Technical Potential	-	-	-	2.6%	1.5%	1.8%	2.1%	2.1%	2.0%	1.8%	1.6%	1.7%	1.7%

Table F-4 Annual Electric Energy Savings, Residential

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	11,577	11,422	11,304	10,915	10,712	10,589	10,526	10,446	10,319	10,262	10,201	11,577	11,422
Cumulative Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	103	233	322	400	476	533	547	584	597	103
Maximum Achievable Potential	-	-	-	135	296	409	506	603	672	695	746	769	135
Economic Potential	-	-	-	317	721	996	1,217	1,358	1,419	1,445	1,558	1,610	317
Technical Potential	-	-	-	520	1,069	1,478	1,803	2,056	2,221	2,297	2,412	2,483	520
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.9%	2.1%	3.0%	3.8%	4.5%	5.1%	5.3%	5.7%	5.9%	0.9%
Maximum Achievable Potential	-	-	-	1.2%	2.7%	3.8%	4.8%	5.7%	6.4%	6.7%	7.3%	7.5%	1.2%
Economic Potential	-	-	-	2.8%	6.6%	9.3%	11.5%	12.9%	13.6%	14.0%	15.2%	15.8%	2.8%
Technical Potential	-	-	-	4.7%	9.8%	13.8%	17.0%	19.5%	21.3%	22.3%	23.5%	24.3%	4.7%
Incremental Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	103	129	90	78	76	56	15	36	14	103
Maximum Achievable Potential	-	-	-	135	160	114	97	96	69	23	51	23	135
Economic Potential	-	-	-	317	405	275	221	141	60	26	113	52	317
Technical Potential	-	-	-	520	548	409	325	253	165	76	115	71	520
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.9%	1.2%	0.8%	0.7%	0.7%	0.5%	0.1%	0.4%	0.1%	0.9%
Maximum Achievable Potential	-	-	-	1.2%	1.5%	1.1%	1.0%	1.0%	0.7%	0.2%	0.5%	0.2%	1.2%
Economic Potential	-	-	-	2.9%	3.8%	2.7%	2.2%	1.4%	0.6%	0.3%	1.2%	0.6%	2.9%
Technical Potential	-	-	-	4.8%	5.4%	4.2%	3.5%	2.8%	1.8%	0.9%	1.3%	0.8%	4.8%

Table F-5 Annual Electric Peak Demand Savings, Residential

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	3,338	3,270	3,213	3,170	3,122	3,077	3,040	3,010	2,985	2,959	2,942	2,932	2,920
Peak Demand Savings (GWh)													
Realistic Achievable Potential	-	-	-	31	53	75	101	127	152	172	195	215	235
Maximum Achievable Potential	-	-	-	45	75	104	139	175	207	236	266	295	322
Economic Potential	-	-	-	100	166	229	300	365	422	473	528	577	623
Technical Potential	-	-	-	192	310	426	545	657	757	844	929	1,007	1,079
Peak Demand Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1%	2%	2%	3%	4%	5%	6%	7%	7%	8%
Maximum Achievable Potential	-	-	-	1%	2%	3%	5%	6%	7%	8%	9%	10%	11%
Economic Potential	-	-	-	3%	5%	7%	10%	12%	14%	16%	18%	20%	21%
Technical Potential	-	-	-	6%	10%	14%	18%	22%	25%	29%	32%	34%	37%
Peak Demand Incremental Savings (GWh)													
Realistic Achievable Potential	-	-	-	31	22	22	26	26	24	21	22	20	20
Maximum Achievable Potential	-	-	-	45	30	30	35	35	33	29	30	28	27
Economic Potential	-	-	-	100	66	63	71	65	57	51	55	49	46
Technical Potential	-	-	-	192	118	116	119	112	100	87	86	78	72
Peak Demand Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.0%	0.7%	0.7%	0.8%	0.9%	0.8%	0.7%	0.8%	0.7%	0.7%
Maximum Achievable Potential	-	-	-	1.4%	1.0%	1.0%	1.2%	1.2%	1.2%	1.0%	1.1%	1.0%	1.0%
Economic Potential	-	-	-	3.2%	2.2%	2.1%	2.4%	2.3%	2.1%	1.9%	2.1%	1.9%	1.8%
Technical Potential	-	-	-	6.3%	4.0%	4.1%	4.3%	4.2%	3.9%	3.5%	3.5%	3.3%	3.1%

Table F-6 Annual Natural Gas Energy Savings, Residential

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	569	567	568	570	575	572	568	565	562	559	558	556	555
Cumulative Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	2.6	4.1	6.3	9.0	11.9	14.5	16.9	19.1	21.5	24.6
Maximum Achievable Potential	-	-	-	3.8	6.1	9.2	13.1	17.2	20.8	24.1	27.1	30.5	34.7
Economic Potential	-	-	-	8.9	13.9	20.9	29.4	37.9	45.2	51.4	56.8	62.5	69.7
Technical Potential	-	-	-	15.1	23.9	34.8	47.9	61.0	72.9	83.4	93.2	103.8	114.6
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0%	1%	1%	2%	2%	3%	3%	3%	4%	4%
Maximum Achievable Potential	-	-	-	1%	1%	2%	2%	3%	4%	4%	5%	5%	6%
Economic Potential	-	-	-	2%	2%	4%	5%	7%	8%	9%	10%	11%	13%
Technical Potential	-	-	-	3%	4%	6%	8%	11%	13%	15%	17%	19%	21%
Incremental Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	2.6	1.6	2.2	2.8	2.9	2.6	2.3	2.2	2.4	3.1
Maximum Achievable Potential	-	-	-	3.8	2.2	3.1	3.9	4.1	3.7	3.3	3.0	3.3	4.2
Economic Potential	-	-	-	8.9	5.0	6.9	8.5	8.5	7.3	6.2	5.5	5.7	7.2
Technical Potential	-	-	-	15.1	8.8	10.9	13.2	13.1	11.9	10.5	9.7	10.7	10.8
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.4%	0.3%	0.4%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.6%
Maximum Achievable Potential	-	-	-	0.7%	0.4%	0.5%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.8%
Economic Potential	-	-	-	1.6%	0.9%	1.2%	1.5%	1.6%	1.4%	1.1%	1.0%	1.1%	1.4%
Technical Potential	-	-	-	2.7%	1.6%	2.0%	2.4%	2.5%	2.3%	2.1%	1.9%	2.2%	2.2%

Table F-7 Annual Electric Energy Savings, Commercial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	12,414	12,031	11,742	11,547	11,415	11,332	11,293	11,308	11,349	11,413	11,479	11,532	11,613
Cumulative Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	197	319	434	547	672	801	1,024	1,239	1,470	1,690
Maximum Achievable Potential	-	-	-	269	442	604	755	917	1,084	1,374	1,648	1,947	2,234
Economic Potential	-	-	-	440	704	950	1,171	1,398	1,631	2,013	2,371	2,759	3,130
Technical Potential	-	-	-	610	915	1,211	1,488	1,774	2,063	2,484	2,869	3,269	3,644
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.7%	2.8%	3.8%	4.8%	5.9%	7.1%	9.0%	10.8%	12.7%	14.6%
Maximum Achievable Potential	-	-	-	2.3%	3.9%	5.3%	6.7%	8.1%	9.6%	12.0%	14.4%	16.9%	19.2%
Economic Potential	-	-	-	3.8%	6.2%	8.4%	10.4%	12.4%	14.4%	17.6%	20.7%	23.9%	27.0%
Technical Potential	-	-	-	5.3%	8.0%	10.7%	13.2%	15.7%	18.2%	21.8%	25.0%	28.3%	31.4%
Incremental Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	197	122	115	113	124	129	223	215	231	220
Maximum Achievable Potential	-	-	-	269	174	162	151	162	167	289	275	299	288
Economic Potential	-	-	-	440	264	246	221	227	232	383	358	388	371
Technical Potential	-	-	-	610	305	295	278	286	289	421	385	400	375
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.7%	1.1%	1.0%	1.0%	1.1%	1.1%	2.0%	1.9%	2.0%	1.9%
Maximum Achievable Potential	-	-	-	2.3%	1.5%	1.4%	1.3%	1.4%	1.5%	2.5%	2.4%	2.6%	2.5%
Economic Potential	-	-	-	3.8%	2.3%	2.2%	2.0%	2.0%	2.0%	3.4%	3.1%	3.4%	3.2%
Technical Potential	-	-	-	5.3%	2.7%	2.6%	2.5%	2.5%	2.5%	3.7%	3.4%	3.5%	3.2%

Table F-8 Annual Electric Peak Demand Savings, Commercial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	2,501	2,435	2,383	2,350	2,323	2,304	2,292	2,291	2,294	2,302	2,311	2,314	2,324
Peak Demand Savings (GWh)													
Realistic Achievable Potential	-	-	-	33	54	75	99	124	151	191	229	271	312
Maximum Achievable Potential	-	-	-	47	78	109	142	178	215	268	319	375	431
Economic Potential	-	-	-	77	124	173	222	274	327	400	470	545	619
Technical Potential	-	-	-	92	144	199	254	311	368	444	514	590	662
Peak Demand Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.4%	2.3%	3.3%	4.3%	5.4%	6.6%	8.3%	9.9%	11.7%	13.4%
Maximum Achievable Potential	-	-	-	2.0%	3.3%	4.7%	6.2%	7.8%	9.4%	11.6%	13.8%	16.2%	18.5%
Economic Potential	-	-	-	3.3%	5.4%	7.5%	9.7%	12.0%	14.3%	17.4%	20.3%	23.6%	26.6%
Technical Potential	-	-	-	3.9%	6.2%	8.6%	11.1%	13.6%	16.1%	19.3%	22.3%	25.5%	28.5%
Peak Demand Incremental Savings (GWh)													
Realistic Achievable Potential	-	-	-	33	21	22	23	26	27	39	38	42	41
Maximum Achievable Potential	-	-	-	47	31	32	33	36	37	53	51	56	56
Economic Potential	-	-	-	77	47	49	49	52	53	73	70	75	74
Technical Potential	-	-	-	92	52	55	55	57	57	75	71	75	72
Peak Demand Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.4%	0.9%	0.9%	1.0%	1.1%	1.2%	1.7%	1.7%	1.8%	1.8%
Maximum Achievable Potential	-	-	-	2.0%	1.3%	1.4%	1.4%	1.6%	1.6%	2.3%	2.2%	2.4%	2.4%
Economic Potential	-	-	-	3.3%	2.0%	2.1%	2.1%	2.3%	2.3%	3.2%	3.0%	3.3%	3.2%
Technical Potential	-	-	-	3.9%	2.2%	2.4%	2.4%	2.5%	2.5%	3.3%	3.1%	3.2%	3.1%

Table F-9 Annual Natural Gas Energy Savings, Commercial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	207	205	205	205	207	208	208	209	210	211	211	212	212
Cumulative Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	2	3	5	7	8	10	12	14	16	18
Maximum Achievable Potential	-	-	-	3	5	7	10	13	16	18	21	23	26
Economic Potential	-	-	-	5	8	12	16	20	24	28	32	35	39
Technical Potential	-	-	-	7	10	15	20	25	30	34	39	42	46
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.0%	1.6%	2.3%	3.1%	4.0%	4.9%	5.8%	6.6%	7.4%	8.3%
Maximum Achievable Potential	-	-	-	1.5%	2.4%	3.6%	4.8%	6.1%	7.4%	8.6%	9.9%	11.1%	12.3%
Economic Potential	-	-	-	2.5%	3.9%	5.7%	7.5%	9.5%	11.5%	13.3%	15.0%	16.7%	18.4%
Technical Potential	-	-	-	3.2%	5.0%	7.2%	9.6%	12.0%	14.3%	16.3%	18.2%	20.0%	21.9%
Incremental Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	2	1	2	2	2	2	2	2	2	2
Maximum Achievable Potential	-	-	-	3	2	2	3	3	3	3	3	3	3
Economic Potential	-	-	-	5	3	4	4	4	4	4	4	4	4
Technical Potential	-	-	-	7	4	5	5	5	5	4	4	4	4
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.0%	0.6%	0.7%	0.8%	0.9%	0.9%	0.9%	0.8%	0.9%	0.9%
Maximum Achievable Potential	-	-	-	1.5%	0.9%	1.1%	1.2%	1.4%	1.3%	1.3%	1.2%	1.2%	1.3%
Economic Potential	-	-	-	2.5%	1.5%	1.8%	1.9%	2.0%	2.0%	1.8%	1.7%	1.7%	1.8%
Technical Potential	-	-	-	3.2%	1.8%	2.2%	2.4%	2.5%	2.3%	2.1%	1.9%	1.8%	1.9%

Table F-10 Annual Electric Energy Savings, Industrial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	12,580	12,566	12,781	13,130	13,480	13,955	13,968	13,971	14,000	14,060	14,083	14,147	14,295
Cumulative Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	182	251	336	424	538	656	791	920	1,080	1,237
Maximum Achievable Potential	-	-	-	226	312	418	526	666	809	972	1,126	1,321	1,512
Economic Potential	-	-	-	392	533	705	876	1,094	1,314	1,555	1,778	2,051	2,320
Technical Potential	-	-	-	453	620	828	1,031	1,274	1,522	1,783	2,020	2,297	2,554
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.4%	1.9%	2.4%	3.0%	3.9%	4.7%	5.6%	6.5%	7.6%	8.7%
Maximum Achievable Potential	-	-	-	1.7%	2.3%	3.0%	3.8%	4.8%	5.8%	6.9%	8.0%	9.3%	10.6%
Economic Potential	-	-	-	3.0%	4.0%	5.0%	6.3%	7.8%	9.4%	11.1%	12.6%	14.5%	16.2%
Technical Potential	-	-	-	3.5%	4.6%	5.9%	7.4%	9.1%	10.9%	12.7%	14.3%	16.2%	17.9%
Incremental Net Savings (GWh)													
Realistic Achievable Potential	-	-	-	182	69	85	88	114	118	135	130	159	157
Maximum Achievable Potential	-	-	-	226	87	106	107	140	143	163	154	195	190
Economic Potential	-	-	-	392	141	172	172	218	220	241	223	273	268
Technical Potential	-	-	-	453	167	208	203	244	248	261	237	277	257
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.4%	0.5%	0.6%	0.6%	0.8%	0.8%	1.0%	0.9%	1.1%	1.1%
Maximum Achievable Potential	-	-	-	1.7%	0.6%	0.8%	0.8%	1.0%	1.0%	1.2%	1.1%	1.4%	1.3%
Economic Potential	-	-	-	3.0%	1.0%	1.2%	1.2%	1.6%	1.6%	1.7%	1.6%	1.9%	1.9%
Technical Potential	-	-	-	3.5%	1.2%	1.5%	1.5%	1.7%	1.8%	1.9%	1.7%	2.0%	1.8%

Table F-11 Annual Electric Peak Demand Savings, Industrial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	1,695	1,693	1,719	1,762	1,806	1,867	1,866	1,864	1,866	1,872	1,874	1,880	1,898
Peak Demand Savings (GWh)													
Realistic Achievable Potential	-	-	-	28	39	54	70	88	108	129	149	172	195
Maximum Achievable Potential	-	-	-	37	53	73	94	119	144	172	197	226	256
Economic Potential	-	-	-	62	88	120	152	189	227	266	302	342	382
Technical Potential	-	-	-	68	96	132	166	205	245	287	324	364	405
Peak Demand Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.6%	2.2%	2.9%	3.7%	4.7%	5.8%	6.9%	8.0%	9.1%	10.3%
Maximum Achievable Potential	-	-	-	2.1%	2.9%	3.9%	5.0%	6.4%	7.7%	9.2%	10.5%	12.0%	13.5%
Economic Potential	-	-	-	3.5%	4.9%	6.4%	8.1%	10.1%	12.1%	14.2%	16.1%	18.2%	20.2%
Technical Potential	-	-	-	3.9%	5.3%	7.0%	8.9%	11.0%	13.1%	15.3%	17.3%	19.4%	21.3%
Peak Demand Incremental Savings (GWh)													
Realistic Achievable Potential	-	-	-	28	12	15	15	19	19	21	20	23	23
Maximum Achievable Potential	-	-	-	37	16	21	21	25	25	27	26	29	30
Economic Potential	-	-	-	62	26	32	32	37	38	40	36	40	41
Technical Potential	-	-	-	68	28	35	34	39	40	41	38	40	41
Peak Demand Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	1.6%	0.6%	0.8%	0.8%	1.0%	1.0%	1.1%	1.1%	1.2%	1.2%
Maximum Achievable Potential	-	-	-	2.1%	0.9%	1.1%	1.1%	1.3%	1.4%	1.5%	1.4%	1.5%	1.6%
Economic Potential	-	-	-	3.5%	1.4%	1.7%	1.7%	2.0%	2.0%	2.1%	1.9%	2.1%	2.1%
Technical Potential	-	-	-	3.9%	1.5%	1.9%	1.8%	2.1%	2.1%	2.2%	2.0%	2.1%	2.1%

Table F-12 Annual Natural Gas Energy Savings, Industrial

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baseline Forecast	330	327	327	326	326	329	328	325	322	319	316	315	314
Cumulative Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	1.5	2.1	3.0	4.1	5.2	6.4	7.6	8.8	10.1	11.8
Maximum Achievable Potential	-	-	-	2.0	2.9	4.2	5.7	7.3	8.9	10.6	12.2	13.9	16.0
Economic Potential	-	-	-	3.5	4.9	6.9	9.3	11.7	14.2	16.7	19.1	21.5	24.7
Technical Potential	-	-	-	7.5	11.0	15.6	20.6	25.6	30.4	34.9	38.8	42.3	45.6
Cumulative Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.5%	0.6%	0.9%	1.2%	1.6%	2.0%	2.4%	2.8%	3.2%	3.7%
Maximum Achievable Potential	-	-	-	0.6%	0.9%	1.3%	1.7%	2.2%	2.8%	3.3%	3.9%	4.4%	5.1%
Economic Potential	-	-	-	1.1%	1.5%	2.1%	2.8%	3.6%	4.4%	5.2%	6.0%	6.8%	7.9%
Technical Potential	-	-	-	2.3%	3.4%	4.7%	6.3%	7.9%	9.5%	10.9%	12.3%	13.5%	14.5%
Incremental Net Savings (million therms)													
Realistic Achievable Potential	-	-	-	1.5	0.6	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.7
Maximum Achievable Potential	-	-	-	2.0	0.9	1.3	1.5	1.6	1.7	1.7	1.6	1.6	2.1
Economic Potential	-	-	-	3.5	1.5	2.0	2.3	2.5	2.5	2.5	2.4	2.4	3.2
Technical Potential	-	-	-	7.5	3.5	4.6	5.0	5.1	4.8	4.4	3.9	3.6	3.2
Incremental Savings % of Baseline													
Realistic Achievable Potential	-	-	-	0.5%	0.2%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%
Maximum Achievable Potential	-	-	-	0.6%	0.3%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.7%
Economic Potential	-	-	-	1.1%	0.4%	0.6%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	1.0%
Technical Potential	-	-	-	2.3%	1.1%	1.4%	1.5%	1.6%	1.5%	1.4%	1.2%	1.1%	1.0%

PROGRAM MEASURE-LEVEL DETAILS

Maximum Achievable Potential (MAP)

Residential

Table G-1 Residential Lighting (MAP)

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$37.50	12,551	12,182	12,182	15,281,644	12,366,495	12,058,191	1,029.79	833.35	812.57	-	-	-
SF - Electric Only	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$21.86	75%	\$16.39	7,804	7,574	7,574	1,957,765	1,910,681	1,912,862	131.93	128.76	128.90	-	-	-
SF - Electric Only	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	12,860	12,482	12,482	2,002,427	1,955,098	1,960,065	134.94	131.75	132.08	-	-	-
SF - Electric Only	New	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$42.60	457	444	444	504,831	401,881	386,905	34.02	27.08	26.07	-	-	-
SF - Electric Only	New	Interior Lighting	Electric	Specialty	CFL	per HH	\$21.73	75%	\$16.30	260	253	253	64,905	63,343	63,412	4.37	4.27	4.27	-	-	-
SF - Electric Only	New	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	453	439	439	65,968	64,409	64,573	4.45	4.34	4.35	-	-	-
MF - Electric Only	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$17.15	4,719	4,580	4,580	4,002,032	3,238,684	3,157,956	269.69	218.25	212.81	-	-	-
MF - Electric Only	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$17.72	75%	\$13.29	3,005	2,917	2,917	534,642	521,784	522,380	36.03	35.16	35.20	-	-	-
MF - Electric Only	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	5,542	5,542	-	387,668	389,975	-	26.12	26.28	0.00	-	-	-
MF - Electric Only	Existing	Exterior Lighting	Electric	Screw-in	LED	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	0.00	0.00	0.00	-	-	-
MF - Electric Only	New	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$21.90	88	85	85	69,494	54,092	52,551	4.68	3.65	3.54	-	-	-
MF - Electric Only	New	Interior Lighting	Electric	Specialty	CFL	per HH	\$17.65	75%	\$13.23	52	51	51	9,265	9,041	9,051	0.62	0.61	0.61	-	-	-
MF - Electric Only	New	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	89	89	-	5,935	5,971	-	0.40	0.40	0.00	-	-	-
MF - Electric Only	New	Exterior Lighting	Electric	Screw-in	LED	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	0.00	0.00	0.00	-	-	-
SF - Electric/Gas	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$32.84	31,016	30,104	30,104	27,280,487	26,631,907	26,666,723	1,838.37	1,794.66	1,797.00	-	-	-
SF - Electric/Gas	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$20.94	75%	\$15.70	10,564	10,254	10,254	2,653,248	2,589,438	2,592,394	178.80	174.50	174.70	-	-	-
SF - Electric/Gas	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	51,798	50,274	50,274	8,339,082	8,141,980	8,162,667	561.95	548.67	550.06	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric/Gas	New	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$37.31	1,114	1,082	1,082	879,189	858,287	859,409	59.25	57.84	57.91	-	-	-
SF - Electric/Gas	New	Interior Lighting	Electric	Specialty	CFL	per HH	\$20.78	75%	\$15.58	344	334	334	85,785	83,720	83,812	5.78	5.64	5.65	-	-	-
SF - Electric/Gas	New	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	1,660	1,612	1,612	250,104	244,193	244,813	16.85	16.46	16.50	-	-	-
MF - Electric/Gas	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$21.38	5,044	4,896	4,896	3,587,800	3,502,502	3,507,080	241.77	236.02	236.33	-	-	-
MF - Electric/Gas	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$17.99	75%	\$13.49	1,719	1,669	1,669	352,059	343,593	343,985	23.72	23.15	23.18	-	-	-
MF - Electric/Gas	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	8,240	7,997	7,997	622,083	607,380	608,923	41.92	40.93	41.03	-	-	-
MF - Electric/Gas	New	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$27.32	93	90	90	63,001	61,503	61,584	4.25	4.14	4.15	-	-	-
MF - Electric/Gas	New	Interior Lighting	Electric	Specialty	CFL	per HH	\$17.97	75%	\$13.48	30	29	29	6,123	5,975	5,982	0.41	0.40	0.40	-	-	-
MF - Electric/Gas	New	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	144	140	140	10,429	10,182	10,208	0.70	0.69	0.69	-	-	-

Table G-2 Residential ENERGY STAR Homes (MAP)

Segment	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$580.88	75%	\$435.66	10	10	10	2,720	1,915	1,667	3.39	2.39	2.08	-	-	-
SF - Electric Only	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$313.88	75%	\$235.41	8	8	8	9,716	7,489	6,820	-	-	-	-	-	-
SF - Electric Only	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	75%	\$548.33	57	56	56	86,871	78,458	76,324	6.47	5.84	5.68	-	-	-
SF - Electric Only	Screw-in	CFL	per HH	\$0.00	75%	\$35.50	75	72	72	82,316	65,529	63,087	5.55	4.42	4.25	-	-	-
SF - Electric Only	Specialty	CFL	per HH	\$21.73	75%	\$16.30	46	45	45	11,454	11,178	11,190	0.77	0.75	0.75	-	-	-
SF - Electric Only	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	80	78	78	11,641	11,366	11,395	0.78	0.77	0.77	-	-	-
SF - Electric/Gas	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$548.90	75%	\$411.68	2	2	2	413	291	253	0.51	0.36	0.32	-	-	-
SF - Electric/Gas	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$310.74	75%	\$233.06	0	0	0	391	303	277	-	-	-	-	-	-
SF - Electric/Gas	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	75%	\$548.33	12	12	12	18,751	17,550	17,297	1.40	1.31	1.29	-	-	-
SF - Electric/Gas	Screw-in	CFL	per HH	\$0.00	75%	\$31.09	182	176	176	143,357	139,949	140,132	9.66	9.43	9.44	-	-	-
SF - Electric/Gas	Specialty	CFL	per HH	\$20.78	75%	\$15.58	61	59	59	15,139	14,774	14,790	1.02	1.00	1.00	-	-	-
SF - Electric/Gas	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	293	284	284	44,136	43,093	43,202	2.97	2.90	2.91	-	-	-
SF - Electric/Gas	Furnace	AFUE 0.9	per HH	\$0.00	75%	\$0.00	-	184	184	-	-	-	-	-	-	-	10,450	10,459
SF - Gas Only	Furnace	AFUE 0.9	per HH	\$0.00	75%	\$0.00	-	55	55	-	-	-	-	-	-	-	2,873	2,876
SF - Electric Only	Insulation - Ducting		per HH	\$95.00	75%	\$71.25	52	51	51	5,991	5,812	5,793	4.81	4.65	4.63	-	-	-
SF - Electric Only	Insulation - Foundation		per HH	\$760.32	75%	\$570.24	112	109	109	79,331	77,057	76,881	34.77	33.61	33.42	-	-	-
SF - Electric Only	Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	57	57	57	6,057	6,065	6,054	2.12	2.12	2.10	-	-	-
SF - Electric Only	Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	30	30	30	593	594	592	0.29	0.29	0.29	-	-	-
SF - Electric Only	Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	35	34	34	33,700	32,717	32,632	16.59	16.03	15.94	-	-	-
SF - Electric Only	Windows - Install Reflective Film		per HH	\$0.00	75%	\$0.00	-	13	13	-	4,367	4,344	-	-	16.39	16.30	-	-
SF - Electric Only	Roofs - High Reflectivity		per HH	\$97.66	75%	\$73.25	221	214	214	23,529	22,762	22,642	29.43	28.47	28.32	-	-	-
SF - Electric Only	Ceiling Fan - Installation		per HH	\$204.00	75%	\$153.00	40	39	39	14,287	13,821	13,748	17.87	17.28	17.19	-	-	-
SF - Electric Only	Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	97	94	94	13,571	13,215	13,210	-	-	-	-	-	-
SF - Electric Only	Boiler - Maintenance		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	2	2	2	640	621	606	0.05	0.05	0.05	-	-	-
SF - Electric Only	Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	68	66	66	5,127	4,826	4,708	0.38	0.36	0.35	-	-	-
SF - Electric Only	Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	62	60	60	21,371	20,114	19,625	1.59	1.50	1.46	-	-	-
SF - Electric Only	Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	1	1	1	1,194	1,158	1,130	0.09	0.09	0.08	-	-	-
SF - Electric/Gas	Insulation - Ceiling		per HH	\$0.00	75%	\$0.00	-	-	12	-	-	375	-	-	0.38	-	-	140
SF - Electric/Gas	Insulation - Ducting		per HH	\$95.00	75%	\$71.25	66	64	64	5,743	5,565	5,543	6.38	6.18	6.15	965	942	936
SF - Electric/Gas	Insulation - Foundation		per HH	\$760.32	75%	\$570.24	127	123	123	47,007	45,589	45,438	45.97	44.50	44.30	13,908	13,598	13,517
SF - Electric/Gas	Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	64	64	64	3,111	3,110	3,101	2.81	2.80	2.79	1,738	1,750	1,740
SF - Electric/Gas	Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	35	35	35	382	382	381	0.39	0.39	0.39	138	139	138
SF - Electric/Gas	Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	41	40	40	22,348	21,672	21,599	21.98	21.28	21.19	2,731	2,666	2,647
SF - Electric/Gas	Windows - Install Reflective Film		per HH	\$0.00	75%	\$0.00	-	18	18	-	5,782	5,756	-	-	21.69	21.59	-	-
SF - Electric/Gas	Roofs - High Reflectivity		per HH	\$97.66	75%	\$73.25	299	290	290	31,168	30,175	30,038	38.97	37.72	37.55	-	-	-
SF - Electric/Gas	Ceiling Fan - Installation		per HH	\$204.00	75%	\$153.00	54	53	53	18,925	18,322	18,239	23.66	22.91	22.80	-	-	-
SF - Electric/Gas	Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	110	107	107	2,695	2,630	2,633	-	-	-	3,893	3,806	3,783
SF - Electric/Gas	Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	31	30	30	-	-	-	-	-	-	3,463	3,418	3,420
SF - Electric/Gas	Boiler - Maintenance		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	6	6	6	2,188	2,156	2,128	0.16	0.16	0.16	953	964	962
SF - Electric/Gas	Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	230	223	223	17,344	16,581	16,362	1.29	1.23	1.22	1,209	1,187	1,185
SF - Electric/Gas	Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	210	204	204	72,291	69,110	68,196	5.38	5.15	5.08	4,941	4,852	4,841
SF - Electric/Gas	Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	0	0	0	494	487	480	0.04	0.04	0.04	-	-	-
SF - Electric/Gas	ENERGY STAR Home Design		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Program Measure-Level Details

Segment	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric/Gas	Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Insulation - Ducting		per HH	\$95.00	75%	\$71.25	16	16	16	-	-	-	-	-	-	217	211	209
SF - Gas Only	Insulation - Foundation		per HH	\$760.32	75%	\$570.24	34	33	33	-	-	-	-	-	-	3,356	3,276	3,255
SF - Gas Only	Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	17	17	17	-	-	-	-	-	-	420	422	420
SF - Gas Only	Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	9	9	9	-	-	-	-	-	-	33	33	33
SF - Gas Only	Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	10	10	10	-	-	-	-	-	-	610	595	590
SF - Gas Only	Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	29	28	28	-	-	-	-	-	-	940	918	912
SF - Gas Only	Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	7	6	6	-	-	-	-	-	-	690	681	681
SF - Gas Only	Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	2	2	2	-	-	-	-	-	-	226	228	228
SF - Gas Only	Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	59	57	57	-	-	-	-	-	-	286	281	281
SF - Gas Only	Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	54	52	52	-	-	-	-	-	-	1,170	1,149	1,147
SF - Gas Only	Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Table G-3 Residential Home Energy Performance (MAP)

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Cooling	Electric	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Cooling	Electric	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$512.52	75%	\$384.39	113	109	109	24,848	18,119	16,065	30.98	22.59	20.03	-	-	-
SF - Electric Only	Existing	Heating	Electric	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$276.94	75%	\$207.71	93	91	91	105,804	83,189	76,513	-	-	-	-	-	-
SF - Electric Only	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	75%	\$548.33	318	308	308	532,780	479,927	467,016	39.68	35.74	34.78	-	-	-
SF - Electric Only	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$31.25	1,734	1,683	1,683	2,111,210	1,708,473	1,665,880	142.27	115.13	112.26	-	-	-
SF - Electric Only	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$21.86	75%	\$16.39	1,285	1,248	1,248	322,455	314,700	315,060	21.73	21.21	21.23	-	-	-
SF - Electric Only	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	1,445	1,402	1,402	224,992	219,674	220,232	15.16	14.80	14.84	-	-	-
SF - Electric/Gas	Existing	Cooling	Electric	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Cooling	Electric	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$484.31	75%	\$363.23	18	17	17	3,732	2,708	2,396	4.65	3.38	2.99	-	-	-
SF - Electric/Gas	Existing	Heating	Electric	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$274.17	75%	\$205.63	4	4	4	4,223	3,387	3,144	-	-	-	-	-	-
SF - Electric/Gas	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	75%	\$548.33	69	66	66	115,001	107,381	105,821	8.56	8.00	7.88	-	-	-
SF - Electric/Gas	Existing	Interior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$27.36	4,285	4,159	4,159	3,768,891	3,679,287	3,684,097	253.98	247.94	248.26	-	-	-
SF - Electric/Gas	Existing	Interior Lighting	Electric	Specialty	CFL	per HH	\$20.94	75%	\$15.70	1,457	1,414	1,414	365,965	357,164	357,572	24.66	24.07	24.10	-	-	-
SF - Electric/Gas	Existing	Exterior Lighting	Electric	Screw-in	CFL	per HH	\$0.00	75%	\$2.50	5,820	5,649	5,649	936,975	914,829	917,154	63.14	61.65	61.80	-	-	-
SF - Electric/Gas	Existing	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$377.69	75%	\$283.27	359	349	349	-	-	-	-	-	-	19,882	19,630	19,647
SF - Gas Only	Existing	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$348.64	75%	\$261.48	145	141	141	-	-	-	-	-	-	7,396	7,302	7,309
SF - Electric Only	Existing			Insulation - Ceiling		per HH	\$363.42	75%	\$272.57	610	610	610	34,827	34,588	34,258	17.15	16.86	16.55	-	-	-
SF - Electric Only	Existing			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	4,312	4,185	4,185	290,040	276,997	272,132	351.72	335.70	329.64	-	-	-
SF - Electric Only	Existing			Insulation - Infiltration Control		per HH	\$327.87	75%	\$245.90	10,130	10,130	10,130	1,254,713	1,248,825	1,239,241	413.20	406.21	398.70	-	-	-
SF - Electric Only	Existing			Insulation - Radiant Barrier		per HH	\$82.84	75%	\$62.13	6,885	6,885	6,885	369,465	366,928	363,415	182.69	179.60	176.28	-	-	-
SF - Electric Only	Existing			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	2,874	2,789	2,789	1,001,343	956,126	939,084	1,148.64	1,095.35	1,074.58	-	-	-
SF - Electric Only	Existing			Windows - Install Reflective Film		per HH	\$1,028.88	75%	\$771.66	1,066	1,066	1,066	265,491	261,156	256,487	1,004.19	987.82	970.18	-	-	-
SF - Electric Only	Existing			Doors - Storm and Thermal		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing			Roofs - High Reflectivity		per HH	\$85.51	75%	\$64.13	1,517	1,472	1,472	152,017	145,137	142,542	191.66	182.99	179.72	-	-	-
SF - Electric Only	Existing			Ceiling Fan - Installation		per HH	\$204.00	75%	\$153.00	536	520	520	159,231	152,025	149,307	200.76	191.68	188.25	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	864	839	839	98,756	95,817	95,443	-	-	-	-	-	-
SF - Electric Only	Existing			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	55	55	55	20,334	20,218	20,027	1.51	1.51	1.49	-	-	-
SF - Electric Only	Existing			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	3,491	3,389	3,389	307,922	297,137	294,289	22.93	22.13	21.92	-	-	-
SF - Electric Only	Existing			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	2,388	2,318	2,318	959,437	925,833	916,959	71.45	68.95	68.29	-	-	-
SF - Electric Only	Existing			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	1,553	1,553	1,553	133,475	132,718	131,462	9.94	9.88	9.79	-	-	-
SF - Electric Only	Existing			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing			Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	23	23	23	52,941	52,635	52,130	3.94	3.92	3.88	-	-	-
SF - Electric Only	New			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	40	38	38	4,519	4,385	4,370	3.63	3.51	3.49	-	-	-
SF - Electric Only	New			Insulation - Foundation		per HH	\$760.32	75%	\$570.24	84	82	82	59,846	58,131	57,998	26.23	25.36	25.21	-	-	-
SF - Electric Only	New			Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	43	43	43	4,570	4,575	4,567	1.60	1.60	1.59	-	-	-
SF - Electric Only	New			Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	23	23	23	448	448	447	0.22	0.22	0.22	-	-	-
SF - Electric Only	New			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	27	26	26	25,422	24,681	24,617	12.51	12.10	12.02	-	-	-
SF - Electric Only	New			Windows - Install Reflective Film		per HH	\$0.00	75%	\$0.00	-	10	10	-	3,397	3,379	-	12.74	12.68	-	-	-
SF - Electric Only	New			Roofs - High Reflectivity		per HH	\$97.66	75%	\$73.25	172	167	167	18,300	17,704	17,611	22.89	22.14	22.02	-	-	-
SF - Electric Only	New			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	22	21	21	3,016	2,937	2,936	-	-	-	-	-	-
SF - Electric Only	New			Boiler - Maintenance		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	1	1	1	523	508	496	0.04	0.04	0.04	-	-	-
SF - Electric Only	New			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	61	59	59	4,601	4,330	4,225	0.34	0.32	0.31	-	-	-
SF - Electric Only	New			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	54	52	52	18,422	17,338	16,917	1.37	1.29	1.26	-	-	-
SF - Electric Only	New			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	66	66	66	5,555	5,390	5,261	0.41	0.40	0.39	-	-	-
SF - Electric Only	New			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New			Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	0	0	0	929	901	879	0.07	0.07	0.07	-	-	-
MF - Electric Only	Existing			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	1,303	1,303	1,303	111,722	111,135	110,230	8.12	8.08	8.01	-	-	-
MF - Electric Only	New			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	28	28	28	2,470	2,440	2,406	0.18	0.18	0.17	-	-	-
SF - Electric/Gas	Existing			Insulation - Ceiling		per HH	\$363.42	75%	\$272.57	689	689	689	21,793	21,538	21,241	22.50	22.16	21.78	7,115	7,156	7,088
SF - Electric/Gas	Existing			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	5,494	5,333	5,333	383,528	366,497	360,253	475.27	454.10	446.31	73,139	71,667	71,240

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric/Gas	Existing			Insulation - Infiltration Control		per HH	\$327.87	75%	\$245.90	11,454	11,454	11,454	602,222	596,440	589,322	542.35	534.07	525.02	329,995	331,920	328,777
SF - Electric/Gas	Existing			Insulation - Radiant Barrier		per HH	\$82.84	75%	\$62.13	7,785	7,785	7,785	231,941	229,222	226,060	239.79	236.13	232.13	75,323	75,762	75,045
SF - Electric/Gas	Existing			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	3,337	3,239	3,239	1,256,177	1,200,534	1,180,195	1,544.76	1,475.92	1,450.55	215,064	210,737	209,481
SF - Electric/Gas	Existing			Windows - Install Reflective Film		per HH	\$1,028.88	75%	\$771.66	1,442	1,442	1,442	350,286	344,930	339,086	1,323.84	1,303.65	1,281.60	-	-	-
SF - Electric/Gas	Existing			Doors - Storm and Thermal		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing			Roofs - High Reflectivity		per HH	\$85.51	75%	\$64.13	2,052	1,992	1,992	200,504	191,631	188,385	252.59	241.42	237.34	-	-	-
SF - Electric/Gas	Existing			Ceiling Fan - Installation		per HH	\$204.00	75%	\$153.00	763	741	741	221,146	211,359	207,778	278.59	266.27	261.77	-	-	-
SF - Electric/Gas	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	980	951	951	18,344	17,889	17,897	-	-	-	33,686	32,886	32,575
SF - Electric/Gas	Existing			Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	1,064	1,032	1,032	-	-	-	-	-	-	107,009	101,302	97,348
SF - Electric/Gas	Existing			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	185	185	185	68,751	68,531	68,067	5.12	5.10	5.07	35,623	35,823	35,525
SF - Electric/Gas	Existing			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	11,790	11,443	11,443	1,029,421	995,861	989,036	76.66	74.16	73.65	74,159	72,384	71,781
SF - Electric/Gas	Existing			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	8,063	7,826	7,826	3,207,426	3,102,862	3,081,598	238.86	231.07	229.49	226,532	221,109	219,269
SF - Electric/Gas	Existing			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	642	642	642	55,210	55,033	54,661	4.11	4.10	4.07	-	-	-
SF - Electric/Gas	Existing			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing			Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	16	16	16	35,428	35,311	35,069	2.64	2.63	2.61	-	-	-
SF - Electric/Gas	Existing			Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New			Insulation - Ceiling		per HH	\$0.00	75%	\$0.00	-	-	9	-	-	283	-	-	0.29	-	-	105
SF - Electric/Gas	New			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	50	48	48	4,333	4,198	4,182	4.82	4.66	4.64	728	711	706
SF - Electric/Gas	New			Insulation - Foundation		per HH	\$760.32	75%	\$570.24	96	93	93	35,462	34,391	34,278	34.68	33.57	33.42	10,492	10,258	10,197
SF - Electric/Gas	New			Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	49	49	49	2,347	2,346	2,339	2.12	2.11	2.10	1,311	1,321	1,313
SF - Electric/Gas	New			Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	26	26	26	288	288	287	0.29	0.29	0.29	104	105	104
SF - Electric/Gas	New			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	31	30	30	16,859	16,349	16,294	16.59	16.06	15.98	2,060	2,011	1,997
SF - Electric/Gas	New			Windows - Install Reflective Film		per HH	\$0.00	75%	\$0.00	-	14	14	-	4,497	4,477	-	16.87	16.79	-	-	-
SF - Electric/Gas	New			Roofs - High Reflectivity		per HH	\$97.66	75%	\$73.25	232	226	226	24,242	23,469	23,363	30.31	29.34	29.21	-	-	-
SF - Electric/Gas	New			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	25	24	24	599	584	585	-	-	-	865	846	841
SF - Electric/Gas	New			Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	25	25	25	-	-	-	-	-	-	2,834	2,797	2,799
SF - Electric/Gas	New			Boiler - Maintenance		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric/Gas	New			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	5	5	5	1,790	1,764	1,741	0.13	0.13	0.13	780	789	787
SF - Electric/Gas	New			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	206	200	200	15,563	14,878	14,681	1.16	1.11	1.09	1,085	1,065	1,063
SF - Electric/Gas	New			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	181	176	176	62,315	59,573	58,785	4.64	4.44	4.38	4,259	4,182	4,173
SF - Electric/Gas	New			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	27	27	27	2,324	2,290	2,261	0.17	0.17	0.17	-	-	-
SF - Electric/Gas	New			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New			Water Heater - Solar System		per HH	\$5,400.00	75%	\$4,050.00	0	0	0	384	378	373	0.03	0.03	0.03	-	-	-
SF - Electric/Gas	New			Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	126	126	126	10,768	10,699	10,600	0.78	0.78	0.77	-	-	-
MF - Electric/Gas	New			Water Heater - Thermostat Setback		per HH	\$5.00	75%	\$3.75	3	3	3	235	232	228	0.02	0.02	0.02	-	-	-
SF - Gas Only	Existing			Insulation - Ceiling		per HH	\$363.42	75%	\$272.57	280	280	280	-	-	-	-	-	-	2,643	2,660	2,637
SF - Gas Only	Existing			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	2,214	2,149	2,149	-	-	-	-	-	-	27,208	26,660	26,502
SF - Gas Only	Existing			Insulation - Infiltration Control		per HH	\$327.87	75%	\$245.90	4,599	4,599	4,599	-	-	-	-	-	-	121,194	122,008	120,953
SF - Gas Only	Existing			Insulation - Radiant Barrier		per HH	\$82.84	75%	\$62.13	3,129	3,129	3,129	-	-	-	-	-	-	27,692	27,878	27,637
SF - Gas Only	Existing			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	1,345	1,305	1,305	-	-	-	-	-	-	80,005	78,395	77,928
SF - Gas Only	Existing			Doors - Storm and Thermal		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	392	380	380	-	-	-	-	-	-	12,316	12,034	11,930
SF - Gas Only	Existing			Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	349	338	338	-	-	-	-	-	-	32,364	30,638	29,442
SF - Gas Only	Existing			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	39	39	39	-	-	-	-	-	-	7,046	7,086	7,027
SF - Gas Only	Existing			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	4,558	4,424	4,424	-	-	-	-	-	-	26,669	26,031	25,814
SF - Gas Only	Existing			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	3,117	3,025	3,025	-	-	-	-	-	-	81,466	79,515	78,854
SF - Gas Only	Existing			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Existing			Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	New			Insulation - Ducting		per HH	\$95.00	75%	\$71.25	12	12	12	-	-	-	-	-	-	163	159	158
SF - Gas Only	New			Insulation - Foundation		per HH	\$760.32	75%	\$570.24	25	25	25	-	-	-	-	-	-	2,532	2,471	2,455
SF - Gas Only	New			Insulation - Infiltration Control		per HH	\$427.68	75%	\$320.76	13	13	13	-	-	-	-	-	-	317	319	317
SF - Gas Only	New			Insulation - Radiant Barrier		per HH	\$94.61	75%	\$70.96	7	7	7	-	-	-	-	-	-	25	25	25

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Gas Only	New			Ducting - Repair and Sealing		per HH	\$497.62	75%	\$373.22	7	7	7	-	-	-	-	-	-	460	449	445
SF - Gas Only	New			Thermostat - Clock/Programmable		per HH	\$30.00	75%	\$22.50	6	6	6	-	-	-	-	-	-	209	204	203
SF - Gas Only	New			Boiler - Hot Water Reset		per HH	\$37.00	75%	\$27.75	5	5	5	-	-	-	-	-	-	564	557	557
SF - Gas Only	New			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	75%	\$674.25	1	1	1	-	-	-	-	-	-	185	187	186
SF - Gas Only	New			Water Heater - Faucet Aerators		per HH	\$16.00	75%	\$12.00	53	51	51	-	-	-	-	-	-	257	252	252
SF - Gas Only	New			Water Heater - Low-Flow Showerheads		per HH	\$12.00	75%	\$9.00	46	45	45	-	-	-	-	-	-	1,009	991	988
SF - Gas Only	New			Water Heater - Desuperheater		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	New			Combined Boiler & Water Htg. Unit		per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Table G-4 Residential Multi Family (MAP)

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Electric Only	Existing	Water Heater > 55 gal	per HH	\$40.00	75%	\$30.00	81	-	-	7,562	-	-	0.55	-	-	-	-	-
MF - Electric Only	Existing	Water Heater > 55 gal	per HH	\$0.00	75%	\$0.00	-	81	81	-	79,260	75,459	-	5.76	5.49	-	-	-
MF - Electric Only	Existing	Screw-in	per HH	\$0.00	75%	\$14.29	2,547	2,472	2,472	2,159,592	1,747,671	1,704,108	145.53	117.77	114.84	-	-	-
MF - Electric Only	Existing	Specialty	per HH	\$17.72	75%	\$13.29	1,618	1,571	1,571	287,884	280,961	281,281	19.40	18.93	18.95	-	-	-
MF - Electric Only	Existing	Screw-in	per HH	\$0.00	75%	\$2.50	2,984	2,984	-	208,744	209,986	-	14.07	14.15	-	-	-	-
MF - Electric Only	Existing	Screw-in	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Bathroom Exhaust Fan	per HH	\$43.50	75%	\$32.63	240	233	233	20,593	20,109	20,185	1.71	1.67	1.68	-	-	-
MF - Electric Only	New	Water Heater > 55 gal	per HH	\$40.00	75%	\$30.00	2	2	-	189	189	-	0.01	0.01	-	-	-	-
MF - Electric Only	New	Water Heater > 55 gal	per HH	\$0.00	75%	\$0.00	-	-	5	-	-	4,681	-	-	0.34	-	-	-
MF - Electric Only	New	Screw-in	per HH	\$0.00	75%	\$18.25	47	46	46	37,501	29,189	28,358	2.53	1.97	1.91	-	-	-
MF - Electric Only	New	Specialty	per HH	\$17.65	75%	\$13.23	28	27	27	4,989	4,868	4,874	0.34	0.33	0.33	-	-	-
MF - Electric Only	New	Screw-in	per HH	\$0.00	75%	\$2.50	48	48	-	3,196	3,215	-	0.22	0.22	-	-	-	-
MF - Electric Only	New	Screw-in	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Bathroom Exhaust Fan	per HH	\$43.50	75%	\$32.63	8	8	8	708	692	694	0.06	0.06	0.06	-	-	-
MF - Electric/Gas	Existing	Water Heater > 55 gal	per HH	\$731.11	75%	\$548.33	69	67	67	112,678	105,453	103,948	8.19	7.67	7.56	-	-	-
MF - Electric/Gas	Existing	Screw-in	per HH	\$0.00	75%	\$17.81	2,722	2,642	2,642	1,936,062	1,890,033	1,892,504	130.47	127.36	127.53	-	-	-
MF - Electric/Gas	Existing	Specialty	per HH	\$17.99	75%	\$13.49	926	898	898	189,570	185,011	185,223	12.77	12.47	12.48	-	-	-
MF - Electric/Gas	Existing	Screw-in	per HH	\$0.00	75%	\$2.50	4,437	4,306	4,306	334,968	327,051	327,882	22.57	22.04	22.10	-	-	-
MF - Electric/Gas	Existing	Bathroom Exhaust Fan	per HH	\$43.50	75%	\$32.63	292	283	283	25,036	24,448	24,540	2.08	2.04	2.04	-	-	-
MF - Electric/Gas	New	Water Heater > 55 gal	per HH	\$731.11	75%	\$548.33	4	4	4	6,174	5,769	5,682	0.45	0.42	0.41	-	-	-
MF - Electric/Gas	New	Screw-in	per HH	\$0.00	75%	\$22.76	50	49	49	33,997	33,189	33,232	2.29	2.24	2.24	-	-	-
MF - Electric/Gas	New	Specialty	per HH	\$17.97	75%	\$13.48	16	16	16	3,297	3,217	3,221	0.22	0.22	0.22	-	-	-
MF - Electric/Gas	New	Screw-in	per HH	\$0.00	75%	\$2.50	78	75	75	5,615	5,483	5,497	0.38	0.37	0.37	-	-	-
MF - Electric/Gas	New	Bathroom Exhaust Fan	per HH	\$43.50	75%	\$32.63	10	10	10	863	843	846	0.07	0.07	0.07	-	-	-
MF - Electric Only	Existing	Insulation - Ceiling	per HH	\$574.27	75%	\$430.70	526	526	526	43,043	43,077	42,953	12.11	11.93	11.74	-	-	-
MF - Electric Only	Existing	Insulation - Ducting	per HH	\$95.00	75%	\$71.25	1,722	1,671	1,671	18,931	18,083	17,778	21.91	20.92	20.57	-	-	-
MF - Electric Only	Existing	Insulation - Infiltration Control	per HH	\$152.01	75%	\$114.01	6,216	6,216	6,216	956,922	960,122	959,408	132.06	130.09	127.97	-	-	-
MF - Electric Only	Existing	Insulation - Radiant Barrier	per HH	\$130.90	75%	\$98.18	2,789	2,789	2,789	215,474	215,621	214,980	61.85	60.93	59.93	-	-	-
MF - Electric Only	Existing	Insulation - Wall Cavity	per HH	\$696.64	75%	\$522.48	127	127	127	11,724	11,767	11,761	1.43	1.41	1.39	-	-	-
MF - Electric Only	Existing	Insulation - Wall Sheathing	per HH	\$510.87	75%	\$383.15	2,322	2,253	2,253	335,427	326,533	326,193	53.03	50.70	49.87	-	-	-
MF - Electric Only	Existing	Ducting - Repair and Sealing	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Electric Only	Existing	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Windows - Install Reflective Film	per HH	\$240.74	75%	\$180.56	361	361	361	17,473	17,212	16,932	60.94	60.03	59.05	-	-	-
MF - Electric Only	Existing	Roofs - High Reflectivity	per HH	\$135.12	75%	\$101.34	579	562	562	26,408	25,248	24,837	30.70	29.35	28.87	-	-	-
MF - Electric Only	Existing	Ceiling Fan - Installation	per HH	\$204.00	75%	\$153.00	1,015	985	985	149,599	143,029	140,698	173.92	166.28	163.57	-	-	-
MF - Electric Only	Existing	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	818	794	794	49,950	48,762	48,826	-	-	-	-	-	-
MF - Electric Only	Existing	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	49	49	49	18,244	18,148	18,000	1.33	1.32	1.31	-	-	-
MF - Electric Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	4,975	4,829	4,829	382,449	369,242	366,226	27.81	26.85	26.63	-	-	-
MF - Electric Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	3,421	3,320	3,320	1,199,647	1,158,220	1,148,760	87.23	84.21	83.53	-	-	-
MF - Electric Only	Existing	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Water Heater - Solar System	per HH	\$5,400.00	75%	\$4,050.00	38	38	38	53,289	53,008	52,575	3.87	3.85	3.82	-	-	-
MF - Electric Only	New	Insulation - Ceiling	per HH	\$534.21	75%	\$400.66	8	8	8	267	268	269	0.10	0.10	0.10	-	-	-
MF - Electric Only	New	Insulation - Ducting	per HH	\$95.00	75%	\$71.25	19	18	18	175	171	171	0.20	0.20	0.20	-	-	-
MF - Electric Only	New	Insulation - Foundation	per HH	\$251.39	75%	\$188.54	50	49	49	8,670	8,462	8,472	2.53	2.47	2.47	-	-	-
MF - Electric Only	New	Insulation - Infiltration Control	per HH	\$141.40	75%	\$106.05	32	32	32	1,778	1,788	1,790	0.38	0.38	0.38	-	-	-
MF - Electric Only	New	Insulation - Radiant Barrier	per HH	\$121.77	75%	\$91.33	14	14	14	174	175	175	0.06	0.06	0.06	-	-	-
MF - Electric Only	New	Insulation - Wall Sheathing	per HH	\$458.02	75%	\$343.52	49	48	48	4,836	4,720	4,726	1.01	0.98	0.98	-	-	-
MF - Electric Only	New	Ducting - Repair and Sealing	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Windows - Install Reflective Film	per HH	\$327.40	75%	\$245.55	6	6	6	378	380	380	1.32	1.32	1.33	-	-	-
MF - Electric Only	New	Roofs - High Reflectivity	per HH	\$125.70	75%	\$94.28	92	89	89	2,052	2,002	2,003	2.39	2.33	2.33	-	-	-
MF - Electric Only	New	Ceiling Fan - Installation	per HH	\$204.00	75%	\$153.00	26	26	26	3,231	3,151	3,153	3.76	3.67	3.67	-	-	-
MF - Electric Only	New	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	6	6	6	225	219	219	-	-	-	-	-	-
MF - Electric Only	New	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	2	2	2	567	560	552	0.04	0.04	0.04	-	-	-
MF - Electric Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	97	94	94	6,537	6,267	6,180	0.48	0.46	0.45	-	-	-
MF - Electric Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	59	58	58	18,296	17,540	17,297	1.33	1.28	1.26	-	-	-
MF - Electric Only	New	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Program Measure-Level Details

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Electric Only	New	Water Heater - Solar System	per HH	\$5,400.00	75%	\$4,050.00	1	1	1	800	790	779	0.06	0.06	0.06	-	-	-
MF - Electric/Gas	Existing	Insulation - Ceiling	per HH	\$574.27	75%	\$430.70	67	67	67	5,454	5,374	5,287	5.36	5.26	5.16	1,696	1,707	1,692
MF - Electric/Gas	Existing	Insulation - Ducting	per HH	\$95.00	75%	\$71.25	908	881	881	30,248	28,798	28,227	35.21	33.52	32.86	-	-	-
MF - Electric/Gas	Existing	Insulation - Infiltration Control	per HH	\$152.01	75%	\$114.01	2,605	2,605	2,605	236,549	233,927	230,892	191.71	188.17	184.53	129,581	130,402	129,222
MF - Electric/Gas	Existing	Insulation - Radiant Barrier	per HH	\$130.90	75%	\$98.18	1,182	1,182	1,182	92,042	90,683	89,219	90.84	89.17	87.44	27,944	28,121	27,866
MF - Electric/Gas	Existing	Insulation - Wall Cavity	per HH	\$696.64	75%	\$522.48	54	54	54	2,697	2,669	2,636	2.09	2.05	2.01	1,749	1,760	1,744
MF - Electric/Gas	Existing	Insulation - Wall Sheathing	per HH	\$510.87	75%	\$383.15	983	954	954	91,801	88,045	86,844	77.80	74.12	72.69	80,227	78,360	77,652
MF - Electric/Gas	Existing	Ducting - Repair and Sealing	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Windows - Install Reflective Film	per HH	\$240.74	75%	\$180.56	214	214	214	25,481	25,011	24,527	88.96	87.32	85.63	-	-	-
MF - Electric/Gas	Existing	Roofs - High Reflectivity	per HH	\$135.12	75%	\$101.34	343	333	333	38,566	36,741	36,030	44.88	42.76	41.93	-	-	-
MF - Electric/Gas	Existing	Ceiling Fan - Installation	per HH	\$204.00	75%	\$153.00	601	584	584	218,471	208,133	204,105	254.25	242.22	237.53	-	-	-
MF - Electric/Gas	Existing	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	342	332	332	4,245	4,144	4,150	-	-	-	8,907	8,699	8,621
MF - Electric/Gas	Existing	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Boiler - Hot Water Reset	per HH	\$37.00	75%	\$27.75	114	111	111	-	-	-	-	-	-	9,034	8,602	8,316
MF - Electric/Gas	Existing	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	30	30	30	10,889	10,820	10,720	0.79	0.79	0.78	4,101	4,123	4,089
MF - Electric/Gas	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	2,981	2,893	2,893	355,733	343,019	339,785	25.86	24.94	24.71	18,627	18,172	18,025
MF - Electric/Gas	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	2,050	1,989	1,989	1,115,856	1,075,976	1,065,830	81.13	78.23	77.50	58,395	56,968	56,506
MF - Electric/Gas	Existing	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Water Heater - Solar System	per HH	\$5,400.00	75%	\$4,050.00	4	4	4	8,013	7,961	7,886	0.58	0.58	0.57	-	-	-
MF - Electric/Gas	Existing	Combined Boiler & Water Htg. Unit	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Insulation - Ceiling	per HH	\$534.21	75%	\$400.66	3	3	3	138	139	139	0.14	0.14	0.14	55	56	56
MF - Electric/Gas	New	Insulation - Ducting	per HH	\$95.00	75%	\$71.25	10	10	10	276	270	270	0.32	0.31	0.31	-	-	-
MF - Electric/Gas	New	Insulation - Foundation	per HH	\$251.39	75%	\$188.54	21	20	20	3,672	3,584	3,589	3.67	3.58	3.59	1,230	1,214	1,215
MF - Electric/Gas	New	Insulation - Infiltration Control	per HH	\$141.40	75%	\$106.05	13	13	13	589	592	593	0.55	0.55	0.55	438	446	446
MF - Electric/Gas	New	Insulation - Radiant Barrier	per HH	\$121.77	75%	\$91.33	6	6	6	89	89	89	0.09	0.09	0.09	37	37	37
MF - Electric/Gas	New	Insulation - Wall Cavity	per HH	\$0.00	75%	\$0.00	-	-	4	-	-	66	-	-	0.05	-	80	
MF - Electric/Gas	New	Insulation - Wall Sheathing	per HH	\$458.02	75%	\$343.52	21	20	20	1,576	1,538	1,540	1.46	1.43	1.43	1,232	1,216	1,217
MF - Electric/Gas	New	Ducting - Repair and Sealing	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Windows - Install Reflective Film	per HH	\$327.40	75%	\$245.55	4	4	4	545	549	549	1.91	1.92	1.92	-	-	-
MF - Electric/Gas	New	Roofs - High Reflectivity	per HH	\$125.70	75%	\$94.28	54	52	52	2,964	2,893	2,896	3.45	3.37	3.37	-	-	-
MF - Electric/Gas	New	Ceiling Fan - Installation	per HH	\$204.00	75%	\$153.00	16	15	15	4,728	4,615	4,621	5.51	5.37	5.38	-	-	-
MF - Electric/Gas	New	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	2	2	2	18	18	18	-	-	-	45	45	45
MF - Electric/Gas	New	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	1	1	1	335	330	325	0.02	0.02	0.02	112	113	113
MF - Electric/Gas	New	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	58	56	56	6,011	5,742	5,653	0.44	0.42	0.41	320	314	313
MF - Electric/Gas	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	36	34	34	16,822	16,070	15,821	1.22	1.17	1.15	895	879	876
MF - Electric/Gas	New	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Water Heater - Solar System	per HH	\$5,400.00	75%	\$4,050.00	0	0	0	119	117	115	0.01	0.01	0.01	-	-	-
MF - Gas Only	Existing	Insulation - Ceiling	per HH	\$574.27	75%	\$430.70	9	9	9	-	-	-	-	-	-	200	201	199
MF - Gas Only	Existing	Insulation - Infiltration Control	per HH	\$152.01	75%	\$114.01	364	364	364	-	-	-	-	-	-	15,351	15,443	15,298
MF - Gas Only	Existing	Insulation - Radiant Barrier	per HH	\$130.90	75%	\$98.18	163	163	163	-	-	-	-	-	-	3,271	3,290	3,260
MF - Gas Only	Existing	Insulation - Wall Cavity	per HH	\$696.64	75%	\$522.48	7	7	7	-	-	-	-	-	-	206	207	205

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Gas Only	Existing	Insulation - Wall Sheathing	per HH	\$510.87	75%	\$383.15	137	133	133	-	-	-	-	-	-	9,449	9,225	9,139
MF - Gas Only	Existing	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	Existing	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	48	46	46	-	-	-	-	-	-	1,053	1,028	1,018
MF - Gas Only	Existing	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	Existing	Boiler - Hot Water Reset	per HH	\$37.00	75%	\$27.75	22	21	21	-	-	-	-	-	-	1,443	1,374	1,328
MF - Gas Only	Existing	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	5	5	5	-	-	-	-	-	-	625	629	623
MF - Gas Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	519	504	504	-	-	-	-	-	-	2,840	2,771	2,748
MF - Gas Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	357	346	346	-	-	-	-	-	-	8,904	8,686	8,616
MF - Gas Only	Existing	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	Existing	Combined Boiler & Water Htg. Unit	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	New	Insulation - Ceiling	per HH	\$534.21	75%	\$400.66	0	0	0	-	-	-	-	-	-	2	2	2
MF - Gas Only	New	Insulation - Foundation	per HH	\$251.39	75%	\$188.54	1	1	1	-	-	-	-	-	-	53	52	52
MF - Gas Only	New	Insulation - Infiltration Control	per HH	\$141.40	75%	\$106.05	1	1	1	-	-	-	-	-	-	19	19	19
MF - Gas Only	New	Insulation - Radiant Barrier	per HH	\$121.77	75%	\$91.33	0	0	0	-	-	-	-	-	-	2	2	2
MF - Gas Only	New	Insulation - Wall Sheathing	per HH	\$458.02	75%	\$343.52	1	1	1	-	-	-	-	-	-	52	52	52
MF - Gas Only	New	Windows - High Efficiency/ENERGY STAR	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	New	Thermostat - Clock/Programmable	per HH	\$30.00	75%	\$22.50	0	0	0	-	-	-	-	-	-	2	2	2
MF - Gas Only	New	Home Energy Management System	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Gas Only	New	Water Heater - Drainwater Heat Recovery	per HH	\$899.00	75%	\$674.25	0	0	0	-	-	-	-	-	-	6	6	6
MF - Gas Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	75%	\$12.00	4	4	4	-	-	-	-	-	-	18	17	17
MF - Gas Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	75%	\$9.00	2	2	2	-	-	-	-	-	-	49	48	48
MF - Gas Only	New	Water Heater - Desuperheater	per HH	\$0.00	75%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-

Program Measure-Level Details

Table G-5 Residential Moderate Income (MAP)

Segment	Vintage	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
								2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	90%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$2,423.61	90%	\$2,181.25	8	7	7	1,657	1,208	1,071	2.07	1.51	1.34	-	-	-
SF - Electric Only	Existing	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$1,309.62	90%	\$1,178.65	6	6	6	7,054	5,546	5,101	-	-	-	-	-	-
SF - Electric Only	Existing	Screw-in	CFL	per HH	\$41.57	90%	\$20.00	144	140	140	175,934	142,373	138,823	11.86	9.59	9.35	-	-	-
SF - Electric Only	Existing	Specialty	CFL	per HH	\$25.79	90%	\$23.21	92	89	89	23,033	22,479	22,504	1.55	1.51	1.52	-	-	-
SF - Electric Only	Existing	Screw-in	CFL	per HH	\$1.78	90%	\$2.50	144	140	140	22,499	21,967	22,023	1.52	1.48	1.48	-	-	-
SF - Electric/Gas	Existing	Central AC	SEER 14.5 (Energy Star)	per HH	\$0.00	90%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$2,290.20	90%	\$2,061.18	1	1	1	249	181	160	0.31	0.23	0.20	-	-	-
SF - Electric/Gas	Existing	Air-Source Heat Pump	SEER 16, HSPF 8.5	per HH	\$1,296.52	90%	\$1,166.87	0	0	0	282	226	210	-	-	-	-	-	-
SF - Electric/Gas	Existing	Screw-in	CFL	per HH	\$39.77	90%	\$20.00	357	347	347	314,074	306,607	307,008	21.16	20.66	20.69	-	-	-
SF - Electric/Gas	Existing	Specialty	CFL	per HH	\$24.70	90%	\$22.23	121	118	118	30,497	29,764	29,798	2.06	2.01	2.01	-	-	-
SF - Electric/Gas	Existing	Screw-in	CFL	per HH	\$1.35	90%	\$2.50	582	565	565	93,698	91,483	91,715	6.31	6.16	6.18	-	-	-
SF - Electric/Gas	Existing	Furnace	AFUE 0.9	per HH	\$2,738.28	90%	\$2,464.45	24	23	23	-	-	-	-	-	-	1,325	1,309	1,310
SF - Gas Only	Existing	Furnace	AFUE 0.9	per HH	\$2,527.64	90%	\$2,274.88	10	9	9	-	-	-	-	-	-	493	487	487
SF - Electric Only	Existing	Insulation - Ceiling		per HH	\$363.42	90%	\$327.08	6	6	6	352	349	346	0.17	0.17	0.17	-	-	-
SF - Electric Only	Existing	Insulation - Ducting		per HH	\$95.00	90%	\$85.50	44	42	42	2,930	2,798	2,749	3.55	3.39	3.33	-	-	-
SF - Electric Only	Existing	Insulation - Infiltration Control		per HH	\$327.87	90%	\$295.08	102	102	102	12,674	12,614	12,518	4.17	4.10	4.03	-	-	-
SF - Electric Only	Existing	Insulation - Radiant Barrier		per HH	\$82.84	90%	\$74.56	70	70	70	3,732	3,706	3,671	1.85	1.81	1.78	-	-	-
SF - Electric Only	Existing	Ducting - Repair and Sealing		per HH	\$497.62	90%	\$447.86	29	28	28	10,115	9,658	9,486	11.60	11.06	10.85	-	-	-
SF - Electric Only	Existing	Ceiling Fan - Installation		per HH	\$204.00	90%	\$183.60	28	27	27	8,381	8,001	7,858	10.57	10.09	9.91	-	-	-
SF - Electric Only	Existing	Thermostat - Clock/Programmable		per HH	\$30.00	90%	\$27.00	58	56	56	6,584	6,388	6,363	-	-	-	-	-	-
SF - Electric Only	Existing	Water Heater - Faucet Aerators		per HH	\$16.00	90%	\$14.40	75	73	73	6,611	6,380	6,319	0.49	0.48	0.47	-	-	-
SF - Electric Only	Existing	Water Heater - Low-Flow Showerheads		per HH	\$12.00	90%	\$10.80	52	51	51	21,063	20,326	20,131	1.57	1.51	1.50	-	-	-
SF - Electric/Gas	Existing	Insulation - Ceiling		per HH	\$363.42	90%	\$327.08	7	7	7	220	218	215	0.23	0.22	0.22	72	72	72
SF - Electric/Gas	Existing	Insulation - Ducting		per HH	\$95.00	90%	\$85.50	55	54	54	3,874	3,702	3,639	4.80	4.59	4.51	739	724	720
SF - Electric/Gas	Existing	Insulation - Infiltration Control		per HH	\$327.87	90%	\$295.08	116	116	116	6,083	6,025	5,953	5.48	5.39	5.30	3,333	3,353	3,321
SF - Electric/Gas	Existing	Insulation - Radiant Barrier		per HH	\$82.84	90%	\$74.56	79	79	79	2,343	2,315	2,283	2.42	2.39	2.34	761	765	758
SF - Electric/Gas	Existing	Ducting - Repair and Sealing		per HH	\$497.62	90%	\$447.86	34	33	33	12,689	12,127	11,921	15.60	14.91	14.65	2,172	2,129	2,116
SF - Electric/Gas	Existing	Thermostat - Clock/Programmable		per HH	\$30.00	90%	\$27.00	65	63	63	1,223	1,193	1,193	-	-	-	2,246	2,192	2,172
SF - Electric/Gas	Existing	Water Heater - Faucet Aerators		per HH	\$16.00	90%	\$14.40	253	246	246	22,102	21,382	21,235	1.65	1.59	1.58	1,592	1,554	1,541
SF - Electric/Gas	Existing	Water Heater - Low-Flow Showerheads		per HH	\$12.00	90%	\$10.80	177	172	172	70,415	68,120	67,653	5.24	5.07	5.04	4,973	4,854	4,814
SF - Electric/Gas	Existing	Combined Boiler & Water Htg. Unit		per HH	\$0.00	90%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Existing	Insulation - Ducting		per HH	\$95.00	90%	\$85.50	22	22	22	-	-	-	-	-	-	275	269	268
SF - Gas Only	Existing	Insulation - Infiltration Control		per HH	\$327.87	90%	\$295.08	46	46	46	-	-	-	-	-	-	1,224	1,232	1,222
SF - Gas Only	Existing	Insulation - Radiant Barrier		per HH	\$82.84	90%	\$74.56	32	32	32	-	-	-	-	-	-	280	282	279
SF - Gas Only	Existing	Ducting - Repair and Sealing		per HH	\$497.62	90%	\$447.86	14	13	13	-	-	-	-	-	-	808	792	787

Segment	Vintage	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
								2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Gas Only	Existing	Thermostat - Clock/Programmable		per HH	\$30.00	90%	\$27.00	26	25	25	-	-	-	-	-	-	821	802	795
SF - Gas Only	Existing	Water Heater - Faucet Aerators		per HH	\$16.00	90%	\$14.40	98	95	95	-	-	-	-	-	-	573	559	554
SF - Gas Only	Existing	Water Heater - Low-Flow Showerheads		per HH	\$12.00	90%	\$10.80	68	66	66	-	-	-	-	-	-	1,788	1,746	1,731

Table G-6 Residential Appliance Recycling (MAP)

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	1,098	1,066	1,066	1,109,116	1,063,501	1,047,630	1,610.44	1,544.21	1,521.17	-	-	-
SF - Electric Only	Existing	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	2,879	2,795	2,795	1,919,684	1,742,429	1,636,971	200.81	182.27	171.24	-	-	-
SF - Electric Only	Existing	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	3,190	3,096	3,096	1,611,395	1,506,666	1,455,552	188.36	176.12	170.14	-	-	-
SF - Electric Only	New	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	11	11	11	11,440	11,055	10,991	16.61	16.05	15.96	-	-	-
SF - Electric Only	New	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	94	91	91	45,003	42,028	40,782	4.71	4.40	4.27	-	-	-
SF - Electric Only	New	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	104	101	101	46,246	43,769	42,888	5.41	5.12	5.01	-	-	-
MF - Electric Only	Existing	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	858	832	832	274,377	263,830	260,557	315.83	303.69	299.92	-	-	-
MF - Electric Only	Existing	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	354	344	344	219,513	197,471	185,296	22.97	20.66	19.39	-	-	-
MF - Electric Only	Existing	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	397	385	385	207,632	197,795	194,398	24.27	23.12	22.73	-	-	-
MF - Electric Only	New	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	9	9	9	2,589	2,506	2,492	2.98	2.88	2.87	-	-	-
MF - Electric Only	New	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	6	6	6	2,960	2,781	2,701	0.31	0.29	0.28	-	-	-
MF - Electric Only	New	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	7	7	7	3,059	2,906	2,849	0.36	0.34	0.33	-	-	-
SF - Electric/Gas	Existing	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	1,422	1,381	1,381	1,358,523	1,303,859	1,285,629	1,972.59	1,893.21	1,866.74	-	-	-
SF - Electric/Gas	Existing	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	3,280	3,184	3,184	2,228,643	2,027,848	1,908,693	233.13	212.13	199.66	-	-	-
SF - Electric/Gas	Existing	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	3,442	3,340	3,340	1,738,385	1,625,404	1,570,261	203.20	190.00	183.55	-	-	-
SF - Electric/Gas	New	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	13	13	13	13,357	12,931	12,873	19.39	18.78	18.69	-	-	-
SF - Electric/Gas	New	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	107	103	103	53,612	49,688	47,944	5.61	5.20	5.02	-	-	-
SF - Electric/Gas	New	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	112	109	109	49,890	47,219	46,268	5.83	5.52	5.41	-	-	-
MF - Electric/Gas	Existing	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	224	217	217	161,229	155,137	153,320	185.59	178.58	176.49	-	-	-
MF - Electric/Gas	Existing	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	267	260	260	169,046	152,290	143,069	17.69	15.93	14.97	-	-	-
MF - Electric/Gas	Existing	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	355	345	345	185,810	177,006	173,967	21.72	20.69	20.34	-	-	-
MF - Electric/Gas	New	Room AC - Removal of Second Unit	per HH	\$60.00	75%	\$45.00	1	1	1	440	427	425	0.51	0.49	0.49	-	-	-
MF - Electric/Gas	New	Refrigerator - Remove Second Unit	per HH	\$120.00	75%	\$90.00	5	4	4	2,343	2,187	2,113	0.25	0.23	0.22	-	-	-
MF - Electric/Gas	New	Freezer - Remove Second Unit	per HH	\$120.00	75%	\$90.00	6	6	6	2,737	2,601	2,550	0.32	0.30	0.30	-	-	-

Table G-7 Residential HVAC (MAP)

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric/Gas	Existing	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$377.69	70%	\$264.39	2,013	1,954	1,954	-	-	-	-	-	-	111,339	109,927	110,024
SF - Electric/Gas	New	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$0.00	70%	\$0.00	-	1,040	1,040	-	-	-	-	-	-	-	59,214	59,267
SF - Gas Only	Existing	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$348.64	70%	\$244.05	811	787	787	-	-	-	-	-	-	41,418	40,893	40,929
SF - Gas Only	New	Heating	Natural Gas	Furnace	AFUE 0.9	per HH	\$0.00	70%	\$0.00	-	310	310	-	-	-	-	-	-	-	16,282	16,297

Program Measure-Level Details

Table G-8 Residential Efficient Products (MAP)

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	318	308	308	532,780	479,927	467,016	39.68	35.74	34.78	-	-	-
SF - Electric Only	Existing	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star	per HH	\$70.00	40%	\$28.00	1,252	1,215	1,215	633,672	618,783	621,119	48.85	47.71	47.89	-	-	-
SF - Electric Only	Existing	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	1,226	1,190	1,190	182,769	178,474	179,148	14.09	13.76	13.81	-	-	-
SF - Electric Only	Existing	Miscellaneous	Electric	Bathroom Exhaust Fan	High Efficiency	per HH	\$43.50	40%	\$17.40	1,634	1,586	1,586	140,165	136,871	137,388	10.81	10.55	10.59	-	-	-
SF - Electric Only	New	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	57	56	56	86,871	78,458	76,324	6.47	5.84	5.68	-	-	-
SF - Electric Only	New	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star	per HH	\$70.00	40%	\$28.00	109	106	106	55,297	53,998	54,202	4.26	4.16	4.18	-	-	-
SF - Electric Only	New	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	97	94	94	14,507	14,167	14,220	1.12	1.09	1.10	-	-	-
SF - Electric Only	New	Miscellaneous	Electric	Bathroom Exhaust Fan	High Efficiency	per HH	\$43.50	40%	\$17.40	133	129	129	11,377	11,110	11,152	0.88	0.86	0.86	-	-	-
MF - Electric Only	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 0.95	per HH	\$40.00	40%	\$16.00	20	-	-	1,891	-	-	0.14	-	-	-	-	-
MF - Electric Only	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.0	per HH	\$0.00	40%	\$0.00	-	20	20	-	19,815	18,865	-	1.44	1.37	-	-	-
MF - Electric Only	Existing	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	Existing	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star	per HH	\$70.00	40%	\$28.00	470	456	456	237,596	232,014	232,890	19.79	19.32	19.39	-	-	-
MF - Electric Only	Existing	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	42	41	41	6,243	6,096	6,120	0.52	0.51	0.51	-	-	-
MF - Electric Only	New	Water Heating	Electric	Water Heater > 55 gal	EF 0.95	per HH	\$40.00	40%	\$16.00	0	0	-	10	10	-	0.00	0.00	-	-	-	-
MF - Electric Only	New	Water Heating	Electric	Water Heater > 55 gal	EF 2.0	per HH	\$0.00	40%	\$0.00	-	-	0	-	-	246	-	-	0.02	-	-	-

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Electric Only	New	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric Only	New	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star High Efficiency	per HH	\$70.00	40%	\$28.00	17	17	17	8,820	8,613	8,645	0.73	0.72	0.72	-	-	-
MF - Electric Only	New	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	1	1	1	212	207	208	0.02	0.02	0.02	-	-	-
SF - Electric/Gas	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	69	66	66	115,001	107,381	105,821	8.56	8.00	7.88	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	TVs	Energy Star (5.1)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	Printer/Fax/Copier	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	Existing	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star High Efficiency	per HH	\$70.00	40%	\$28.00	1,580	1,533	1,533	799,314	780,532	783,479	61.63	60.18	60.40	-	-	-
SF - Electric/Gas	Existing	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	761	739	739	113,511	110,843	111,262	8.75	8.55	8.58	-	-	-
SF - Electric/Gas	Existing	Miscellaneous	Electric	Bathroom Exhaust Fan	High Efficiency	per HH	\$43.50	40%	\$17.40	5,223	5,069	5,069	447,996	437,470	439,121	34.54	33.73	33.86	-	-	-
SF - Electric/Gas	New	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	12	12	12	18,751	17,550	17,297	1.40	1.31	1.29	-	-	-
SF - Electric/Gas	New	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Electronics	Electric	TVs	Energy Star (5.1)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Electronics	Electric	Printer/Fax/Copier	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star High Efficiency	per HH	\$70.00	40%	\$28.00	138	134	134	69,752	68,113	68,370	5.38	5.25	5.27	-	-	-
SF - Electric/Gas	New	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	60	59	59	9,010	8,798	8,832	0.69	0.68	0.68	-	-	-
SF - Electric/Gas	New	Miscellaneous	Electric	Bathroom Exhaust Fan	High Efficiency	per HH	\$43.50	40%	\$17.40	424	412	412	36,408	35,552	35,687	2.81	2.74	2.75	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
MF - Electric/Gas	Existing	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	17	17	17	28,169	26,363	25,987	2.05	1.92	1.89	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	TVs	Energy Star (5.1)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	Printer/Fax/Copier	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	Existing	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star	per HH	\$70.00	40%	\$28.00	185	179	179	93,532	91,334	91,679	7.79	7.61	7.63	-	-	-
MF - Electric/Gas	Existing	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	50	49	49	7,500	7,324	7,351	0.62	0.61	0.61	-	-	-
MF - Electric/Gas	New	Water Heating	Electric	Water Heater > 55 gal	EF 2.3 (HP)	per HH	\$731.11	40%	\$292.44	0	0	0	325	304	299	0.02	0.02	0.02	-	-	-
MF - Electric/Gas	New	Electronics	Electric	Personal Computers	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Electronics	Electric	Monitor	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Electronics	Electric	Laptops	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Electronics	Electric	TVs	Energy Star (5.1)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Electronics	Electric	Printer/Fax/Copier	Energy Star	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Electronics	Electric	Set-top Boxes/DVR	Energy Star (2011)	per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
MF - Electric/Gas	New	Miscellaneous	Electric	Air Purifier/Cleaner	Energy Star	per HH	\$70.00	40%	\$28.00	7	7	7	3,472	3,391	3,403	0.29	0.28	0.28	-	-	-
MF - Electric/Gas	New	Miscellaneous	Electric	Pool Pump	High Efficiency	per HH	\$85.00	40%	\$34.00	2	2	2	254	248	249	0.02	0.02	0.02	-	-	-
SF - Electric Only	Existing			Roofs - High Reflectivity		per HH	\$85.51	40%	\$34.20	169	164	164	16,891	16,126	15,838	21.30	20.33	19.97	-	-	-
SF - Electric Only	Existing			Ceiling Fan - Installation		per HH	\$204.00	40%	\$81.60	2,256	2,189	2,189	670,448	640,104	628,660	845.30	807.06	792.65	-	-	-
SF - Electric Only	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	2,016	1,957	1,957	230,431	223,573	222,700	-	-	-	-	-	-
SF - Electric Only	Existing			Water Heater - Desuperheater		per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	Existing			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	19	19	19	43,315	43,065	42,652	3.23	3.21	3.18	-	-	-
SF - Electric Only	Existing			Pool Pump - Timer		per HH	\$0.00	40%	\$0.00	-	-	1,224	-	-	152,291	-	-	11.74	-	-	-
SF - Electric Only	Existing			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	977	949	949	2,628,858	2,528,230	2,505,920	202.68	194.92	193.20	-	-	-
SF - Electric Only	New			Windows - Install Reflective Film		per HH	\$0.00	40%	\$0.00	-	6	6	-	1,941	1,931	-	7.28	7.24	-	-	-
SF - Electric Only	New			Roofs - High Reflectivity		per HH	\$97.66	40%	\$39.06	98	95	95	10,457	10,116	10,063	13.08	12.65	12.59	-	-	-

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	New			Ceiling Fan - Installation		per HH	\$204.00	40%	\$81.60	49	48	48	17,461	16,892	16,804	21.84	21.13	21.01	-	-	-
SF - Electric Only	New			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	43	42	42	6,031	5,873	5,871	-	-	-	-	-	-
SF - Electric Only	New			Water Heater - Desuperheater		per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric Only	New			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	0	0	0	531	515	502	0.04	0.04	0.04	-	-	-
SF - Electric Only	New			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	32	31	31	79,601	77,731	78,024	6.14	5.99	6.02	-	-	-
MF - Electric Only	Existing			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	4	4	4	5,921	5,890	5,842	0.43	0.43	0.42	-	-	-
MF - Electric Only	Existing			Pool Pump - Timer		per HH	\$0.00	40%	\$0.00	-	-	41	-	-	5,083	-	-	0.42	-	-	-
MF - Electric Only	Existing			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	55	53	53	146,950	141,320	140,076	12.24	11.77	11.67	-	-	-
MF - Electric Only	New			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	0	0	0	89	88	87	0.01	0.01	0.01	-	-	-
MF - Electric Only	New			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	1	1	1	2,341	2,286	2,295	0.19	0.19	0.19	-	-	-
SF - Electric/Gas	Existing			Roofs - High Reflectivity		per HH	\$85.51	40%	\$34.20	228	221	221	22,278	21,292	20,932	28.07	26.82	26.37	-	-	-
SF - Electric/Gas	Existing			Ceiling Fan - Installation		per HH	\$204.00	40%	\$81.60	3,053	2,963	2,963	884,582	845,437	831,114	1,114.37	1,065.10	1,047.08	-	-	-
SF - Electric/Gas	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	2,286	2,219	2,219	42,803	41,740	41,759	-	-	-	78,601	76,734	76,007
SF - Electric/Gas	Existing			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	2	2	2	3,936	3,923	3,897	0.29	0.29	0.29	-	-	-
SF - Electric/Gas	Existing			Pool Pump - Timer		per HH	\$0.00	40%	\$0.00	-	-	760	-	-	94,582	-	-	7.29	-	-	-
SF - Electric/Gas	Existing			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	2,043	1,983	1,983	5,496,195	5,285,810	5,239,166	423.74	407.52	403.93	190,511	186,752	185,526
SF - Electric/Gas	New			Windows - Install Reflective Film		per HH	\$0.00	40%	\$0.00	-	8	8	-	2,570	2,558	-	9.64	9.59	-	-	-
SF - Electric/Gas	New			Roofs - High Reflectivity		per HH	\$97.66	40%	\$39.06	133	129	129	13,852	13,411	13,350	17.32	16.77	16.69	-	-	-
SF - Electric/Gas	New			Ceiling Fan - Installation		per HH	\$204.00	40%	\$81.60	66	65	65	23,131	22,394	22,292	28.92	28.00	27.87	-	-	-
SF - Electric/Gas	New			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	49	48	48	1,198	1,169	1,170	-	-	-	1,730	1,692	1,682
SF - Electric/Gas	New			Water Heater - Desuperheater		per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Electric/Gas	New			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	0	0	0	220	216	213	0.02	0.02	0.02	-	-	-
SF - Electric/Gas	New			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	66	64	64	166,423	162,512	163,126	12.83	12.53	12.58	6,149	6,009	5,963
MF - Electric/Gas	Existing			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	0	0	0	890	885	876	0.06	0.06	0.06	-	-	-
MF - Electric/Gas	Existing			Pool Pump - Timer		per HH	\$0.00	40%	\$0.00	-	-	49	-	-	6,106	-	-	0.51	-	-	-
MF - Electric/Gas	Existing			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	66	64	64	176,526	169,764	168,269	14.70	14.14	14.01	-	-	-
MF - Electric/Gas	New			Water Heater - Solar System		per HH	\$5,400.00	40%	\$2,160.00	0	0	0	13	13	13	0.00	0.00	0.00	-	-	-
MF - Electric/Gas	New			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	1	1	1	2,812	2,746	2,757	0.23	0.23	0.23	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Fuel	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
										2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Gas Only	Existing			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	914	887	887	-	-	-	-	-	-	28,737	28,079	27,836
SF - Gas Only	Existing			Water Heater - Drainwater Heat Recovery		per HH	\$899.00	40%	\$359.60	32	32	32	-	-	-	-	-	-	5,765	5,797	5,749
SF - Gas Only	Existing			Water Heater - Desuperheater		per HH	\$0.00	40%	\$0.00	-	-	-	-	-	-	-	-	-	-	-	-
SF - Gas Only	Existing			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	916	889	889	-	-	-	-	-	-	85,434	83,748	83,198
SF - Gas Only	New			Thermostat - Clock/Programmable		per HH	\$30.00	40%	\$12.00	13	13	13	-	-	-	-	-	-	418	408	405
SF - Gas Only	New			Pool/Spa cover		per HH	\$115.00	40%	\$46.00	20	19	19	-	-	-	-	-	-	1,811	1,769	1,755

Table G-9 Residential School Kits (MAP)

Segment	Vintage	Technology	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations (Households)			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
							2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
SF - Electric Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	182	176	176	16,032	15,471	15,323	1.19	1.15	1.14	-	-	-
SF - Electric Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	181	176	176	72,669	70,123	69,451	5.41	5.22	5.17	-	-	-
SF - Electric Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	7	6	6	496	467	455	0.04	0.03	0.03	-	-	-
SF - Electric Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	9	8	8	2,949	2,776	2,708	0.22	0.21	0.20	-	-	-
MF - Electric Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	254	246	246	19,494	18,821	18,667	1.42	1.37	1.36	-	-	-
MF - Electric Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	254	246	246	88,910	85,840	85,139	6.46	6.24	6.19	-	-	-
MF - Electric Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	5	5	5	333	319	315	0.02	0.02	0.02	-	-	-
MF - Electric Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	4	4	4	1,356	1,300	1,282	0.10	0.09	0.09	-	-	-
Electric/Gas SF -	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	614	596	596	53,598	51,851	51,496	3.99	3.86	3.83	3,861	3,769	3,737
Electric/Gas SF -	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	611	593	593	242,933	235,014	233,403	18.09	17.50	17.38	17,158	16,747	16,608
Electric/Gas SF -	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	22	22	22	1,677	1,604	1,582	0.12	0.12	0.12	117	115	115
Electric/Gas SF -	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	29	28	28	9,976	9,537	9,411	0.74	0.71	0.70	682	670	668
Electric/Gas MF -	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	152	147	147	18,132	17,484	17,320	1.32	1.27	1.26	949	926	919
Electric/Gas MF -	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	152	147	147	82,700	79,745	78,993	6.01	5.80	5.74	4,328	4,222	4,188
Electric/Gas MF -	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	3	3	3	306	293	288	0.02	0.02	0.02	16	16	16
Electric/Gas MF -	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	3	3	3	1,247	1,191	1,173	0.09	0.09	0.09	66	65	65
SF - Gas Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	237	230	230	-	-	-	-	-	-	1,389	1,355	1,344
SF - Gas Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	236	229	229	-	-	-	-	-	-	6,170	6,023	5,972
SF - Gas Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	6	5	5	-	-	-	-	-	-	28	27	27
SF - Gas Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	7	7	7	-	-	-	-	-	-	162	159	158
MF - Gas Only	Existing	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	26	26	26	-	-	-	-	-	-	145	141	140
MF - Gas Only	Existing	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	26	26	26	-	-	-	-	-	-	660	644	639
MF - Gas Only	New	Water Heater - Faucet Aerators	per HH	\$16.00	0%	\$0.00	0	0	0	-	-	-	-	-	-	1	1	1
MF - Gas Only	New	Water Heater - Low-Flow Showerheads	per HH	\$12.00	0%	\$0.00	0	0	0	-	-	-	-	-	-	4	4	4

Commercial

Table G-10 Small Business Direct Install (MAP)

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Office - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.03	100%	\$0.03	14,522,712	14,095,573	14,095,573	1,660,085	1,484,995	1,376,121	314.20	281.06	260.46	-	-	-
Office - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	8,713,213	8,456,942	8,456,942	282,590	274,179	273,505	53.49	51.89	51.77	-	-	-
Office - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.05	100%	\$0.05	5,228,630	5,074,847	5,074,847	948,294	920,071	917,808	179.48	174.14	173.71	-	-	-
Office - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	9,385,228	9,109,192	9,109,192	179,561	160,615	148,829	1.67	1.49	1.38	-	-	-
Office - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	4,552,946	-	-	6,296	-	-	0.06	-	-	-
Office - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	46,508	45,140	45,140	333	323	323	0.03	0.03	0.03	-	-	-
Office - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	325,414	315,843	315,843	16,791	16,276	16,239	1.76	1.70	1.70	-	-	-
Office - E	Existing	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	490,606	476,177	476,177	5,306	5,137	5,119	0.55	0.54	0.54	-	-	-
Office - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	36,788	35,706	35,706	44,405	43,084	42,978	10.22	9.91	9.89	-	-	-
Office - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	435,087	422,291	422,291	301,301	292,333	291,615	36.29	35.21	35.13	-	-	-
Office - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	527,496	511,981	511,981	56,305	54,629	54,495	6.78	6.58	6.56	-	-	-
Office - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	2,154,250	2,090,890	2,090,890	116,084	112,629	112,352	13.98	13.57	13.53	-	-	-
Office - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	209,996	203,820	203,820	16,401	15,913	15,874	1.98	1.92	1.91	-	-	-
Office - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	882,245	856,297	856,297	69,286	67,224	67,059	8.35	8.10	8.08	-	-	-
Office - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.03	100%	\$0.03	1,555,093	1,509,355	1,509,355	179,221	159,768	147,522	33.92	30.24	27.92	-	-	-
Office - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	1,124,740	1,091,659	1,091,659	36,478	35,392	35,305	6.90	6.70	6.68	-	-	-
Office - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.05	100%	\$0.05	1,124,740	1,091,659	1,091,659	203,989	197,918	197,431	38.61	37.46	37.37	-	-	-
Office - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	1,120,180	1,087,233	1,087,233	21,608	19,271	17,798	0.20	0.18	0.17	-	-	-
Office - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	1,201,414	1,166,078	1,166,078	1,666	1,617	1,613	0.02	0.02	0.01	-	-	-
Office - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	11,472	11,135	11,135	82	80	80	0.01	0.01	0.01	-	-	-
Office - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	131,137	127,280	127,280	6,767	6,559	6,542	0.71	0.69	0.68	-	-	-
Office - E	New	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	131,137	127,280	127,280	1,418	1,373	1,367	0.15	0.14	0.14	-	-	-
Office - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	9,372	9,097	9,097	11,313	10,976	10,949	2.60	2.53	2.52	-	-	-
Office - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	46,378	45,014	45,014	32,117	31,161	31,085	3.87	3.75	3.74	-	-	-
Office - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	58,391	56,673	56,673	6,233	6,047	6,032	0.75	0.73	0.73	-	-	-
Office - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	220,974	214,475	214,475	11,907	11,553	11,525	1.43	1.39	1.39	-	-	-
Office - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	24,543	23,822	23,822	1,917	1,860	1,855	0.23	0.22	0.22	-	-	-

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Office - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	125,604	121,909	121,909	9,864	9,571	9,547	1.19	1.15	1.15	-	-	-
Restaurant - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.09	100%	\$0.09	3,062,687	2,972,607	2,972,607	1,364,291	1,218,196	1,129,587	162.93	145.48	134.90	-	-	-
Restaurant - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.02	100%	\$0.02	1,840,514	1,786,382	1,786,382	339,133	329,040	328,231	40.50	39.30	39.20	-	-	-
Restaurant - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.04	100%	\$0.04	1,070,334	1,038,853	1,038,853	192,401	186,675	186,216	22.98	22.29	22.24	-	-	-
Restaurant - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	1,974,952	1,916,865	1,916,865	77,444	69,167	64,104	0.72	0.64	0.60	-	-	-
Restaurant - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	961,731	-	-	320	-	-	0.00	-	-	-
Restaurant - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.17	100%	\$0.17	56,249	54,595	54,595	26,747	25,802	25,619	2.72	2.62	2.60	-	-	-
Restaurant - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.02	100%	\$0.02	15,880	15,413	15,413	2,554	2,478	2,475	0.26	0.25	0.25	-	-	-
Restaurant - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.11	100%	\$0.11	147,210	142,880	142,880	170,572	165,346	164,960	17.33	16.80	16.76	-	-	-
Restaurant - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	38,807	37,665	37,665	37,610	36,491	36,401	4.53	4.39	4.38	-	-	-
Restaurant - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.02	100%	\$0.02	67,472	65,487	65,487	41,030	39,809	39,711	4.94	4.79	4.78	-	-	-
Restaurant - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.05	100%	\$0.05	63,895	62,016	62,016	161,600	156,791	156,405	19.45	18.87	18.82	-	-	-
Restaurant - E	Existing	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.07	100%	\$0.07	21,194	20,570	20,570	34,413	33,389	33,307	4.14	4.02	4.01	-	-	-
Restaurant - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	71,792	69,681	69,681	7,760	7,529	7,511	0.75	0.73	0.73	-	-	-
Restaurant - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	69,726	67,676	67,676	929	902	899	0.09	0.09	0.09	-	-	-
Restaurant - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	268,174	260,287	260,287	27,067	26,262	26,197	2.63	2.55	2.55	-	-	-
Restaurant - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	33,511	32,526	32,526	409	396	395	0.04	0.04	0.04	-	-	-
Restaurant - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	85,389	82,877	82,877	2,512	2,437	2,431	0.24	0.24	0.24	-	-	-
Restaurant - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.09	100%	\$0.09	334,200	324,371	324,371	149,505	133,958	123,446	17.85	16.00	14.74	-	-	-
Restaurant - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.02	100%	\$0.02	237,582	230,594	230,594	43,777	42,474	42,369	5.23	5.07	5.06	-	-	-
Restaurant - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.04	100%	\$0.04	230,361	223,585	223,585	41,409	40,177	40,078	4.95	4.80	4.79	-	-	-
Restaurant - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	240,860	233,776	233,776	9,485	8,496	7,835	0.09	0.08	0.07	-	-	-
Restaurant - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	253,778	246,314	246,314	85	82	82	0.00	0.00	0.00	-	-	-
Restaurant - E	New	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.17	100%	\$0.17	15,019	14,577	14,577	7,142	6,884	6,828	0.73	0.70	0.69	-	-	-
Restaurant - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.02	100%	\$0.02	4,268	4,142	4,142	686	666	665	0.07	0.07	0.07	-	-	-
Restaurant - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.11	100%	\$0.11	58,891	57,159	57,159	68,237	66,140	65,978	6.93	6.72	6.70	-	-	-
Restaurant - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	10,009	9,715	9,715	9,701	9,412	9,389	1.17	1.13	1.13	-	-	-
Restaurant - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.02	100%	\$0.02	17,623	17,105	17,105	10,717	10,398	10,372	1.29	1.25	1.25	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Restaurant - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.05	100%	\$0.05	17,357	16,846	16,846	43,897	42,591	42,486	5.28	5.13	5.11	-	-	-
Restaurant - E	New	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.07	100%	\$0.07	6,095	5,916	5,916	9,896	9,602	9,578	1.19	1.16	1.15	-	-	-
Restaurant - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	7,677	7,451	7,451	830	805	803	0.08	0.08	0.08	-	-	-
Restaurant - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	7,776	7,547	7,547	104	101	100	0.01	0.01	0.01	-	-	-
Restaurant - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	27,658	26,845	26,845	2,792	2,708	2,702	0.27	0.26	0.26	-	-	-
Restaurant - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	3,925	3,809	3,809	48	46	46	0.00	0.00	0.00	-	-	-
Restaurant - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	12,262	11,901	11,901	361	350	349	0.04	0.03	0.03	-	-	-
Retail - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	15,473,110	15,018,019	15,018,019	835,677	747,231	694,534	98.70	88.25	82.03	-	-	-
Retail - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	8,837,568	8,577,640	8,577,640	266,054	258,136	257,501	31.42	30.49	30.41	-	-	-
Retail - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.09	100%	\$0.09	5,303,253	5,147,275	5,147,275	1,514,734	1,469,653	1,466,038	178.90	173.58	173.15	-	-	-
Retail - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.04	100%	\$0.04	10,082,491	9,785,948	9,785,948	631,505	564,679	523,793	5.86	5.24	4.86	-	-	-
Retail - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	4,617,926	-	-	1,567	-	-	0.01	-	-	-
Retail - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.01	100%	\$0.01	129,449	125,642	125,642	2,714	2,634	2,631	0.27	0.27	0.27	-	-	-
Retail - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.01	100%	\$0.01	383,989	372,695	372,695	58,034	56,255	56,124	5.85	5.67	5.65	-	-	-
Retail - E	Existing	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.01	100%	\$0.01	578,917	561,890	561,890	18,340	17,755	17,691	1.85	1.79	1.78	-	-	-
Retail - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	47,968	46,557	46,557	4,923	4,776	4,764	0.70	0.68	0.67	-	-	-
Retail - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	46,119	44,762	44,762	2,970	2,881	2,874	0.42	0.41	0.41	-	-	-
Retail - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	82,012	79,600	79,600	43,926	42,619	42,514	6.21	6.03	6.01	-	-	-
Retail - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	412,379	400,251	400,251	25,622	24,859	24,798	2.48	2.40	2.40	-	-	-
Retail - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	462,519	448,916	448,916	4,429	4,298	4,287	0.43	0.42	0.41	-	-	-
Retail - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	1,624,805	1,577,017	1,577,017	94,265	91,460	91,235	9.11	8.84	8.82	-	-	-
Retail - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	194,955	189,221	189,221	1,366	1,325	1,322	0.13	0.13	0.13	-	-	-
Retail - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	752,715	730,576	730,576	6,364	6,175	6,160	0.62	0.60	0.60	-	-	-
Retail - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	1,643,868	1,595,519	1,595,519	88,683	79,319	73,851	10.47	9.37	8.72	-	-	-
Retail - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	1,140,792	1,107,239	1,107,239	34,343	33,321	33,239	4.06	3.94	3.93	-	-	-
Retail - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.09	100%	\$0.09	1,140,792	1,107,239	1,107,239	325,837	316,140	315,362	38.48	37.34	37.25	-	-	-
Retail - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.04	100%	\$0.04	1,187,802	1,152,867	1,152,867	74,313	66,465	61,851	0.69	0.62	0.57	-	-	-
Retail - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	1,218,560	1,182,720	1,182,720	415	402	401	0.00	0.00	0.00	-	-	-

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Retail - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.01	100%	\$0.01	34,975	33,947	33,947	733	712	711	0.07	0.07	0.07	-	-	-
Retail - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.01	100%	\$0.01	154,445	149,903	149,903	23,342	22,624	22,569	2.35	2.28	2.27	-	-	-
Retail - E	New	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.01	100%	\$0.01	154,445	149,903	149,903	4,893	4,735	4,716	0.49	0.48	0.48	-	-	-
Retail - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	12,308	11,946	11,946	1,263	1,225	1,222	0.18	0.17	0.17	-	-	-
Retail - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	11,842	11,494	11,494	763	740	738	0.11	0.10	0.10	-	-	-
Retail - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	21,047	20,428	20,428	11,273	10,938	10,911	1.59	1.55	1.54	-	-	-
Retail - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	43,468	42,189	42,189	2,701	2,620	2,614	0.26	0.25	0.25	-	-	-
Retail - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	51,299	49,790	49,790	491	477	475	0.05	0.05	0.05	-	-	-
Retail - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	165,487	160,620	160,620	9,601	9,315	9,292	0.93	0.90	0.90	-	-	-
Retail - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	22,641	21,975	21,975	159	154	154	0.02	0.01	0.01	-	-	-
Retail - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	106,380	103,251	103,251	899	873	871	0.09	0.08	0.08	-	-	-
Grocery - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	1,602,615	1,555,479	1,555,479	191,804	171,523	159,164	34.68	31.01	28.78	-	-	-
Grocery - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	970,393	941,852	941,852	21,028	20,402	20,352	3.80	3.69	3.68	-	-	-
Grocery - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.14	100%	\$0.14	565,216	548,592	548,592	349,817	339,406	338,571	63.25	61.37	61.22	-	-	-
Grocery - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	1,033,047	1,002,663	1,002,663	31,245	27,941	25,903	0.29	0.26	0.24	-	-	-
Grocery - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	507,063	-	-	1,377	-	-	0.01	-	-	-
Grocery - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.21	100%	\$0.21	19,761	19,180	19,180	16,510	15,926	15,814	1.83	1.76	1.75	-	-	-
Grocery - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	4,444	4,314	4,314	359	348	348	0.04	0.04	0.04	-	-	-
Grocery - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.57	100%	\$0.57	78,878	76,558	76,558	458,820	444,762	443,724	50.83	49.27	49.15	-	-	-
Grocery - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	38,283	37,157	37,157	4,093	3,971	3,961	0.99	0.96	0.96	-	-	-
Grocery - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	57,441	55,752	55,752	3,853	3,739	3,729	0.93	0.91	0.90	-	-	-
Grocery - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.01	100%	\$0.01	17,448	16,935	16,935	9,736	9,446	9,423	2.36	2.29	2.29	-	-	-
Grocery - E	Existing	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.06	100%	\$0.06	32,795	31,831	31,831	11,749	11,399	11,371	2.85	2.76	2.76	-	-	-
Grocery - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	46,110	44,754	44,754	3,171	3,076	3,069	0.38	0.37	0.37	-	-	-
Grocery - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	43,227	41,955	41,955	458	444	443	0.06	0.05	0.05	-	-	-
Grocery - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	150,900	146,462	146,462	4,844	4,700	4,689	0.58	0.57	0.57	-	-	-
Grocery - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	21,513	20,880	20,880	167	162	161	0.02	0.02	0.02	-	-	-
Grocery - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	96,804	93,957	93,957	906	879	877	0.11	0.11	0.11	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Grocery - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	169,887	164,890	164,890	19,447	17,663	16,401	3.52	3.19	2.97	-	-	-
Grocery - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	125,263	121,578	121,578	2,714	2,634	2,627	0.49	0.48	0.48	-	-	-
Grocery - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.14	100%	\$0.14	121,606	118,030	118,030	75,263	73,023	72,844	13.61	13.20	13.17	-	-	-
Grocery - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	123,500	119,868	119,868	3,573	3,237	3,008	0.03	0.03	0.03	-	-	-
Grocery - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	133,802	129,866	129,866	364	353	353	0.00	0.00	0.00	-	-	-
Grocery - E	New	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.21	100%	\$0.21	5,210	5,057	5,057	4,353	4,196	4,162	0.48	0.46	0.46	-	-	-
Grocery - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	1,066	1,035	1,035	87	84	84	0.01	0.01	0.01	-	-	-
Grocery - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.57	100%	\$0.57	31,501	30,575	30,575	183,236	177,605	177,171	20.30	19.67	19.63	-	-	-
Grocery - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	9,823	9,534	9,534	1,050	1,019	1,016	0.25	0.25	0.25	-	-	-
Grocery - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	14,749	14,316	14,316	989	960	958	0.24	0.23	0.23	-	-	-
Grocery - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.01	100%	\$0.01	4,478	4,346	4,346	2,499	2,424	2,418	0.61	0.59	0.59	-	-	-
Grocery - E	New	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.06	100%	\$0.06	9,250	8,978	8,978	3,314	3,215	3,207	0.80	0.78	0.78	-	-	-
Grocery - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	4,860	4,717	4,717	334	324	323	0.04	0.04	0.04	-	-	-
Grocery - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	4,806	4,665	4,665	51	49	49	0.01	0.01	0.01	-	-	-
Grocery - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	15,369	14,917	14,917	493	479	478	0.06	0.06	0.06	-	-	-
Grocery - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	2,498	2,425	2,425	19	19	19	0.00	0.00	0.00	-	-	-
Grocery - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	13,681	13,279	13,279	128	124	124	0.02	0.01	0.01	-	-	-
College - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	11,633,991	11,291,815	11,291,815	893,990	800,585	741,176	126.01	112.85	104.47	-	-	-
College - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	6,536,474	6,344,224	6,344,224	362,301	351,518	350,653	51.07	49.55	49.43	-	-	-
College - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.06	100%	\$0.06	3,922,411	3,807,046	3,807,046	1,084,867	1,052,580	1,049,991	152.92	148.37	148.00	-	-	-
College - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	7,498,300	7,277,762	7,277,762	307,224	275,065	254,798	2.85	2.55	2.36	-	-	-
College - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	3,415,527	-	-	217	-	-	0.00	-	-	-
College - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.00	100%	\$0.00	37,465	36,363	36,363	876	845	839	0.09	0.09	0.09	-	-	-
College - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	48,389	46,966	46,966	766	744	743	0.08	0.08	0.08	-	-	-
College - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	146,790	142,473	142,473	8,361	8,105	8,086	0.90	0.87	0.87	-	-	-
College - E	Existing	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	221,307	214,798	214,798	2,642	2,558	2,549	0.28	0.28	0.27	-	-	-
College - E	Existing	Refrigeration	Icemaker	5.5 kWh/100 lbs	per sq ft	\$0.00	100%	\$0.00	-	-	240,306	-	-	2,178	-	-	0.23	-	-	-
College - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	453,351	440,017	440,017	3,627	3,519	3,511	0.63	0.61	0.61	-	-	-

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
College - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	680,224	660,218	660,218	3,415	3,313	3,305	0.60	0.58	0.58	-	-	-
College - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	293,615	284,980	284,980	12,261	11,896	11,867	2.14	2.08	2.07	-	-	-
College - E	Existing	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.00	100%	\$0.00	177,380	172,163	172,163	4,755	4,614	4,603	0.83	0.81	0.80	-	-	-
College - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	333,278	323,476	323,476	59,387	57,619	57,478	6.22	6.03	6.02	-	-	-
College - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	286,756	278,322	278,322	7,876	7,641	7,623	0.82	0.80	0.80	-	-	-
College - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	683,583	663,477	663,477	37,913	36,784	36,694	3.97	3.85	3.84	-	-	-
College - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	157,772	153,132	153,132	3,171	3,076	3,069	0.33	0.32	0.32	-	-	-
College - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	661,842	642,376	642,376	26,749	25,953	25,889	2.80	2.72	2.71	-	-	-
College - E	Existing	Office Equipment	POS Terminal	Energy Star	per sq ft	\$0.00	100%	\$0.00	-	-	380,458	-	-	15,018	-	-	1.57	-	-	-
College - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	1,248,217	1,211,505	1,211,505	95,448	86,364	79,686	13.45	12.17	11.23	-	-	-
College - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	843,757	818,940	818,940	46,767	45,375	45,264	6.59	6.40	6.38	-	-	-
College - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.06	100%	\$0.06	843,757	818,940	818,940	233,368	226,422	225,865	32.89	31.92	31.84	-	-	-
College - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.02	100%	\$0.02	899,989	873,519	873,519	36,695	33,144	30,615	0.34	0.31	0.28	-	-	-
College - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	901,276	874,768	874,768	57	56	56	0.00	0.00	0.00	-	-	-
College - E	New	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.00	100%	\$0.00	8,701	8,445	8,445	203	196	194	0.02	0.02	0.02	-	-	-
College - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	13,023	12,640	12,640	206	200	200	0.02	0.02	0.02	-	-	-
College - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	59,691	57,935	57,935	3,400	3,295	3,287	0.37	0.35	0.35	-	-	-
College - E	New	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	59,691	57,935	57,935	713	690	687	0.08	0.07	0.07	-	-	-
College - E	New	Refrigeration	Icemaker	5.5 kWh/100 lbs	per sq ft	\$0.00	100%	\$0.00	-	-	66,271	-	-	590	-	-	0.06	-	-	-
College - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	118,763	115,270	115,270	950	922	920	0.17	0.16	0.16	-	-	-
College - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	178,335	173,090	173,090	895	869	866	0.16	0.15	0.15	-	-	-
College - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	76,757	74,499	74,499	3,205	3,110	3,102	0.56	0.54	0.54	-	-	-
College - E	New	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.00	100%	\$0.00	50,971	49,472	49,472	1,366	1,326	1,323	0.24	0.23	0.23	-	-	-
College - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	35,518	34,473	34,473	6,329	6,141	6,125	0.66	0.64	0.64	-	-	-
College - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	31,893	30,955	30,955	876	850	848	0.09	0.09	0.09	-	-	-
College - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	70,868	68,784	68,784	3,930	3,814	3,804	0.41	0.40	0.40	-	-	-
College - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	18,440	17,897	17,897	371	360	359	0.04	0.04	0.04	-	-	-
College - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	94,225	91,454	91,454	3,808	3,695	3,686	0.40	0.39	0.39	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
College - E	New	Office Equipment Interior Lighting	POS Terminal	Energy Star	per sq ft	\$0.00	100%	\$0.00	-	-	75,251	-	-	2,970	-	-	0.31	-	-	-
School - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	10,827,368	10,508,916	10,508,916	167,615	150,102	138,964	12.64	11.32	10.48	-	-	-
School - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.01	100%	\$0.01	6,083,278	5,904,358	5,904,358	201,502	195,505	195,024	15.20	14.75	14.71	-	-	-
School - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.11	100%	\$0.11	3,650,457	3,543,091	3,543,091	833,210	808,412	806,424	62.84	60.97	60.82	-	-	-
School - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	6,978,418	6,773,170	6,773,170	97,908	87,660	81,201	0.91	0.81	0.75	-	-	-
School - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	3,178,717	-	-	161	-	-	0.00	-	-	-
School - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.01	100%	\$0.01	150,513	146,087	146,087	3,966	3,826	3,799	0.42	0.41	0.40	-	-	-
School - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	66,239	64,291	64,291	1,181	1,146	1,144	0.13	0.12	0.12	-	-	-
School - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	330,148	320,438	320,438	21,199	20,549	20,501	2.26	2.19	2.18	-	-	-
School - E	Existing	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	-	-	445,566	-	-	7,833	-	-	0.83	-	-	-
School - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	149,626	145,225	145,225	3,161	3,066	3,059	0.18	0.17	0.17	-	-	-
School - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	47,859	46,451	46,451	634	615	614	0.04	0.03	0.03	-	-	-
School - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	283,194	274,865	274,865	31,221	30,292	30,217	1.76	1.71	1.70	-	-	-
School - E	Existing	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.00	100%	\$0.00	81,749	79,344	79,344	5,786	5,614	5,600	0.33	0.32	0.32	-	-	-
School - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	305,027	296,056	296,056	24,073	23,356	23,299	1.36	1.32	1.32	-	-	-
School - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	379,546	368,383	368,383	3,078	2,986	2,979	0.17	0.17	0.17	-	-	-
School - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	1,479,199	1,435,694	1,435,694	72,670	70,507	70,334	4.12	4.00	3.99	-	-	-
School - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	146,834	142,515	142,515	1,307	1,268	1,265	0.07	0.07	0.07	-	-	-
School - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	615,955	597,838	597,838	22,051	21,395	21,342	1.25	1.21	1.21	-	-	-
School - E	Existing	Office Equipment	POS Terminal	Energy Star	per sq ft	\$0.00	100%	\$0.00	244,714	237,517	237,517	3,432	3,330	3,322	0.19	0.19	0.19	-	-	-
School - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	1,161,674	1,127,507	1,127,507	17,896	16,193	14,940	1.35	1.22	1.13	-	-	-
School - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.01	100%	\$0.01	785,256	762,160	762,160	26,011	25,237	25,175	1.96	1.90	1.90	-	-	-
School - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.11	100%	\$0.11	785,256	762,160	762,160	179,233	173,899	173,471	13.52	13.12	13.08	-	-	-
School - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.01	100%	\$0.01	837,590	812,955	812,955	11,694	10,562	9,757	0.11	0.10	0.09	-	-	-
School - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	838,787	814,117	814,117	43	41	41	0.00	0.00	0.00	-	-	-
School - E	New	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.01	100%	\$0.01	40,308	39,122	39,122	1,062	1,024	1,015	0.11	0.11	0.11	-	-	-
School - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	18,373	17,833	17,833	328	318	317	0.03	0.03	0.03	-	-	-
School - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	132,478	128,581	128,581	8,506	8,245	8,225	0.90	0.88	0.87	-	-	-

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
School - E	New	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	-	-	145,994	-	-	2,397	-	-	0.26	-	-	-
School - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	40,609	39,414	39,414	858	832	830	0.05	0.05	0.05	-	-	-
School - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	11,730	11,385	11,385	155	151	150	0.01	0.01	0.01	-	-	-
School - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.00	100%	\$0.00	73,985	71,809	71,809	8,157	7,914	7,894	0.46	0.45	0.44	-	-	-
School - E	New	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.00	100%	\$0.00	23,933	23,229	23,229	1,694	1,644	1,640	0.10	0.09	0.09	-	-	-
School - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	32,513	31,557	31,557	2,566	2,490	2,483	0.15	0.14	0.14	-	-	-
School - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	41,998	40,763	40,763	341	330	330	0.02	0.02	0.02	-	-	-
School - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	151,750	147,287	147,287	7,455	7,233	7,215	0.42	0.41	0.41	-	-	-
School - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	17,161	16,656	16,656	153	148	148	0.01	0.01	0.01	-	-	-
School - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	87,692	85,113	85,113	3,139	3,046	3,038	0.18	0.17	0.17	-	-	-
School - E	New	Office Equipment	POS Terminal	Energy Star	per sq ft	\$0.00	100%	\$0.00	32,803	31,838	31,838	460	446	445	0.03	0.03	0.03	-	-	-
Health - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.03	100%	\$0.03	7,743,956	7,516,193	7,516,193	896,706	800,892	742,604	94.29	84.22	78.09	-	-	-
Health - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.01	100%	\$0.01	4,662,017	4,524,898	4,524,898	216,988	210,530	210,013	22.82	22.14	22.08	-	-	-
Health - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.06	100%	\$0.06	2,715,328	2,635,465	2,635,465	587,549	570,062	568,660	61.78	59.94	59.80	-	-	-
Health - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.00	100%	\$0.00	5,007,376	4,860,100	4,860,100	13,862	12,384	11,477	0.13	0.11	0.11	-	-	-
Health - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	2,436,060	-	-	88	-	-	0.00	-	-	-
Health - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.00	100%	\$0.00	53,926	52,340	52,340	1,521	1,467	1,457	0.16	0.15	0.15	-	-	-
Health - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	26,070	25,304	25,304	250	242	242	0.03	0.03	0.03	-	-	-
Health - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.01	100%	\$0.01	333,891	324,071	324,071	22,952	22,248	22,196	2.42	2.34	2.34	-	-	-
Health - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	124,437	120,777	120,777	8,666	8,408	8,387	0.99	0.96	0.96	-	-	-
Health - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	187,528	182,012	182,012	8,194	7,950	7,931	0.94	0.91	0.91	-	-	-
Health - E	Existing	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.01	100%	\$0.01	195,704	189,948	189,948	71,132	69,015	68,846	8.13	7.89	7.87	-	-	-
Health - E	Existing	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.01	100%	\$0.01	34,388	33,377	33,377	8,025	7,786	7,767	0.92	0.89	0.89	-	-	-
Health - E	Existing	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	233,156	226,299	226,299	30,872	29,953	29,880	3.11	3.02	3.01	-	-	-
Health - E	Existing	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	227,267	220,583	220,583	4,638	4,500	4,489	0.47	0.45	0.45	-	-	-
Health - E	Existing	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	1,065,893	1,034,543	1,034,543	32,946	31,966	31,887	3.32	3.22	3.21	-	-	-
Health - E	Existing	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	111,915	108,624	108,624	1,671	1,622	1,618	0.17	0.16	0.16	-	-	-
Health - E	Existing	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	472,047	458,163	458,163	21,265	20,632	20,581	2.14	2.08	2.07	-	-	-

Program Measure-Level Details

Segment	Vintage	End Use	Technology	Option	Cost Unit	Incremental Cost	Incentive as % of Incremental Cost	Incentive Cost	Number of Net Incremental Installations			Total Net Incremental Energy Savings (kWh)			Total Net Incremental Demand Savings (kW)			Total Net Incremental Therm Savings (therms)		
									2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Health - E	New	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.03	100%	\$0.03	828,980	804,598	804,598	96,492	85,997	79,447	10.15	9.04	8.35	-	-	-
Health - E	New	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.01	100%	\$0.01	601,794	584,094	584,094	28,010	27,176	27,109	2.95	2.86	2.85	-	-	-
Health - E	New	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.06	100%	\$0.06	584,161	566,979	566,979	126,402	122,640	122,338	13.29	12.90	12.86	-	-	-
Health - E	New	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.00	100%	\$0.00	597,743	580,162	580,162	1,663	1,483	1,370	0.02	0.01	0.01	-	-	-
Health - E	New	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	642,818	623,912	623,912	23	23	23	0.00	0.00	0.00	-	-	-
Health - E	New	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.00	100%	\$0.00	14,055	13,641	13,641	396	382	379	0.04	0.04	0.04	-	-	-
Health - E	New	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	5,735	5,567	5,567	55	53	53	0.01	0.01	0.01	-	-	-
Health - E	New	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.01	100%	\$0.01	133,673	129,741	129,741	9,189	8,906	8,884	0.97	0.94	0.94	-	-	-
Health - E	New	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	33,516	32,530	32,530	2,334	2,265	2,259	0.27	0.26	0.26	-	-	-
Health - E	New	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	50,566	49,079	49,079	2,210	2,144	2,139	0.25	0.25	0.24	-	-	-
Health - E	New	Food Preparation	Dishwasher	Energy Star	per sq ft	\$0.01	100%	\$0.01	51,727	50,206	50,206	18,801	18,242	18,197	2.15	2.09	2.08	-	-	-
Health - E	New	Food Preparation	Hot Food Container	Energy Star	per sq ft	\$0.01	100%	\$0.01	9,943	9,650	9,650	2,320	2,251	2,246	0.27	0.26	0.26	-	-	-
Health - E	New	Office Equipment	Desktop Computer	Energy Star	per sq ft	\$0.00	100%	\$0.00	24,853	24,122	24,122	3,291	3,193	3,185	0.33	0.32	0.32	-	-	-
Health - E	New	Office Equipment	Laptop	Energy Star	per sq ft	\$0.00	100%	\$0.00	25,233	24,491	24,491	515	500	498	0.05	0.05	0.05	-	-	-
Health - E	New	Office Equipment	Server	Energy Star	per sq ft	\$0.00	100%	\$0.00	109,405	106,187	106,187	3,382	3,281	3,273	0.34	0.33	0.33	-	-	-
Health - E	New	Office Equipment	Monitor	Energy Star	per sq ft	\$0.00	100%	\$0.00	13,080	12,696	12,696	195	190	189	0.02	0.02	0.02	-	-	-
Health - E	New	Office Equipment	Printer/Copier/Fax	Energy Star	per sq ft	\$0.00	100%	\$0.00	67,204	65,228	65,228	3,027	2,937	2,930	0.31	0.30	0.30	-	-	-
Lodging - E	Existing	Interior Lighting	Screw-in	LED (2010)	per sq ft	\$0.11	100%	\$0.11	7,176,017	6,964,957	6,964,957	2,568,993	2,293,969	2,125,026	208.79	186.43	172.70	-	-	-
Lodging - E	Existing	Interior Lighting	High-Bay Fixtures	T5	per sq ft	\$0.00	100%	\$0.00	4,320,295	4,193,227	4,193,227	63,720	61,823	61,671	5.18	5.02	5.01	-	-	-
Lodging - E	Existing	Interior Lighting	Linear Fluorescent	T5	per sq ft	\$0.02	100%	\$0.02	2,519,661	2,445,554	2,445,554	136,860	132,787	132,461	11.12	10.79	10.77	-	-	-
Lodging - E	Existing	Exterior Lighting	Screw-in	LED (2010)	per sq ft	\$0.03	100%	\$0.03	4,636,375	4,500,011	4,500,011	150,739	134,632	124,733	1.40	1.25	1.16	-	-	-
Lodging - E	Existing	Exterior Lighting	Linear Fluorescent	T5	per sq ft	\$0.00	100%	\$0.00	-	-	2,257,499	-	-	109	-	-	0.00	-	-	-
Lodging - E	Existing	Refrigeration	Walk-in Refrigerator	9000 kWh/yr	per sq ft	\$0.01	100%	\$0.01	77,012	74,747	74,747	2,483	2,395	2,378	0.25	0.24	0.24	-	-	-
Lodging - E	Existing	Refrigeration	Reach-in Refrigerator	1500 kWh/yr	per sq ft	\$0.00	100%	\$0.00	32,478	31,523	31,523	350	340	339	0.04	0.03	0.03	-	-	-
Lodging - E	Existing	Refrigeration	Glass Door Display	6800 kWh/yr	per sq ft	\$0.00	100%	\$0.00	210,565	204,371	204,371	16,541	16,034	15,996	1.68	1.63	1.62	-	-	-
Lodging - E	Existing	Refrigeration	Open Display Case	4330 kWh/yr	per sq ft	\$0.00	100%	\$0.00	-	296,311	296,311	-	5,619	5,233	-	0.57	0.53	-	-	-
Lodging - E	Existing	Food Preparation	Oven	Energy Star	per sq ft	\$0.00	100%	\$0.00	265,856	258,037	258,037	2,271	2,204	2,198	0.27	0.26	0.26	-	-	-
Lodging - E	Existing	Food Preparation	Fryer	Energy Star	per sq ft	\$0.00	100%	\$0.00	140,256	136,131	136,131	752	730	728	0.09	0.09	0.09	-	-	-