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S T A T E O F R H O D E I S L A N D

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2018

A N A C T

RELATING TO PUBLIC UTILITIES AND CARRIERS-THE ENERGY AND CONSUMER SAVINGS ACT OF 2005

Introduced By: Representatives Handy, Regunberg, Slater, Ruggiero, and Barros

Date Introduced: February 28, 2018

Referred To: House Finance

It is enacted by the General Assembly as follows:

SECTION 1. Sections 39-27-2, 39-27-3, 39-27-4, 39-27-5, 39-27-6, 39-27-7 and 39-27-8 of the General Laws in Chapter 39-27 entitled "The Energy and Consumer Savings Act of 2005" are hereby amended to read as follows:

39-27-2. Findings.

The legislature finds that:

(a) Efficiency standards for certain products sold or installed in the state assure consumers and businesses that such products meet minimum efficiency performance levels, thus reducing energy and water waste and saving consumers and businesses money on utility bills.

(b) Such efficiency standards save energy and thus reduce pollution and other environmental impacts associated with the production, distribution and use of electricity ~~and~~, natural gas and other fuels.

(c) Such efficiency standards can make electricity and natural gas systems more reliable by reducing the strain on ~~the electricity grid~~ systems during peak demand periods. Furthermore, improved energy efficiency can reduce or delay the need for new power plants, power transmission lines, and power distribution system upgrades as well as new and expanded gas pipelines.

(d) ~~Energy efficiency~~ Efficiency standards contribute to the economy of this state by helping to better balance ~~energy~~ supply and demand for both water and energy, thus reducing

pressure ~~for~~ that creates higher natural gas, water and electricity prices. By saving consumers and businesses money on ~~energy~~ utility bills, efficiency standards help the state and local economy, since ~~energy~~ utility bill savings can be spent on local goods and services.

(e) Furthermore, such water efficiency standards save water and thus reduce the strain on the water supply. Furthermore, improved water efficiency can reduce or delay the need for water and sewer infrastructure improvements.

39-27-3. Definitions.

As used in this chapter:

~~(a) "Automatic commercial ice-maker" means a factory-made assembly that is shipped in one or more packages that consists of a condensing unit and ice-making section operating as an integrated unit, that makes and harvests ice cubes, and that may store and dispense ice. This term includes machines with capacities between and including fifty (50) and two thousand five hundred (2,500) pounds per twenty-four (24) hours.~~

~~(b) "Ballast" means a device used with an electric discharge lamp to obtain necessary circuit conditions (voltage, current and waveform) for starting and operating the lamp.~~

~~(c) "Boiler" means a self-contained low-pressure appliance for supplying steam or hot water primarily designed for space heating.~~

~~(d) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.~~

~~(e) "Chief of Energy and Community Services" means the head official of the Rhode Island state energy office.~~

~~(f) "Commercial clothes washer" means a soft-mount horizontal-or vertical-axis clothes washer that:~~

~~(1) Has a clothes container compartment no greater than three and a half (3.5) cubic feet in the case of a horizontal-axis product or no greater than four (4.0) cubic feet in the case of a vertical-axis product; and~~

~~(2) Is designed for use by more than one household, such as in multi-family housing, apartments or coin laundries.~~

~~(g) "Commercial hot-food holding cabinet" means an appliance that is a heated, fully-enclosed compartment with one or more solid doors, and that is designed to maintain the temperature of hot food that has been cooked in a separate appliance. "Commercial hot-food holding cabinet" does not include heated glass merchandizing cabinets, drawer warmers, or cook-and-hold appliances.~~

~~(h) "Commercial pre-rinse spray valve" means a hand-held device designed and marketed~~

~~for use with commercial dishwashing and ware washing equipment and which sprays water on dishes, flatware, and other food service items for the purpose of removing food residue prior to their cleaning.~~

~~(i) "Commercial refrigerator, freezer and refrigerator freezer" means self contained refrigeration equipment that:~~

~~(1) Is not a consumer product as regulated pursuant to 42 U.S.C. § 6291 and subsequent sections;~~

~~(2) Operates at a chilled, frozen, combination chilled/frozen, or variable temperature for the purpose of storing and/or merchandising food, beverages and/or ice;~~

~~(3) May have transparent and/or solid hinged doors, sliding doors, or a combination of hinged and sliding doors; and~~

~~(4) Incorporates most components involved in the vapor compression cycle and the refrigerated compartment in a single cabinet.~~

~~This term does not include:~~

~~(1) Units with eighty-five (85) cubic feet or more of internal volume;~~

~~(2) Walk-in refrigerators or freezers;~~

~~(3) Units with no doors; or~~

~~(4) Freezers specifically designed for ice cream.~~

~~(j) "Commission" means the Rhode Island public utilities commission.~~

~~(k) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.~~

~~(l) "Electricity ratio" is the ratio of furnace electricity use to total furnace energy use. Electricity ratio = (3.412*EAE/(1000*Ef +3.412*EAE)) where EAE (average annual auxiliary electrical consumption) and EF (average annual fuel energy consumption) are defined in Appendix N to subpart B of part 430 of title 10 of the Code of Federal Regulations.~~

~~(m) "High intensity discharge lamp" means a lamp in which light is produced by the passage of an electric current through a vapor or gas, and in which the light producing arc is stabilized by bulb wall temperature and the arc tube has a bulb wall loading in excess of three (3) watts per square centimeter.~~

~~(n) "Illuminated exit sign" means an internally illuminated sign that is designed to be permanently fixed in place to identify a building exit and consists of an electrically powered integral light source that illuminates the legend "EXIT" and any directional indicators and provides contrast between the legend, any directional indicators and the background.~~

~~(o) "Large packaged air conditioning equipment" means electronically operated, air-~~

~~cooled air-conditioning and air-conditioning heat pump equipment having cooling capacity greater than or equal to two hundred forty thousand (240,000) Btu/hour but less than seven hundred sixty thousand (760,000) Btu/hour that is built as a package and shipped as a whole to end-user sites.~~

~~(p) "Low voltage dry-type distribution transformer" means a transformer that:~~

~~(1) Has an input voltage of six hundred (600) volts or less;~~

~~(2) Is air-cooled;~~

~~(3) Does not use oil as a coolant; and~~

~~(4) Is rated for operation at a frequency of sixty (60) Hertz.~~

~~(q) "Mercury vapor lamp" means a high intensity discharge lamp in which the major portion of the light is produced by radiation from mercury operating at a partial pressure in excess of one hundred thousand (100,000) PA (approximately 1 atm). This includes clear, phosphor-coated and self-ballasted lamps.~~

~~(r) "Metal halide lamp" means a high intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in combination with metallic vapors.~~

~~(s) "Metal halide lamp fixture" means a lamp fixture designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.~~

~~(t) "Probe-start metal halide ballast" means a ballast used to operate metal halide lamps which does not contain an igniter and which instead starts lamps by using a third staring electrode "probe" in the arc tube.~~

~~(u) "Pulldown refrigerator" means a commercial refrigerator with doors that, when fully loaded with twelve (12) ounce canned beverages at ninety (90) degrees F, can cool these beverages to an average stable temperature of thirty-eight (38) degrees F in twelve (12) hours or less.~~

~~(v) "Residential boiler" means a self-contained appliance for supplying steam or hot water, which uses natural gas, propane, or home heating oil, and which has a heat input rate of less than three hundred thousand (300,000) Btu per hour.~~

~~(w) "Residential furnace" means a self-contained space heater designed to supply heated air through ducts of more than ten (10) inches length and which utilizes only single-phase electric current, or single-phase electric current or DC current in conjunction with natural gas, propane, or home heating oil, and which:~~

~~(1) Is designed to be the principle heating source for the living space of one or more residences;~~

~~(2) Is not contained within the same cabinet with a central air conditioner whose rated cooling capacity is above sixty-five thousand (65,000) Btu per hour; and~~

~~(3) Has a heat input rate of less than two hundred twenty-five thousand (225,000) Btu per hour.~~

~~(x) "Single-voltage external AC to DC power supply" means a device that:~~

~~(1) Is designed to convert line voltage AC input into lower voltage DC output;~~

~~(2) Is able to convert to one DC output voltage at a time;~~

~~(3) Is sold with, or intended to be used with, a separate end-use product that constitutes the primary power load;~~

~~(4) Is contained within a separate physical enclosure from the end-use product;~~

~~(5) Is connected to the end-use product via a removable or hard-wired male/female electrical connection, cable, cord or other wiring;~~

~~(6) Does not have batteries or battery packs, including those that are removable, that physically attach directly to the power supply unit;~~

~~(7) Does not have a battery chemistry or type selector switch and indicator light; or~~

~~(8) Has a nameplate output power less than or equal to two hundred fifty (250) watts.~~

~~(y) "State-regulated incandescent reflector lamp" means a lamp, not colored or designed for rough or vibration service applications, with an inner reflective coating on the outer bulb to direct the light, an E26 medium screw base, a rated voltage or voltage range that lies at least partially within one hundred fifteen (115) to one hundred thirty (130) volts, and that falls into either of the following categories: a blown PAR (BPAR), bulged reflector (BR), or elliptical reflector (ER) bulb shape or similar bulb shape with a diameter equal to or greater than two and one quarter (2.25) inches; or a reflector (R), parabolic aluminized reflector (PARA) bulged reflector (BR) or similar bulb shape with a diameter of two and one quarter (2.25) to two and three quarter (2.75) inches, inclusive.~~

~~(z) "Torchiere" means a portable electric lighting fixture with a reflective bowl that directs light upward onto a ceiling so as to produce indirect illumination on the surfaces below. A torchiere may include downward directed lamps in addition to the upward, indirect illumination.~~

~~(aa) "Traffic signal module" means a standard eight (8) inch (two hundred millimeter (200 mm)) or twelve (12) inch (three hundred millimeter (300 mm)) traffic signal indication, consisting of a light source, a lens, and all other parts necessary for operation.~~

~~(bb) "Transformer" means a device consisting of two (2) or more coils of insulated wire and that is designed to transfer alternating current by electromagnetic induction from one coil to another to change the original voltage or current value. The term "transformer" does not include:~~

~~(1) Transformers with multiple voltage taps, with the highest voltage tap equaling at least twenty percent (20%) more than the lowest voltage tap; or~~

~~(2) Transformers, such as those commonly known as drive transformers, rectifier transformers, auto-transformers, uninterruptible power system transformers, impedance transformers, regulating transformers, sealed and nonventilating transformers, machine tool transformers, welding transformers, grounding transformers, or testing transformers, that are designed to be used in a special purpose application and are unlikely to be used in general purpose applications.~~

~~(cc) "Unit heater" means a self-contained, vented fan-type commercial space heater that uses natural gas or propane, and that is designed to be installed without ducts within a heated space, except that such term does not include any products covered by federal standards established pursuant to 42 U.S.C. § 6291 and subsequent sections or any product that is a direct vent, forced flue heater with a sealed combustion burner.~~

~~(dd) "Walk-in refrigerator" and "walk-in freezer" mean a space, designed for the purpose of storing and/or merchandising food, beverages and/or ice, that is refrigerated to temperatures, respectively, at or above and below thirty-two (32) degrees F that can be walked into.~~

~~(ee) "Water dispenser" means a factory-made assembly that mechanically cools and heats potable water and that dispenses the cooled or heated water by integral or remote means.~~

(1) The following definitions refer to air compressors:

(i) "Air compressor" means a compressor designed to compress air that has an inlet open to the atmosphere or other source of air, and is made up of a compression element (bare compressor), driver(s), mechanical equipment to drive the compressor element, and any ancillary equipment.

(ii) "Compressor" means a machine or apparatus that converts different types of energy into the potential energy of gas pressure for displacement and compression of gaseous media to any higher-pressure values above atmospheric pressure and has a pressure ratio at full-load operating pressure greater than 1.3.

(2) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.

(3) "Commercial dishwasher" means a machine designed to clean and sanitize plates, pots, pans, glasses, cups, bowls, utensils, and trays by applying sprays of detergent solution (with or without blasting media granules) and a sanitizing rinse.

(4) "Commercial fryer" means an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the

cooking fluid rather than by the bottom of the vessel. Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).

(5) "Commercial hot-food holding cabinet" means a heated, fully enclosed compartment with one or more solid transparent doors designed to maintain the temperature of hot food that has been cooked using a separate appliance. "Commercial hot-food holding cabinet" does not include heated glass merchandizing cabinets, drawer warmers, or cook-and-hold appliances.

(6) "Commercial steam cooker," also known as a "compartment steamer," means a device with one or more food-steaming compartments in which the energy in the steam is transferred to the food by direct contact. Models may include countertop models, wall-mounted models, and floor models mounted on a stand, pedestal, or cabinet-style base.

(7) "Commission" means the Rhode Island public utilities commission.

(8) "Commissioner" means the commissioner of the office of energy resources".

(9 Compensation" means money or any other thing of value, regardless of form, received or to be received by a person for services rendered.

(10) "General service lamp" means a lamp that has an American National Standards Institute (ANSI) base; is able to operate at a voltage of twelve (12) volts or twenty-four (24) volts, at or between one hundred (100) to one hundred thirty (130) volts, at or between two hundred twenty (220) to two hundred forty (240) volts, or of two hundred seventy-seven (277) volts for integrated lamps, or is able to operate at any voltage for non-integrated lamps; has an initial lumen output of greater than or equal to three hundred ten (310) lumens (or two hundred thirty-two (232) lumens for modified spectrum general service incandescent lamps) and less than or equal to three thousand three hundred (3,300) lumens; is not a light fixture; is not an LED downlight retrofit kit; and is used in general lighting applications. General service lamps include, but are not limited to, general service incandescent lamps, compact fluorescent lamps, general service light-emitting diode lamps, and general service organic light-emitting diode lamps. General service lamps do not include:

(i) Appliance lamps;

(ii) Black light lamps;

(iii) Bug lamps;

(iv) Colored lamps;

(v) G shape lamps with a diameter of five inches (5") or more as defined in ANSI C79.1-2002;

(vi) General service fluorescent lamps;

(vii) High-intensity discharge lamps;

(viii) Infrared lamps;

(ix) J, JC, JCD, JCS, JCV, JCX, JD, JS, and JT shape lamps that do not have Edison screw bases;

(x) Lamps that have a wedge base or prefocus base;

(xi) Left-hand thread lamps;

(xii) Marine lamps;

(xiii) Marine signal service lamps;

(xiv) Mine service lamps;

(xv) MR shape lamps that have a first number symbol equal to sixteen (16) (diameter equal to two inches (2")) as defined in ANSI C79.1-2002, operate at twelve (12) volts, and have a lumen output greater than or equal to eight hundred (800);

(xvi) Other fluorescent lamps;

(xvii) Plant light lamps;

(xviii) R20 short lamps;

(xix) Reflector lamps that have a first number symbol less than sixteen (16) (diameter less than two inches (2")) as defined in ANSI C79.1-2002 and that do not have E26/E24, E26d, E26/50x39, E26/53x39, E29/28, E29/53x39, E39, E39d, EP39, or EX39 bases;

(xx) S shape or G shape lamps that have a first number symbol less than or equal to 12.5 (diameter less than or equal to 1.5625 inches) as defined in ANSI C79.1-2002;

(xxi) Sign service lamps;

(xxii) Silver bowl lamps;

(xxiii) Showcase lamps;

(xxiv) Specialty MR lamps;

(xxv) T shape lamps that have a first number symbol less than or equal to eight (8) (diameter less than or equal to one inch (1")) as defined in ANSI C79.1-2002, nominal overall length less than twelve inches (12"), and that are not compact fluorescent lamps (as defined in this section); and

(xxvi) Traffic signal lamps.

(11) "High color rendering index (CRI) fluorescent lamp" means a fluorescent lamp with a color-rendering index of eighty-seven (87) or greater that is not a compact fluorescent lamp.

(12) The following definitions refer to faucets and showerheads:

(i) "Faucet" means a lavatory faucet, kitchen faucet, metering faucet, public lavatory

faucet, or replacement aerator for a lavatory, public lavatory or kitchen faucet.

(ii) "Public lavatory faucet" means a fitting intended to be installed in nonresidential bathrooms that are exposed to walk-in traffic.

(iii) "Metering faucet" means a faucet that, when turned on, will gradually shut itself off over a period of several seconds.

(iv) "Replacement aerator" means an aerator sold as a replacement, separate from the faucet to which it is intended to be attached.

(v) "Showerhead" means a device through which water is discharged for a shower bath and includes a body sprayer and handheld showerhead, but does not include a safety showerhead.

(13) The following definitions refer to urinals and water closets:

(i) "Plumbing fixture" means an exchangeable device, which connects to a plumbing system to deliver and drain away water and waste.

(ii) "Urinal" means a plumbing fixture that receives only liquid body waste and, on demand, conveys the waste through a trap into a drainage system.

(iii) "Water closet" means a plumbing fixture having a water-containing receptor that receives liquid and solid body waste through an exposed integral trap into a drainage system.

(iv) "Dual-flush effective flush volume" means the average flush volume of two (2) reduced flushes and one full flush.

(v) "Dual-flush water closet" means a water closet incorporating a feature that allows the user to flush the water closet with either a reduced or a full volume of water.

(vi) "Trough-type urinal" means a urinal designed for simultaneous use by two (2) or more persons.

(14) The following definitions refer to portable air conditioners:

(i) "Portable air conditioner" means a portable encased assembly, other than a packaged terminal air conditioner, room air conditioner, or dehumidifier, that delivers cooled, conditioned air to an enclosed space, and is powered by single-phase electric current. It includes a source of refrigeration and may include additional means for air circulation and heating and may be a single-duct or a dual-duct portable air conditioner.

(ii) "Single-duct portable air conditioner" means a portable air conditioner that draws all of the condenser inlet air from the conditioned space without the means of a duct and discharges the condenser outlet air outside the conditioned space through a single duct attached to an adjustable window bracket.

(iii) "Dual-duct portable air conditioner" means a portable air conditioner that draws some or all of the condenser inlet air from outside the conditioned space through a duct attached

to an adjustable window bracket, may draw additional condenser inlet air from the conditioned space, and discharges the condenser outlet air outside the conditioned space by means of a separate duct attached to an adjustable window bracket.

(15) "Portable electric spa" means a factory-built electric spa or hot tub which may or may not include any combination of integral controls, water heating or water circulating equipment.

(16) "Residential furnace" means a self-contained space heater designed to supply heated air through ducts of more than ten inches (10") length and which utilizes only single-phase electric current, or single-phase electric current or DC current in conjunction with natural gas, propane, or home heating oil, and which:

(i) Is designed to be the principle heating source for the living space of one or more residences;

(ii) Is not contained within the same cabinet with a central air conditioner whose rated cooling capacity is above sixty-five thousand (65,000) Btu per hour; and

(iii) Has a heat input rate of less than two hundred twenty-five thousand (225,000) Btu per hour.

(17) "Residential ventilating fan" means a ceiling, wall-mounted, or remotely mounted in-line fan designed to be used in a bathroom or utility room, whose purpose is to move air from inside the building to the outdoors.

(18) The following definitions refer to spray sprinkler bodies:

(i) "Pressure regulator" means a device that maintains constant operating pressure immediately downstream from the device, given higher pressure upstream.

(ii) "Spray sprinkler body" means the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.

(19) "Uninterruptible power supply" means a battery charger consisting of a combination of convertors, switches and energy storage devices (such as batteries), constituting a power system for maintaining continuity of load power in case of input power failure.

(20) The following definitions refer to water coolers:

(i) "Water cooler" means a freestanding device that consumes energy to cool and/or heat potable water.

(ii) "Cold only units" dispense cold water only.

(iii) "Hot and cold units" dispense both hot and cold water. Some units also offer room-temperature water.

(iv) Cook and cold units" dispense both cold and room temperature water.

(v) "Storage-type" means thermally conditioned water is stored in a tank in the water cooler and is available instantaneously. Point-of-use, dry storage compartment, and bottled water coolers are included in this category.

(vi) "On demand" means the water cooler heats water as it is requested, which typically takes a few minutes to deliver.

39-27-4. Scope.

(a) The provisions of this chapter apply to ~~the following types of new products sold, offered for sale or installed in the state~~:

(1) ~~Automatic commercial ice makers~~ Air compressors;

~~(2) Commercial clothes washers;~~

~~(3) Commercial pre-rinse spray valves;~~

~~(4)~~(2) ~~Commercial refrigerators, freezers, and refrigerator-freezers~~ Commercial dishwashers;

~~(5)~~(3) ~~High-intensity discharge lamp ballasts~~ Commercial fryers;

~~(6)~~(4) ~~Illuminated exit signs~~ Commercial steam cookers;

~~(7)~~(5) ~~Large packaged air-conditioning equipment~~ Computers and computer monitors;

~~(8)~~(6) ~~Low-voltage dry-type distribution transformers~~ Faucets;

~~(9)~~(7) ~~Metal halide lamp fixtures~~ General service lamps;

~~(10)~~(8) ~~Single-voltage external AC to DC power supplies~~ High CRI fluorescent lamps;

~~(11)~~(9) ~~Torchieres~~ Portable air conditioners;

~~(12)~~(10) ~~Traffic signal modules~~ Portable electric spas;

~~(13)~~(11) ~~Unit heaters~~ Residential ventilating fans.

(12) Showerheads;

(13) Spray sprinkler bodies;

(14) Uninterruptible power supplies;

(15) Urinals;

(16) Water closets;

(17) Water coolers; and

(18) Any other products as may be designated by the commissioner in accordance with § 39-27-7 or by operation of law.

(b) The provisions of this chapter also apply to the following types of new products sold, offered for sale or installed in the state:

(1) Bottle-type water dispensers;

(2) Commercial hot food holding cabinets; and

(3) ~~Residential boilers and residential~~ Residential furnaces;

~~(4) State-regulated incandescent reflector lamps; and~~

~~(5) Walk-in refrigerators and walk-in freezers.~~

(c) The provisions of this chapter do not apply to:

(1) New products manufactured in the state and sold outside the state;

(2) New products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state;

(3) Products installed in mobile manufactured homes at the time of construction; or

(4) Products designed expressly for installation and use in recreational vehicles.

39-27-5. Efficiency standards.

~~(a) Not later than June 1, 2006, the commission, in consultation with the state building commissioner and the chief of energy and community services, shall adopt regulations, in accordance with the provisions of chapter 35 of title 42, establishing minimum efficiency standards for the types of new products set forth in subparagraph (a) of § 39-27-4. The regulations shall provide for the following minimum efficiency standards:~~

~~(1) Automatic commercial ice makers shall meet the energy efficiency requirements shown in table A-7 of § 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations as adopted on December 15, 2004.~~

~~(2) Commercial clothes washers shall meet the requirements shown in Table P-4 of § 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations in effect on December 15, 2004.~~

~~(3) Commercial pre-rinse spray valves shall have a flow rate equal to or less than one and six tenths (1.6) gallons per minute.~~

~~(4) Commercial refrigerators, freezers and refrigerator-freezers shall meet the minimum efficiency requirements shown in Table A-6 of § 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations as adopted on December 15, 2004, except that pulldown refrigerators with transparent doors shall meet a requirement five percent (5%) less stringent than shown in the California regulations.~~

~~(5) High intensity discharge lamp ballasts shall not be designed and marketed to operate a mercury vapor lamp.~~

~~(6) Illuminated exit signs shall have an input power demand of five (5) watts or less per illuminated face.~~

~~(7) Large packaged air-conditioning equipment shall meet a minimum energy efficiency ratio of:~~

~~(i) Ten (10.0) for air conditioning without an integrated heating component or with electric resistance heating integrated into the unit;~~

~~(ii) Nine and eight tenths (9.8) for air conditioning with heating other than electric resistance integrated into the unit;~~

~~(iii) Nine and five tenths (9.5) for air conditioning with heating other than electric resistance integrated heating component or with electric resistance heating integrated into the unit;~~

~~(iv) Nine and three tenths (9.3) for air conditioning heat pump equipment with heating other than electric resistance integrated into the unit. Large packaged air conditioning heat pumps shall meet a minimum coefficient of performance in the heating mode of three and two tenths (3.2) (measured at a high temperature rating of forty-seven (47) degrees F db).~~

~~(8) Low voltage dry-type distribution transformers shall meet the Class 1 efficiency levels for low voltage distribution transformers specified in Table 4-2 of the "Guide for Determining Energy Efficiency for Distribution Transformers" published by the National Electrical Manufacturers Association (NEMA Standard TP-1-2002).~~

~~(9) Metal halide lamp fixtures that operate in a vertical position and are designed to be operated with lamps rated greater than or equal to one hundred fifty (150) watts but less than or equal to five hundred (500) watts shall not contain a probe-start metal halide lamp ballast.~~

~~(10) Single-voltage external AC to DC power supplies shall meet the tier one energy efficiency requirements shown in Table U-1 of § 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations as adopted on December 15, 2004. This standard applies to single-voltage AC to DC power supplies that are sold individually and to those that are sold as a component of or in conjunction with another product. Single-voltage external AC to DC power supplies that are made available by a product manufacturer as service parts or spare parts for its products manufactured prior to January 1, 2008 shall be exempt from this provision.~~

~~(11) Torchieres shall not use more than one hundred ninety (190) watts. A torchiere shall be deemed to use more than one hundred ninety (190) watts if any commercially available lamp or combination of lamps can be inserted in its socket(s) and cause the torchiere to draw more than one hundred ninety (190) watts when operated at full brightness.~~

~~(12) Traffic signal modules shall meet the product specification of the "Energy Star Program Requirements for Traffic Signals" developed by the U.S. Environmental Protection Agency that took effect in February 2001 and shall be installed with compatible, electronically-connected signal control interface devices and conflict monitoring systems.~~

~~(13) Unit heater shall be equipped with an intermittent ignition device and shall have either power venting or an automatic flue damper.~~

~~(b)~~(a) Not later than June 1, 2007, the commission, in consultation with the state building commissioner and the chief of energy and community services, shall adopt regulations, in accordance with the provisions of chapter 42-35, establishing minimum efficiency standards for the types of new products set forth in paragraph (b) of § 39-27-4. The regulations shall provide for the following minimum efficiency standards.

(1) Bottle-type water dispensers designed for dispensing both hot and cold water shall not have standby energy consumption greater than one and two tenths (1.2) kilowatt-hours per day.

(2) Commercial hot food holding cabinets shall have a maximum idle energy rate of forty (40) watts per cubic foot of interior volume.

(3) (i) Residential furnaces and residential boilers shall comply with the following Annual Fuel Utilization Efficiency (AFUE) and electricity ratio values.

Product Type	Minimum AFUE	Maximum electricity ratio
Natural gas and propane fired furnaces	90%	
	2.0%	
Oil-fired furnaces>94,000 Btu/hour in capacity	83%	
	2.0%	
Oil-fired furnaces>94,000 Btu/hour in capacity	83%	
	2.3%	
Natural gas and oil, and propane-fired hot water residential boilers	84%	Not applicable
Natural gas, oil, and propane-fired steam residential boilers	82%	Not applicable

(ii) The ~~chief of energy and community services~~ commissioner shall adopt rules to provide for exemptions from compliance with the foregoing residential furnace or residential boiler AFUE standards at any building, site or location where complying with said standards would be in conflict with any local zoning ordinance, fire code, building or plumbing code or other rule regarding installation and venting of residential furnaces or residential boilers. This

clause becomes effective if the state is granted a waiver from federal preemption to implement the furnace standard.

(iii) The provisions of this subsection 39-27-5~~(b)~~(a)(3) shall be effective upon determination by the chief of energy and community services that the same or substantial corresponding standards have been enacted in two (2) New England states.

~~(4) (i) State-regulated incandescent reflector lamps shall meet the minimum average lamp efficacy requirements for federally-regulated incandescent reflector lamps contained in 42 U.S.C. § 6295(i)(1)(A).~~

~~(ii) The following types of incandescent reflector lamps are exempt from these requirements:~~

~~(I) lamps rated at fifty (50) watts or less of the following types: BR30, BR40, ER30 and ER40;~~

~~(II) lamps rated at sixty-five (65) watts of the following types: BR30, BR40, and ER40; and~~

~~(III) R20 lamps of forty-five (45) watts or less.~~

~~(5) (i) Walk-in refrigerators and walk-in freezers with the applicable motor types shown in the table below shall include the required components shown.~~

~~MOTOR Type~~	~~Required Components~~
~~All~~	~~Interior lights: light sources with an efficacy of forty-five (45) lumens per watt or more, including ballast losses (if any). This efficacy standard does not apply to LED light sources until January 2010.~~
~~All~~	~~Automatic door closers that firmly close all reach-in doors.~~
~~All~~	~~Automatic door closers that firmly close~~

~~all walk in doors no wider than 3.9 feet and no higher than 6.9 feet that have been closed to within one inch of full closure.~~

~~All Wall, ceiling, and door insulation at least R-28 for refrigerators and at least R-34 for freezers~~

~~All Floor insulation at least R-28 for freezers (no requirements for refrigerators)~~

~~Condenser fan motors of under one horsepower Electronically commutated motors, Permanently split capacitor-type motors~~

~~Polyphase motors of one half (1/2) horsepower or more~~

~~Single-phase evaporator fan motors of under one horse power and less than four hundred sixty (460) volts Electronically commutated motors~~

~~(ii) In addition to the requirements in paragraph (i), walk-in refrigerators and walk-in freezers with transparent reach-in doors shall meet the following requirements: transparent reach-in doors shall be of triple pane glass with either heat reflective treated glass or gas fill; if the appliance has an anti-sweat heater without anti-sweat controls, then: the appliance shall have a total door rail, glass, and frame heater power draw of no more than forty (40) watts if it is a freezer or seventeen (17) watts if it is a refrigerator per foot of door frame width; and if the appliance has an anti-sweat heater with anti-sweat heat controls, and the total door rail, glass, and~~

~~frame heater power draw is more than forty (40) watts if it is a freezer or seventeen (17) watts if it is a refrigerator per foot of door frame width, then: the anti-sweat heat controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.~~

(b) Not later than June 1, 2019, the commission, in consultation with the state building commissioner and the commissioner, shall adopt regulations, in accordance with the provisions of chapter 35 of title 42, establishing minimum efficiency standards for the types of new products set forth in § 39-27-4(a). The regulations shall provide for the following minimum efficiency standards:

(1) Air compressors that meet the twelve (12) criteria listed on pages 350 and 351 of the "Energy Conservation Standards for Air Compressors" final rule issued by the U.S. Department of Energy on December 5, 2016, shall meet the requirements in Table 1 on page 352 following the instructions on page 353 and as measured in accordance with Appendix A through Subpart T of Part 431 of Title 10 of the Code of Federal Regulations (CFR) "Uniform Test Method for Certain Air Compressors" as in effect on July 3, 2017.

(2) Commercial dishwashers included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Dishwashers, Version 2.0, shall meet the qualification criteria of that specification.

(3) Commercial fryers included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Fryers, Version 2.0, shall meet the qualification criteria of that specification.

(4) Commercial steam cookers shall meet the requirements of the ENERGY STAR Program Requirements Product Specification for Commercial Steam Cookers, Version 1.2.

(5) Computers and computer monitors shall meet the requirements of § 1605.3(v) of Title 20 of the California Code of Regulations (C.C.R.) and compliance with those requirements shall be as measured in accordance with test methods prescribed in § 1604(v) of those regulations.

(i) The rules shall define "computer" and "computer monitor" to have the same meaning as set forth in 20 C.C.R. § 1602(v).

(ii) The referenced portions of the C.C.R. shall be those adopted on or before the effective date of this act. However, the commissioner shall have authority to amend the rules so that the definitions of "computer" and "computer monitor" and the minimum efficiency standards for computers and computer monitors conform to subsequently adopted modifications to the referenced sections of the C.C.R.

(6) Faucets, except for metering faucets, and showerheads shall meet the standards shown

in this subsection when tested in accordance with Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring the Water Consumption of Faucets and Showerheads" as in effect on January 3, 2017.

(7) Lavatory faucets and replacement aerators shall not exceed a maximum flow rate of one and five-tenths gallons per minute (1.5 gpm) at sixty pounds per square inch (60 psi).

(8) Residential kitchen faucets and replacement aerators shall not exceed a maximum flow rate of one and eight-tenths gallons per minute (1.8 gpm) at sixty pounds per square inch (60 psi), with optional temporary flow of two and two-tenths gallons per minute (2.2 gpm), provided they default to a maximum flow rate of one and eight-tenths gallons per minute (1.8 gpm) at sixty pounds per square inch (60 psi) after each use.

(9) Public lavatory faucets and replacement aerators shall not exceed a maximum flow rate of one-half gallon per minute (0.5 gpm) at sixty pounds per square inch (60 psi).

(10) Showerheads shall not exceed a maximum flow rate of two gallons per minute (2.0 gpm) at eighty pounds per square inch (80 psi).

(11) General service lamps shall meet or exceed a lamp efficacy of forty-five (45) lumens per watt, when tested in accordance with the applicable federal test procedures for general service lamps, prescribed in § 430.23(gg) of Title 10 of the Code of Federal Regulations as in effect on January 3, 2017.

(12) High CRI fluorescent lamps shall meet the minimum efficacy requirements contained in § 430.32(n)(4) of Title 10 of the Code of Federal Regulations as in effect on January 3, 2017, as measured in accordance with Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring Average Lamp Efficacy (LE), Color Rendering Index (CRI), and Correlated Color Temperature (CCT) of Electric Lamps" as in effect on January 3, 2017.

(13) Urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health facilities, shall meet the standards shown in subsections (1) to (4) when tested in accordance with Appendix T to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring the Water Consumption of Water Closets and Urinals" as in effect on January 3, 2017, and water closets shall pass the waste extraction test for water closets (Section 7.10) of the American Society of Mechanical Engineers (ASME) A112.19.2-2013.

(i) Urinals, except for trough-type urinals, shall have a maximum flush volume of five-tenths (0.5) of a gallon per flush.

(ii) Water closets, except for dual-flush tank-type water closets, shall have a maximum

flush volume of one and twenty-eight hundredths (1.28) of a gallon per flush.

(iii) Dual-flush tank-type water closets shall have a maximum dual flush effective flush volume of one and twenty-eight hundredths (1.28) of a gallon per flush.

(14) Portable air conditioners shall have a Combined Energy Efficiency Ratio (CEER), as measured in accordance with Appendix CC to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring the Energy Consumption of Portable Air Conditioners" as in effect on January 3, 2017, that is greater than or equal to:

$1.04 \times SACC/(3.7117 \times SACC^{0.6384})$ where SACC is Seasonally Adjusted Cooling Capacity in Btu/h.

(15) Portable electric shall meet the requirements of the "American National Standard for Portable Electric Spa Energy Efficiency" (ANSI/APSP/ICC-14 2014).

(16) Residential ventilating fans shall meet the qualification criteria of the ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans, Version 3.2.

(17) Spray sprinkler bodies that are not specifically excluded from the scope of the WaterSense Specification for Spray Sprinkler Bodies, Version 1.0, shall include an integral pressure regulator and shall meet the water efficiency and performance criteria and other requirements of that specification.

(18) Uninterruptible power supplies that utilize a NEMA 1-15P or 5-15P input plug and have an AC output shall have an average load adjusted efficiency that meets or exceed the values shown on page 193 of the pre-publication final rule "Energy Conservation Program: Energy Conservation Standards for Uninterruptible Power Supplies" issued by the U.S. Department of Energy on December 28, 2016, as measured in accordance with test procedures prescribed in Appendix Y to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations "Uniform Test Method for Measuring the Energy Consumption of Battery Chargers" as in effect on January 11, 2017.

(19) Water coolers included in the scope of the ENERGY STAR Program Requirements Product Specification for Water Coolers, Version 2.0, shall have on mode with no water draw energy consumption less than or equal the following values as measured in accordance with the test requirements of that program:

(i) Sixteen hundredths (0.16 KWh) kilowatt-hours per day for cold-only units and cook and cold units;

(ii) Eighty-seven hundredths (0.87 KWh) kilowatt-hours per day for storage type hot and cold units; and

(iii) Eighteen hundredths (0.18 KWh) kilowatt-hours per day for on demand hot and cold units.

39-27-6. Implementation.

(a) ~~No new commercial clothes washer, commercial pre-rinse spray valve, high intensity discharge lamp ballast, illuminated exit sign, low voltage dry type distribution transformer, torchiere, traffic signal module, or unit heater after January 1, 2007 may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to § 39-27-5.~~ No bottle-type-water dispenser, or commercial hot food holding cabinet, ~~metal halide lamp fixture, single voltage external AC to DC power supply, state regulated incandescent reflector lamp, or walk-in refrigerator or walk-in freezer~~ manufactured on or after January 1, 2008 may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to § 39-27-5. ~~No new automatic commercial icemaker, commercial refrigerator, refrigerator-freezer, or freezer or large packaged air conditioning equipment manufactured on or after January 1, 2010 may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to § 39-27-5.~~

(b) ~~No later than six (6) months after the effective date of this chapter, the chief of energy and community services, in consultation with the attorney general, shall determine if implementation of state standards for residential furnaces and residential boilers require a waiver from federal preemption. If the chief of energy and community services determines that a waiver from federal preemption is not needed, then no new residential furnace or residential boiler manufactured on or after January 1, 2008, or the date which is one year after the date of said determination, if later, may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to § 39-27-5.~~ If the ~~chief of energy and community services~~ commissioner determines that a waiver from federal preemption is required, then the ~~chief of energy and community services~~ commissioner ~~shall~~ may apply for such waiver within one year of such determination and upon approval of such waiver application, the applicable state standards shall go into effect at the earliest date permitted by federal law.

(c) ~~One year after the date upon which sale or offering for sale of certain products is limited pursuant to this section, no new products may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to § 39-27-5.~~

(d) On or after January 1, 2020, no new air compressor, commercial dishwasher, commercial fryer, commercial steam cooker, computer or computer monitor, faucet, high CRI fluorescent lamp, portable electric spa, residential ventilating fan, showerhead, spray sprinkler body, uninterruptible power supply, urinal, water closet, or water cooler may be sold or offered for sale, lease, or rent in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in § 39-27-5.

(e) On or after February 1, 2022, no new portable air conditioner may be sold or offered for sale, lease, or rent in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in § 39-27-5. This provision shall only apply if, prior to January 1, 2019, the Department of Energy (DOE) has not published a final rule in the Federal Register establishing efficiency standards for portable air conditioners and if, prior to February 1, 2022, the rule has not been repealed, voided, or retracted.

(f) No later than January 1, 2019, and as necessary thereafter, the commission, in consultation with the attorney general, shall determine which general service lamps are subject to federal preemption. On or after January 1, 2020, no general service lamp that is not subject to federal preemption may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in § 39-27-5.

(g) One year after the date upon which the sale or offering for sale of certain products becomes subject to the requirements of subsections (d), (e), (f), or (g) of this section, no such products may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in § 39-27-5.

39-27-7. New and revised standards.

The commission may adopt regulations, in accordance with the provisions of chapter 35 of title 42, to establish increased efficiency standards for the products listed in § 39-27-4. The commission may also establish standards for products not specifically listed in § 39-27-4. In considering such new amended standards, the commission, in consultation with the ~~chief of energy and community services~~ commission, shall set efficiency standards upon a determination that increased efficiency standards would serve to promote energy or water conservation in the state and would be cost-effective for consumers who purchase and use such products; provided, that no new or increased efficiency standards shall become effective within one year following the adoption of any amended regulations establishing such increased efficiency standards.

39-27-8. Testing, certification, and enforcement.

(a) The manufacturers of products covered by the chapter shall test samples of their products in accordance with the test procedures adopted pursuant to this chapter or those

specified in the State Building Code. The ~~chief of energy and community services~~ commissioner, in consultation with the state building commissioner, shall adopt test procedures for determining the energy efficiency of the products covered by § 39-27-4 if such procedures are not provided for in this section, and § 39-27-5 of this chapter or in the State Building Code., ~~except that the test procedure for:~~

~~(1) Automatic commercial icemakers shall be the test standard specified by the Air Conditioning and Refrigeration Institute Standard 810-2003, as in effect on January 1, 2005;~~

~~(2) Bottle-type water dispensers shall be measured in accordance with the test criteria contained in version 1 of the U.S. Environmental Protection Agency's "Energy Star Program/Requirement for Bottled Water Coolers," except units with an integral, automatic timer shall not be tested using Section D, "Timer Usage," of the test criteria;~~

~~(3) Commercial hot food holding cabinets shall be the "idle energy rate dry test" on ASTM F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by ASTM International Interior volume and shall be measured in accordance with the method shown in the U.S. Commercial Hot Food Holding Cabinets as in effect on August 15, 2003; and~~

~~(4) Residential furnaces and boilers AFUE shall be measured in accordance with the federal test method for measuring the energy consumption of furnaces and boilers contained in Appendix N to subpart B of part 430, title 10, Code of Federal Regulations.~~

~~The chief of energy and community services shall use U.S. Department of Energy approved test methods, or in the absence of such test methods, other appropriate nationally recognized test methods.~~ The ~~chief of energy and community services~~ commissioner may use updated test methods when new versions of test procedures become available.

(b) Manufacturers of new products covered by § 39-27-4 of this chapter~~, except for single voltage external AC to DC power supplies, high intensity discharge lamp ballasts, walk-in refrigerators and walk-in freezers,~~ shall certify to the ~~chief of energy and community services~~ commissioner that such products are in compliance with the provisions of this chapter. Such certifications shall be based on test results. The ~~chief of energy and community services~~ commissioner shall promulgate regulations governing the certification of such products and may coordinate with the certification programs of other states and federal agencies.

(c) Manufacturers of new products covered by § 39-27-4 shall identify each product offered for sale or installation in the state as in compliance with the provisions of this chapter by means of a mark, label, or tag on the product and packaging at the time of sale or installation. The commission shall promulgate regulations governing the identification of such products and

packaging, which shall be coordinated to the greatest practical extent with the labeling programs of other states and federal agencies with equivalent efficiency standards. The commission shall allow the use of existing marks, labels, or tags, which connote compliance with the efficiency requirements of this chapter.

~~(c)~~(d) The ~~chief of energy and community services~~ commissioner may test products covered by § 39-27-4. If the products so tested are found not to be in compliance with the minimum efficiency standards established under § 39-27-5, the ~~chief of energy and community services~~ commissioner shall:

(1) Charge the manufacturer of such product for the cost of product purchase and testing; and

(2) Make information available to the attorney general and public on products found not to be in compliance with the standards.

~~(d)~~(e) With prior notice and at reasonable and convenient hours, the ~~chief of energy and community services~~ commissioner may cause periodic inspections to be made of distributors or retailers of new products covered by § 39-27-4 in order to determine compliance with the provisions of this chapter. The ~~chief of energy and community services~~ commissioner shall also coordinate in accordance with § 23-27.3-111.7 regarding inspections prior to occupancy of newly constructed buildings containing new products that are also covered by the State Building Code.

~~(e)~~(f) The ~~chief of energy and community services~~ commissioner shall investigate complaints received concerning violations of this chapter. Any manufacturer, distributor or retailer who violates any provision of this chapter shall be issued a warning by the ~~chief of energy and community services~~ commissioner for any first violation. Repeat violations shall be subject to a civil penalty of not more than ~~two hundred fifty dollars ($250)~~ five hundred dollars ($500). Each violation shall constitute a separate offense, and each day that such violation continues shall constitute a separate offense. Penalties assessed under this paragraph are in addition to costs assessed under subsection (d) of this section.

SECTION 2. Chapter 39-27 of the General Laws entitled "The Energy and Consumer Savings Act of 2005" is hereby amended by adding thereto the following section:

39-27-7.1. Protection against repeal of federal standards.

(a) If any of the energy or water conservation standards issued or approved for publication by the Office of the United States Secretary of Energy as of January 19, 2017, pursuant to the Energy Policy and Conservation Act (Parts 430-431 of Title 10 of the Code of Federal Regulations), are withdrawn, repealed, or otherwise voided, the minimum energy or water efficiency level permitted for products previously subject to federal energy or water

conservation standards shall be the previously applicable federal standards, and no such new product may be sold or offered for sale, lease or rent in the state unless it meets or exceeds such standards.

(b) This section shall not apply to any federal energy or water conservation standard set aside by a court upon the petition of a person who will be adversely affected, as provided in Section 6306(b) of Title 42 of the United States Code.

SECTION 3. This act shall take effect upon passage.

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LC003817/SUB A
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EXPLANATION

BY THE LEGISLATIVE COUNCIL

OF

A N A C T

RELATING TO PUBLIC UTILITIES AND CARRIERS-THE ENERGY AND CONSUMER SAVINGS ACT OF 2005

***

This act would establish minimum energy and water efficiency standards for certain products sold or installed in the state.

This act would take effect upon passage.

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LC003817/SUB A
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