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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. 2007

A N A C T

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

Introduced By: Senators Blais, Gibbs, Breene, Sosnowski, and McCaffrey

Date Introduced: March 01, 2007

Referred To: Senate Corporations

It is enacted by the General Assembly as follows:

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

39-27-3. 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. section 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) "General service incandescent lamp" means a standard incandescent or halogen type lamp that is intended for general service applications and has all of the following:

(A) A medium screw base.

(B) A wattage rating no less than twenty-five (25) watts and no greater than one hundred fifty (150) watts.

(C) A A-15, A-19, A-21, A-23, A-25, PS-25, PS-30, BT-14.5, BT-15, CP-19, TB-19, CA-22, or equivalent shape as defined in the American National Standard Institute C78.20-2003.

(D) A bulb finish of frosted, clear, or soft white type.

(3) A general service incandescent lamp does not include an appliance lamp, black light lamp, bug lamp, colored lamp, enhanced spectrum lamp, infrared lamp, left-hand tread lamp, marine lamp, marine signal service lamp, mine service lamp, plant light, reflector lamp, rough service lamp, shatter resistant lamp, sign service lamp, silver bowl lamp, showcase lamp, three-way lamp, traffic signal lamp, or vibration service or vibration resistant lamp.

~~(m)~~(n) "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)~~(o) "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)~~(p) "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)~~(q) "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)~~(r) "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)~~(s) "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)~~(t) "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)~~(u) "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)~~(v) "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)~~(w) "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)~~(x) "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)~~(y) "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)~~(z) "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)~~(aa) "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)~~(bb) "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)~~(cc) "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)~~(dd) "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. section 6291 and subsequent sections or any product that is a direct vent, forced flue heater with a sealed combustion burner.

~~(dd)~~(ee) "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)~~(ff) "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.

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 section 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 section 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 section 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 section 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 section 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) 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 section 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 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.

(iii) The provisions of this subsection 39-27-5(b) 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. section 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 1, 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 Electronically commutated
motors of under one motors, Permanently
horsepower split capacitor-type motors
Polyphase motors of one half (1/2)
horsepower or more
Single-phase evaporator fan Electronically commutated
motors of under one horse-motors
power and less than four
hundred sixty (460) volts

(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.

(C) Not later than June 1, 2012, a general service incandescent lamp shall not be sold in the state.

SECTION 2. This act shall take effect upon passage.

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EXPLANATION

BY THE LEGISLATIVE COUNCIL

OF

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

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This act would define "general service incandescent lamp" and prohibit its sale within the state after June 1, 2012.

This act would take effect upon passage.

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