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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2017

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A N A C T

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

Introduced By: Representatives Handy, Marszalkowski, McKiernan, Amore, and
Regunberg

Date Introduced: April 05, 2017

Referred To: House Environment and Natural Resources

It is enacted by the General Assembly as follows:

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

4 **39-27-2. Findings.**

5 The legislature finds that:

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

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

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

16 (d) ~~Energy efficiency~~ Efficiency standards contribute to the economy of this state by
17 helping to better balance ~~energy~~ supply and demand for both water and energy, thus reducing
18 pressure ~~for that creates~~ higher natural gas, water and electricity prices. By saving consumers and

1 businesses money on [energy utility](#) bills, efficiency standards help the state and local economy,
2 since [energy utility](#) bill savings can be spent on local goods and services.

3 [\(e\) Furthermore, such water efficiency standards save water and thus reduce the strain on](#)
4 [the water supply. Furthermore, improved water efficiency can reduce or delay the need for water](#)
5 [and sewer infrastructure improvements.](#)

6 **39-27-3. Definitions.**

7 As used in this chapter:

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

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

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

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

19 ~~(e)~~(d) "Chief of Energy and Community Services" means the head official of the Rhode
20 Island ~~state energy office~~ [office of energy resources](#).

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

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

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

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

33 ~~(h)~~(g) "Commercial pre-rinse spray valve" means a hand-held device designed and
34 marketed for use with commercial dishwashing and ware washing equipment and which sprays

1 water on dishes, flatware, and other food service items for the purpose of removing food residue
2 prior to their cleaning.

3 ~~(h)~~(h) "Commercial refrigerator, freezer and refrigerator-freezer" means self-contained
4 refrigeration equipment that:

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

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

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

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

13 This term does not include:

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

15 (2) Walk-in refrigerators or freezers;

16 (3) Units with no doors; or

17 (4) Freezers specifically designed for ice cream.

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

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

21 (k) The following definitions refer to computers and computer monitors:

22 (1) "Computer" means a device that performs logical operations and processes data. A
23 computer includes both stationary and portable units and includes a desktop computer, a portable
24 all-in-one, a notebook computer, a mobile gaming system, a high-expandability computer, a
25 small-scale server, a thin client, and a workstation. Although a computer is capable of using input
26 devices and displays, such devices are not required to be included with the computer when the
27 computer is shipped. A computer is composed of, at a minimum:

28 (i) A central processing unit (CPU) to perform operations or, if no CPU is present, then
29 the device must function as a client gateway to a server, and the server acts as a computational
30 CPU;

31 (ii) Ability to support user input devices such as a keyboard, mouse, or touch pad; and

32 (iii) An integrated display screen or the ability to support an external display screen to
33 output information;

34 (2) "Computer monitor" means an analog or digital device of size greater than or equal to

1 seventeen inches (17") and less than or equal to sixty-one inches (61"), that has a pixel density of
2 greater than five thousand (5,000) pixels per square inch, and that is designed primarily for the
3 display of computer-generated signals for viewing by one person in a desk-based environment. A
4 computer monitor is composed of a display screen and associated electronics. A computer
5 monitor does not include:

6 (i) Displays with integrated or replaceable batteries designed to support primary
7 operation without AC mains or external DC power (e.g., electronic readers, mobile phones,
8 portable tablets, battery-powered digital picture frames); and

9 (ii) A television or signage display.

10 (l) "Deep-dimming fluorescent lamp ballast" means a fluorescent ballast that is capable of
11 operating lamps in dimmed operating modes at any number of levels at or below fifty percent
12 (50%) of full output. The term shall only apply to lamp ballasts designed to operate one, two (2),
13 three (3), or four (4) T5 or T8 four-foot (4ft) linear or U-shape fluorescent lamps.

14 ~~(m)~~ (m) "Electricity ratio" is the ratio of furnace electricity use to total furnace energy use.
15 Electricity ratio = $(3.412 \cdot \text{EAE} / (1000 \cdot \text{Ef} + 3.412 \cdot \text{EAE}))$ where EAE (average annual auxiliary
16 electrical consumption) and EF (average annual fuel energy consumption) are defined in
17 Appendix N to subpart B of part 430 of title 10 of the Code of Federal Regulations.

18 (n) "General service lamp" has the meaning defined at pages 7321-7322 of Volume 82,
19 Number 12 of the Federal Register published on January 19, 2017 as modified in that same issue
20 of the Federal Register on page 7333.

21 (o) The following definitions refer to high color rendering index (CRI) fluorescent lamps:

22 (1) "Fluorescent lamp" means a low pressure mercury electric-discharge source in which
23 a fluorescing coating transforms some of the ultraviolet energy generated by the mercury
24 discharge into light, and includes only the following:

25 (i) Any straight-shaped lamp (commonly referred to as four-foot (4ft) medium bipin
26 lamps) with medium bipin bases of nominal overall length of 48 inches and rated wattage of
27 twenty-five (25) or more.

28 (2) "Color rendering index" or "CRI" means the measure of the degree of color-shift
29 objects undergo when illuminated by a light source as compared with the color of those same
30 objects when illuminated by a reference source of comparable color temperature.

31 (3) "High color rendering index fluorescent lamp" means a fluorescent lamp with a color
32 rendering index of eighty-seven (87) or greater.

33 ~~(p)~~ (p) "High intensity discharge lamp" means a lamp in which light is produced by the
34 passage of an electric current through a vapor or gas, and in which the light-producing arc is

1 stabilized by bulb wall temperature and the arc tube has a bulb wall loading in excess of three (3)
2 watts per square centimeter.

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

7 ~~(r)~~(r) "Large packaged air-conditioning equipment" means electronically-operated, air-
8 cooled air-conditioning and air-conditioning heat pump equipment having cooling capacity
9 greater than or equal to two hundred forty thousand (240,000) Btu/hour but less than seven
10 hundred sixty thousand (760,000) Btu/hour that is built as a package and shipped as a whole to
11 end-user sites.

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

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

14 (2) Is air-cooled;

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

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

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

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

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

26 (w) "Plumbing fitting" means a device that controls and guides the flow of water in a
27 supply system. The following definitions apply to plumbing fittings:

28 (1) "Faucet" means a lavatory faucet, kitchen faucet, metering faucet, or replacement
29 aerator for a lavatory or kitchen faucet;

30 (2) "Flow rate" means the rate of water flow of a plumbing fitting;

31 (3) "Public lavatory faucet" means a fitting intended to be installed in non-residential
32 bathrooms that are exposed to walk-in traffic;

33 (4) "Replacement aerator" means an aerator sold as a replacement, separate from the
34 faucet to which it is intended to be attached;

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

3 (6) "Water use" means the quantity of water flowing through a showerhead or faucet, at
4 point of use.

5 (x) "Plumbing fixture" means an exchangeable device, which connects to a plumbing
6 system to deliver and drain away water and waste. The following definitions apply to plumbing
7 fixtures:

8 (1) "Dual-flush effective flush volume" means the average flush volume of two (2)
9 reduced flushes and one full flush;

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

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

14 (4) "Urinal" means a plumbing fixture that receives only liquid body waste and conveys
15 the waste through a trap into a drainage system.

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

18 (6) "Water use" means the quantity of water flowing through a water closet or urinal at
19 point of use.

20 (y) "Portable electric spa" means a factory-built portable electric spa or hot tub, supplied
21 with equipment for heating and circulating water.

22 (1) "Standby power", as applied to portable electric spas, means the average power in
23 standby mode, measured in Watts.

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

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

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

34 ~~(cc)~~ (cc) "Residential furnace" means a self-contained space heater designed to supply

1 heated air through ducts of more than ten (10) inches length and which utilizes only single-phase
2 electric current, or single-phase electric current or DC current in conjunction with natural gas,
3 propane, or home heating oil, and which:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

34 ~~(aa)~~(gg) "Traffic signal module" means a standard eight (8) inch (two hundred millimeter

1 (200 mm)) or twelve (12) inch (three hundred millimeter (300 mm)) traffic signal indication,
2 consisting of a light source, a lens, and all other parts necessary for operation.

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

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

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

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

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

24 (kk) The following definitions refer to water coolers:

25 (1) "Water cooler" means a freestanding (i.e., not wall mounted, under sink, or otherwise
26 building integrated) device that consumes energy to cool and/or heat potable water.

27 (i) "Cold only" units dispense cold water.

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

30 (iii) "Cook and cold units" dispense both cold and room-temperature water.

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

34 (3) "On demand" means the water cooler heats water as it is requested, which typically

1 [takes a few minutes to deliver.](#)

2 [\(4\) "On mode with no water draw" means a test that records the 24-hour energy](#)
3 [consumption of a water cooler with no water drawn during the test period.](#)

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

6 **39-27-4. Scope.**

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

- 9 (1) Automatic commercial ice makers;
- 10 (2) Commercial clothes washers;
- 11 (3) Commercial pre-rinse spray valves;
- 12 (4) Commercial refrigerators, freezers, and refrigerator freezers;
- 13 (5) High-intensity discharge lamp ballasts;
- 14 (6) Illuminated exit signs;
- 15 (7) Large packaged air-conditioning equipment;
- 16 (8) Low voltage dry-type distribution transformers;
- 17 (9) Metal halide lamp fixtures;
- 18 (10) Single-voltage external AC to DC power supplies;
- 19 (11) Torchieres;
- 20 (12) Traffic signal modules;
- 21 (13) Unit heaters.

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

- 24 (1) ~~Bottle-type water dispensers;~~
- 25 (2) Commercial hot food holding cabinets;
- 26 (3) Residential boilers and residential furnaces;
- 27 (4) State-regulated incandescent reflector lamps; and
- 28 (5) Walk-in refrigerators and walk-in freezers.

29 [\(c\) The provisions of this chapter also apply to the following types of new products sold,](#)
30 [offered for sale or installed in the state:](#)

- 31 [\(1\) Computers and computer monitors;](#)
- 32 [\(2\) Deep dimming fluorescent lamp ballasts;](#)
- 33 [\(3\) Plumbing fittings including lavatory and kitchen faucets that are consumer products](#)
34 [and faucet aerators; public lavatory faucets, and showerheads;](#)

1 [\(4\) Plumbing fixtures including urinals and water closets;](#)

2 [\(5\) Residential portable electric spas and residential exercise spas \(also known as swim](#)
3 [spas\) and portions of combination spas/swim spas that are used for bathing and are operated by a](#)
4 [private owner;](#)

5 [\(6\) Water coolers, including cold only units, hot and cold units, and cook and cold units,](#)
6 [but excluding units that provide pressurized water and are not freestanding, and air-source units,](#)
7 [and units with a water source other than bottled or tap water.](#)

8 [\(7\) High CRI fluorescent lamps;](#)

9 [\(8\) General service lamps; and](#)

10 [\(9\) Any other products as may be designated by the commission in accordance with this](#)
11 [chapter.](#)

12 ~~(e)~~(d) The provisions of this chapter do not apply to:

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

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

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

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

18 **39-27-5. Efficiency standards.**

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

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

27 (2) Commercial clothes washers shall meet the requirements shown in Table P-4 of §
28 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4:
29 Appliance Efficiency Regulations in effect on December 15, 2004.

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

32 (4) Commercial refrigerators, freezers and refrigerator-freezers shall meet the minimum
33 efficiency requirements shown in Table A-6 of § 1605.3 of the California Code of Regulations,
34 Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations as adopted on

1 December 15, 2004, except that pulldown refrigerators with transparent doors shall meet a
2 requirement five percent (5%) less stringent than shown in the California regulations.

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

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

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

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

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

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

16 (iv) Nine and three tenths (9.3) for air conditioning heat pump equipment with heating
17 other than electric resistance integrated into the unit. Large packaged air conditioning heat pumps
18 shall meet a minimum coefficient of performance in the heating mode of three and two tenths
19 (3.2) (measured at a high temperature rating of forty-seven (47) degrees F db).

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

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

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

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

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

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

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

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

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

20 (3) (i) Residential furnaces and residential boilers shall comply with the following
21 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		

1	residential boilers	82%	Not applicable
2	<u>Product Type</u>	<u>Minumum AFUE</u>	<u>Electricity Ratio</u>
3	<u>Natural gas and</u>	<u>90%</u>	<u>2.0%</u>
4	<u>propane- fired furnaces</u>		
5	<u>Oil-fired furnaces</u>	<u>83%</u>	<u>2.0%</u>
6	<u><94,000 Btu/hour in capacity</u>		
7	<u>Oil-fired furnaces</u>	<u>83%</u>	<u>2.3%</u>
8	<u>>94,000 Btu/hour in capacity</u>		
9	<u>Natural gas and oil, and</u>	<u>84%</u>	<u>Not applicable</u>
10	<u>propane-fired hot water</u>		
11	<u>residential boilers</u>		
12	<u>Natural gas, oil, and</u>	<u>82%</u>	<u>Not applicable[BB1]</u>
13	<u>Propane-fired steam residential</u>		
14	<u>boilers</u>		

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

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

23 (4) (i) State-regulated incandescent reflector lamps shall meet the minimum average lamp
24 efficacy requirements for federally-regulated incandescent reflector lamps contained in 42 U.S.C.
25 § 6295(i)(1)(A).

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

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

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

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

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

1 ~~MOTOR Type~~ ~~Required Components~~

2 ~~All~~ ~~Interior lights: light sources~~

3 ~~with an efficacy of forty-~~

4 ~~five (45) lumens per watt~~

5 ~~or more, including ballast losses~~

6 ~~(if any). This efficacy standard~~

7 ~~does not apply to LED light~~

8 ~~sources until January 1, 2010.~~

9 ~~All~~ ~~Automatic door closers that~~

10 ~~firmly close all reach-in doors.~~

11 ~~All~~ ~~Automatic door closers that~~

12 ~~firmly close all walk-in doors~~

13 ~~no wider than 3.9 feet and no~~

14 ~~higher than 6.9 feet that have~~

15 ~~been closed to within one inch~~

16 ~~of full closure.~~

17 ~~All~~ ~~Wall, ceiling, and door insulation~~

18 ~~at least R-28 for refrigerators~~

19 ~~and at least R-34 for freezers~~

20 ~~All~~ ~~Floor insulation at least R-28~~

21 ~~for freezers (no requirements~~

22 ~~for refrigerators)~~

23 ~~Condenser fan~~ ~~Electronically commutated~~

24 ~~motors of under one~~ ~~motors, Permanently~~

25 ~~horsepower~~ ~~split capacitor type motors~~

26 ~~Polyphase motors of one half (1/2)~~

27 ~~horsepower or more~~

28 ~~Single-phase evaporator fan~~ ~~Electronically commutated~~

29 ~~motors of under one horse~~ ~~motors~~

30 ~~power and less than four~~

31 ~~hundred sixty (460) volts~~

32 Motor Type Required Components

33 All Interior lights: light sources with an efficacy of forty- five (45) lumens

34 per watt or more, including ballast losses (if any). This efficacy

1 [standard does not apply to LED light sources until January 1, 2010.](#)

2 [All Automatic door closers that firmly close all reach-in doors.](#)

3 [All Automatic door closers that firmly close all walk-in doors no wider](#)

4 [than three and nine-tenths feet \(3.9 ft\) and no higher than six and nine-](#)

5 [tenths feet \(6.9 ft\) that have been closed to](#)

6 [within one inch of full closure.](#)

7 [All Wall, ceiling, and door insulation at least R-28 for refrigerators and at](#)

8 [least R-34 for freezers](#)

9 [All Floor insulation at least R-28 for freezers \(no requirements for](#)

10 [refrigerators\)](#)

11 [Condenser fan Electronically commutated motors, permanently split capacitor-type](#)

12 [motors of under motors or polyphase motors of one-half \(1/2\) horsepower or more](#)

13 [one horsepower](#)

14 [Single-phase Electronically commutated motors of under one horsepower](#)

15 [evaporator fan and less than four hundred sixty \(460\) volts \[BB2\]](#)

16 [motors of under one](#)

17 [horsepower and less](#)

18 [than 460 volts](#)

19 (ii) In addition to the requirements in paragraph (i), walk-in refrigerators and walk-in
20 freezers with transparent reach-in doors shall meet the following requirements: transparent reach-
21 in doors shall be of triple pane glass with either heat-reflective treated glass or gas fill; if the
22 appliance has an anti-sweat heater without anti-sweat controls, then: the appliance shall have a
23 total door rail, glass, and frame heater power draw of no more than forty (40) watts if it is a
24 freezer or seventeen (17) watts if it is a refrigerator per foot of door frame width; and if the
25 appliance has an anti-sweat heater with anti-sweat heat controls, and the total door rail, glass, and
26 frame heater power draw is more than forty (40) watts if it is a freezer or seventeen (17) watts if it
27 is a refrigerator per foot of door frame width, then: the anti-sweat heat controls shall reduce the
28 energy use of the anti-sweat heater in an amount corresponding to the relative humidity in the air
29 outside the door or to the condensation on the inner glass pane.

30 [\(c\) Not later than June 1, 2018, the commission, in consultation with the state building](#)
31 [commissioner and the chief of energy and community services, shall adopt regulations, in](#)
32 [accordance with the provisions of chapter 35 of title 42, establishing minimum efficiency](#)
33 [standards for the types of new products set forth in §39-27-4\(c\). The regulations shall provide for](#)
34 [the following minimum efficiency standards:](#)

1 (1) Computers and computer monitors shall meet the requirements of Section 1605.3 of
2 Title 20 of the California Code of Regulations as adopted on December 14, 2016, as measured in
3 accordance with test methods prescribed in Section 1604 of those regulations.

4 (2) Deep-dimming fluorescent lamp ballasts shall meet the requirements of Section
5 1605.3 of Title 20 of the California Code of Regulations as in effect on January 3, 2017 as
6 measured in accordance with test methods prescribed in Section 1604 of those regulations.

7 (3) General service lamps shall meet or exceed a lamp efficacy standard of forty-five (45)
8 lumens per watt, when tested in accordance with the applicable federal test methods for general
9 service lamps as in effect on January 3, 2017.

10 (4) High color rendering index fluorescent lamps shall meet or exceed the minimum lamp
11 efficacy levels as shown in the table below, when tested in accordance with the test procedure
12 prescribed in Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations
13 – "Uniform Test Method for Measuring Average Lamp Efficacy (LE), Color Rendering Index
14 (CRI), and Correlated Color Temperature (CCT) of Electric Lamps" – as in effect on January 3,
15 2017:

<u>Lamp Type</u>	<u>Correlated Color</u> <u>Temperature</u>	<u>Minimum</u> <u>Average Lamp</u> <u>Efficacy</u> <u>(lumens/watt)</u>
<u>4-foot medium bipin</u>	<u><4500K</u>	<u>92.4</u>
<u>4-foot medium bipin</u>	<u>>4500K & <=700K</u>	<u>88.7</u>

23 (5) Plumbing fittings shall meet the following requirements:

24 (1) The flow rate of lavatory faucets, kitchen faucets, replacement aerators, and public
25 lavatory faucets shall be not greater than the applicable values shown in the table below in
26 accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part 430 of
27 Title 10 of the Code of Federal Regulations – "Uniform Test Method for Measuring the Water
28 Consumption of Faucets and Showerheads," as in effect on January 3, 2017.

29 Standards for faucets and aerators

<u>Appliance</u>	<u>Maximum Flow Rate</u>
<u>Lavatory faucets and</u> 32 <u>aerators</u>	<u>1.2 gpm at 60 pounds per square inch (psi)^{1,2}</u>
<u>Kitchen faucets and</u> 34 <u>aerators</u>	<u>1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi</u>

1 for Portable Electric Spa Energy Efficiency" (ANSI/APSP/ICC-14 2014) as in effect on
2 September 12, 2014.

3 (8) Water coolers shall have on mode with no water draw energy consumption less than
4 or equal to:

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

7 (2) Eighty-seven hundredths kilowatt-hours (0.87 KWh) per day, for hot and cold units –
8 storage type; and

9 (3) Eighteen hundredths kilowatt-hours (0.18 KWh) per day, for hot and cold units – on
10 demand, as measured in accordance with the test criteria prescribed in version 2.0 of the
11 ENERGY STAR program product specifications for water coolers as in effect on February 1,
12 2014.

13 **39-27-6. Implementation.**

14 (b) No later than six (6) months after the effective date of this chapter, the chief of energy
15 and community services, in consultation with the attorney general, shall determine if
16 implementation of state standards for residential furnaces and residential boilers require a waiver
17 from federal preemption. If the chief of energy and community services determines that a waiver
18 from federal preemption is not needed, then no new residential furnace or residential boiler
19 manufactured on or after January 1, 2008, or the date which is one year after the date of said
20 determination, if later, may be sold or offered for sale in the state unless the efficiency of the new
21 product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to
22 § 39-27-5. If the chief of energy and community services determines that a waiver from federal
23 preemption is required, then the chief of energy and community services shall apply for such
24 waiver within one year of such determination and upon approval of such waiver application, the
25 applicable state standards shall go into effect at the earliest date permitted by federal law.

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

30 (d) If any of the energy or water conservation standards issued or approved for
31 publication by the Office of the United States Secretary of Energy as of January 19, 2017
32 pursuant to the Energy Policy and Conservation Act (10 C.F.R. §§430-431) are withdrawn,
33 repealed or otherwise voided, the minimum energy or water efficiency level permitted for
34 products previously subject to federal energy or water conservation standards shall be the

1 [previously applicable federal standards and no such product may be sold or offered for sale in the](#)
2 [state unless it meets or exceeds such standards. This section shall not apply to any federal energy](#)
3 [or water conservation standard set aside by a court upon the petition of a person who will be](#)
4 [adversely affected, as provided in 42 U.S.C. §6306\(b\).](#)

5 **39-27-8. Testing, certification, and enforcement. Testing, certification, labeling and**
6 **enforcement.**

7 (a) The manufacturers of products covered by the chapter shall test samples of their
8 products in accordance with the test procedures adopted pursuant to this chapter or those
9 specified in the State Building Code. The chief of energy and community services, in consultation
10 with the state building commissioner, shall adopt test procedures for determining the energy
11 efficiency of the products covered by § 39-27-4 if such procedures are not provided for in this
12 section, and § 39-27-5 of this chapter or in the State Building Code, except that the test procedure
13 for:

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

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

20 (3) Commercial hot food holding cabinets shall be the "idle energy rate-dry test" on
21 ASTM F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets"
22 published by ASTM International Interior volume and shall be measured in accordance with the
23 method shown in the U.S. Commercial Hot Food Holding Cabinets as in effect on August 15,
24 2003; and

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

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

32 (b) Manufacturers of new products covered by § 39-27-4 of this chapter, except for single
33 voltage external AC to DC power supplies, high-intensity discharge lamp ballasts, walk-in
34 refrigerators and walk-in freezers, shall certify to the chief of energy and community services that

1 such products are in compliance with the provisions of this chapter. Such certifications shall be
2 based on test results. The chief of energy and community services shall promulgate regulations
3 governing the certification of such products and may coordinate with the certification programs
4 of other states and federal agencies.

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

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

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

12 (d) With prior notice and at reasonable and convenient hours, the chief of energy and
13 community services may cause periodic inspections to be made of distributors or retailers of new
14 products covered by § 39-27-4 in order to determine compliance with the provisions of this
15 chapter. The chief of energy and community services shall also coordinate in accordance with §
16 23-27.3-111.7 regarding inspections prior to occupancy of newly constructed buildings
17 containing new products that are also covered by the State Building Code.

18 (e) The chief of energy and community services shall require manufacturers of new
19 products covered by §39-27-4 of this chapter to identify each product offered for sale or
20 installation in the state as in compliance with the provisions of this chapter by means of a mark,
21 label, or tag on the product and packaging at the time of sale or installation. The commission shall
22 promulgate regulations governing the identification of such products and packaging, which shall
23 be coordinated to the greatest practical extent with the labeling programs of other states and
24 federal agencies with equivalent efficiency standards. The commission shall allow the use of
25 existing marks, labels, or tags, which connote compliance with the efficiency requirements of this
26 chapter.

27 ~~(e)~~(f) The chief of energy and community services shall investigate complaints received
28 concerning violations of this chapter and shall report the results of such investigation to the
29 attorney general. The attorney general may institute proceedings to enforce the provisions of the
30 chapter. Any manufacturer, distributor or retailer, or any person who installs a product covered by
31 the chapter for compensation, who violates any provision of this chapter shall be issued a warning
32 and be subject to a civil penalty of one hundred dollars (\$100) for each offense by the chief of
33 energy and community services for any first violation. Repeat violations shall be subject to a civil
34 penalty of not more than ~~two hundred fifty dollars (\$250)~~ five hundred dollars (\$500). Each

1 violation shall constitute a separate offense, and each day that such violation continues shall
2 constitute a separate offense. Penalties assessed under this paragraph are in addition to costs
3 assessed under subsection (d) of this section.

4 SECTION 2. This act shall take effect upon passage.

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LC002094
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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

- 1 The act would establish minimum energy and water efficiency standards for certain
- 2 products sold or installed in the state.
- 3 This act would take effect upon passage.

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LC002094
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