

STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2005

A N A C T

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

Introduced By: Senators Roberts, Bates, and Sosnowski

Date Introduced: February 10, 2005

Referred To: Senate Financial, Technology, Regulatory

It is enacted by the General Assembly as follows:

1 SECTION 1. Title 39 of the General Laws entitled "Public Utilities and Carriers" is
2 hereby amended by adding thereto the following chapter:

3 CHAPTER 27

4 THE ENERGY AND CONSUMER SAVINGS ACT OF 2005

5 **39-27-1. General purpose.** – This act establishes energy and consumer savings by
6 setting minimum efficiency standards for certain products sold or installed in the state.

7 **39-27-2. Findings.** – The legislature finds that:

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

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

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

18 (d) Energy efficiency standards contribute to the economy of this state by helping to

1 better balance energy supply and demand, thus reducing pressure for higher natural gas and
2 electricity prices. By saving consumers and businesses money on energy bills, efficiency
3 standards help the state and local economy, since energy bill savings can be spent on local goods
4 and services.

5 **39-27-3. Definitions.** – As used in this chapter:

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

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

13 (c) "Chief of Energy and Community Services" means the head official of the Rhode
14 Island State Energy Office.

15 (d) "Commercial clothes washer" means a soft mount horizontal or vertical-axis clothes
16 washer that:

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

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

22 (e) "Commercial pre-rinse spray valve" means a hand-held device designed and marketed
23 for use with commercial dishwashing and ware washing equipment and which sprays water on
24 dishes, flatware, and other food service items for the purpose of removing food residue prior to
25 their cleaning.

26 (f) "Commercial refrigerator, freezer and refrigerator-freezer" means self-contained
27 refrigeration equipment that:

28 (1) is not a consumer product as regulated pursuant to 42 U.S. Code section 6291 and
29 subsequent sections;

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

32 (3) may have transparent and/or solid hinged doors, sliding doors, or a combination of
33 hinged and sliding doors; and

34 (4) incorporates most components involved in the vapor compression cycle and the

1 refrigerated compartment in a single cabinet.

2 This term does not include :

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

4 (2) walk-in refrigerators or freezers;

5 (3) units with no doors; or

6 (4) freezers specifically designed for ice cream.

7 (g) "Commission" means the Rhode Island Public Utilities Commission.

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

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

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

18 (k) "Large packaged air-conditioning equipment" means electronically-operated, air-
19 cooled air-conditioning and air-conditioning heat pump equipment having cooling capacity
20 greater than or equal to two hundred forty thousand (240,000) Btu/hour but less than seven
21 hundred sixty thousand (760,000) Btu/hour that is built as a package and shipped as a whole to
22 end-user sites.

23 (l) "Low voltage dry-type distribution transformer" means a transformer that:

24 (1) has an input voltage of six hundred (600) volts or less;

25 (2) is air-cooled;

26 (3) does not use oil as a coolant; and

27 (4) is rated for operation at a frequency of sixty (60) Hertz.

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

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

1 (o) "Metal halide lamp fixture" means a lamp fixture designed to be operated with a metal
2 halide lamp and a ballast for a metal halide lamp.

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

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

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

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

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

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

33 (2) transformers, such as those commonly known as drive transformers, rectifier
34 transformers, auto-transformers, uninterruptible power system transformers, impedance

1 transformers, regulating transformers, sealed and nonventilating transformers, machine tool
2 transformers, welding transformers, grounding transformers, or testing transformers, that are
3 designed to be used in a special purpose application and are unlikely to be used in general
4 purpose applications.

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

10 **39-27-4. Scope.** – (a) The provisions of this chapter apply to the following types of new
11 products sold, offered for sale or installed in the state:

- 12 (1) automatic commercial ice makers;
- 13 (2) commercial clothes washers;
- 14 (3) commercial pre-rinse spray valves;
- 15 (4) commercial refrigerators, freezers, and refrigerator freezers;
- 16 (5) high-intensity discharge lamp ballasts;
- 17 (6) illuminated exit signs;
- 18 (7) large packaged air-conditioning equipment;
- 19 (8) low voltage dry-type distribution transformers;
- 20 (9) metal halide lamp fixtures;
- 21 (10) single-voltage external AC to DC power supplies;
- 22 (11) torchiers;
- 23 (12) traffic signal modules; and
- 24 (13) unit heaters.

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

- 26 (1) new products manufactured in the state and sold outside the state;
- 27 (2) new products manufactured outside the state and sold at wholesale inside the state for
28 final retail sale and installation outside the state;
- 29 (3) products installed in mobile manufactured homes at the time of construction; or
- 30 (4) products designed expressly for installation and use in recreational vehicles.

31 **39-27-5. Efficiency standards.** – (a) Not later than June 1, 2006, the commission, in
32 consultation with the state building commissioner and the chief of energy and community
33 services, shall adopt regulations, in accordance with the provisions of chapter 42-35, establishing
34 minimum efficiency standards for the types of new products set forth in section 39-27-4. The

1 regulations shall provide for the following minimum efficiency standards:

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

5 (2) Commercial clothes washers shall meet the requirements shown in Table P4 of
6 section 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4:
7 Appliance Efficiency Regulations in effect on December 15, 2004.

8 (3) Commercial pre-rinse spray valves shall have a flow rate equal to or less than 1.6
9 gallons per minute.

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

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

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

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

21 (A) 10.0 for air conditioning without an integrated heating component or with electric
22 resistance heating integrated into the unit;

23 (B) 9.8 for air conditioning with heating other than electric resistance integrated into the
24 unit;

25 (C) 9.5 for air conditioning with heating other than electric resistance integrated heating
26 component or with electric resistance heating integrated into the unit;

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

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

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

4 (10) Single-voltage external AC to DC power supplies shall meet the tier one energy
5 efficiency requirements shown in Table U-1 of section 1605.3 of the California Code of
6 Regulations, Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations as
7 adopted on December 15, 2004. This standard applies to single voltage AC to DC power supplies
8 that are sold individually and to those that are sold as a component of or in conjunction with
9 another product.

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

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

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

20 **39-27-6. Implementation.** – (a) On or after January 1, 2007, no new commercial clothes
21 washer, commercial pre-rinse spray valve, high-intensity discharge lamp ballast, illuminated exit
22 sign, low voltage dry-type distribution transformer, single-voltage external AC to DC power
23 supply, torchiere, traffic signal module, or unit heater may be sold or offered for sale in the state
24 unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the
25 regulations adopted pursuant to section 39-27-5. On or after January 1, 2008, no new metal
26 halide lamp fixture may be sold or offered for sale in the state unless the efficiency of the new
27 product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to
28 section 39-27-5. On or after January 1, 2010, no new automatic commercial icemaker,
29 commercial refrigerator, refrigerator-freezer, or freezer or large packaged air conditioning
30 equipment may be sold or offered for sale in the state unless the efficiency of the new product
31 meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to section
32 39-27-5.

33 (b) One year after the date upon which sale or offering for sale of certain products is
34 limited pursuant to this section, no new products may be installed for compensation in the state

1 unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the
2 regulations adopted pursuant to section 39-27-5.

3 **39-27-7. New and revised standards.** – The commission may adopt regulations, in
4 accordance with the provisions of chapter 42-35, to establish increased efficiency standards for
5 the products listed in section 39-27-4. In considering such amended standards, the commission,
6 in consultation with the chief of energy and community services, shall set efficiency standards
7 upon a determination that increased efficiency standards would serve to promote energy
8 conservation in the state and would be cost-effective for consumers who purchase and use such
9 products; provided, that increased efficiency standards shall become effective within one year
10 following the adoption of any amended regulations establishing such increased efficiency
11 standards.

12 **39-27-8. Testing, certification, and enforcement.** – (a) The manufacturers of products
13 covered by the chapter shall test samples of their products in accordance with the test procedures
14 adopted pursuant to this chapter or those specified in the State Building Code. The chief of
15 energy and community services, in consultation with the state building commissioner, shall adopt
16 test procedures for determining the energy efficiency of the products covered by section 39-27-4
17 if such procedures are not provided for in this section 39-27-5 of this chapter or in the State
18 Building Code, except that the test procedure for automatic commercial icemakers shall be the
19 test standard specified by the Air Conditioning and Refrigeration Institute Standard 810-2003, as
20 in effect on January 1, 2005. The chief of energy and community services shall use U.S.
21 Department of Energy approved test methods, or in the absence of such test methods, other
22 appropriate nationally recognized test methods. The chief of energy and community services may
23 use updated test methods when new versions of test procedures become available.

24 (b) Manufacturers of new products covered by section 39-27-4 of the chapter, except for
25 single voltage external AC to DC power supplies, shall certify to the chief of energy and
26 community services that such products are in compliance with the provisions of the chapter.
27 Such certifications shall be based on test results. The chief of energy and community services
28 shall promulgate regulations governing the certification of such products and may coordinate with
29 the certification programs of other states and federal agencies.

30 (c) The chief of energy and community services may test products covered by section
31 39-27-4. If the products so tested are found not to be in compliance with the minimum efficiency
32 standards established under section 39-27-5, the chief of energy and community services shall:

33 (1) charge the manufacturer of such product for the cost of product purchase and testing;
34 and

1 (2) make information available to the public on products found not to be in compliance
2 with the standards.

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

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

16 **39-27-9. Severability of provisions.** – The provisions of this chapter shall be severable
17 and if the application of any clause, sentence, paragraph, subdivision, section or part of this
18 chapter shall be adjudged by any court of competent jurisdiction to be invalid, such judgment
19 shall not affect, impair, or invalidate the application of any other clause, sentence, paragraph,
20 subdivision, section or part of this chapter.

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

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LC01789/SUB A/5
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EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF

A N A C T

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

- 1 This act would establish minimum energy and consumer savings by setting efficiency
- 2 standards for certain products sold in the state.
- 3 This act would take effect upon passage.

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LC01789/SUB A/
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