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THE GENERAL ASSEMBLY OF PENNSYLVANIA

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**HOUSE BILL**

**No. 15**

Special Session No. 1 of  
2007-2008

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INTRODUCED BY KING, CONKLIN, MAHONEY, BENNINGTON, BRENNAN,  
FRANKEL, FREEMAN, GALLOWAY, GEORGE, GIBBONS, GRUCELA,  
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MUNDY, MURT, PETRONE, READSHAW, SCAVELLO, SCHRODER, SIPTROTH,  
STURLA, McCALL AND FABRIZIO, SEPTEMBER 24, 2007

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REFERRED TO COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY,  
SEPTEMBER 24, 2007

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AN ACT

1 Providing for minimum energy efficiency standards for certain  
2 appliances and equipment and for the powers and duties of the  
3 Pennsylvania Public Utility Commission and of the Attorney  
4 General.

5 The General Assembly of the Commonwealth of Pennsylvania  
6 hereby enacts as follows:

7 Section 1. Short title.

8 This act shall be known and may be cited as the Minimum  
9 Energy Efficiency Standards Act.

10 Section 2. Declaration of policy.

11 The General Assembly finds and declares as follows:

12 (1) Efficiency standards for certain products sold or  
13 installed in this Commonwealth assure consumers and  
14 businesses that products meet minimum efficiency performance  
15 levels and save money on utility bills.

16 (2) Efficiency standards save energy and reduce  
17 pollution and other environmental impacts associated with the

1 production, distribution and use of electricity, natural gas  
2 and oil.

3 (3) Efficiency standards can make electricity systems  
4 more reliable by reducing the strain on the electricity grid  
5 during peak demand periods, and improved energy efficiency  
6 can reduce or delay the need for new power plants, power  
7 transmission lines and power distribution system upgrades.

8 (4) Energy efficiency standards contribute to the  
9 economy of this Commonwealth by helping to balance energy  
10 supply and demand, reducing pressure for higher natural gas  
11 and electricity prices. By saving consumers and businesses  
12 money on energy bills, efficiency standards help the State  
13 and local economy, since energy bill savings can be spent on  
14 local goods and services.

15 Section 3. Definitions.

16 The following words and phrases when used in this act shall  
17 have the meanings given to them in this section unless the  
18 context clearly indicates otherwise:

19 "Attorney General." The Attorney General of the  
20 Commonwealth.

21 "Ballast." A device used with an electric discharge lamp to  
22 obtain necessary circuit conditions, including voltage, current  
23 and waveform, for starting and operating the lamp.

24 "Bottle-type water dispenser." A water dispenser that uses a  
25 bottle or reservoir as the source of potable water.

26 "Commission." The Pennsylvania Public Utility Commission.

27 "Commercial hot food holding cabinet." A heated, fully  
28 enclosed compartment with one or more solid or glass doors that  
29 is designed to maintain the temperature of hot food that has  
30 been cooked in a separate appliance. The term does not include

1 heated glass merchandizing cabinets, drawer warmers or cook-and-  
2 hold appliances.

3 "Compact audio product." An integrated audio system encased  
4 in a single housing that includes an amplifier and radio tuner,  
5 attached or separable speakers and can reproduce audio from  
6 magnetic tape, compact disc, digital versatile disc or flash  
7 memory. The term does not include products that can be  
8 independently powered by internal batteries or that have a  
9 powered external satellite antenna or that can provide a video  
10 output signal.

11 "Compensation." Money or any other valuable thing,  
12 regardless of form, received or to be received by a person for  
13 services rendered.

14 "Digital versatile disc" or "DVD." A laser-encoded plastic  
15 medium capable of storing a large amount of digital audio, video  
16 and computer data.

17 "DVD player" or "DVD recorder." A commercially available  
18 electronic product player or recorder encased in a single  
19 housing that includes an integral power supply and for which the  
20 sole purpose is the decoding, production or recording of  
21 digitized video signal on a digital versatile disc. The term  
22 does not include models that have an electronic programming  
23 guide function that provides an interactive, onscreen menu of  
24 television listings and that downloads program information from  
25 the vertical blanking interval of a regular television signal.

26 "EAE." Average annual auxiliary electrical consumption as  
27 defined in 10 CFR Pt. 430, Subpt. B App. N (relating to Uniform  
28 Test Method for Measuring the Energy Consumption of Furnaces and  
29 Boilers).

30 "EF." Average annual fuel energy consumption as defined in

1 10 CFR Pt. 430, Subpt. B App. N (relating to Uniform Test Method  
2 for Measuring the Energy Consumption of Furnaces and Boilers).

3 "Electricity ratio." The ratio of furnace electricity use to  
4 total furnace energy use.

5  $\text{Electricity ratio} = (3.412 \cdot \text{EAE}) / (1000 \cdot \text{EF} + 3.412 \cdot \text{EAE})$  where EF is  
6 expressed in millions of BTUs per year.

7 "High-intensity discharge lamp." A lamp in which light is  
8 produced by the passage of an electric current through a vapor  
9 or gas in which the light-producing arc is stabilized by bulb  
10 wall temperature and the arc tube has a bulb wall loading in  
11 excess of three watts per square centimeter.

12 "Metal halide lamp." A high-intensity discharge lamp in  
13 which the major portion of the light is produced by radiation of  
14 metal halides and their products of dissociation, possibly in  
15 combination with metallic vapors.

16 "Metal halide lamp fixture." A light fixture designed to be  
17 operated with a metal halide lamp and a ballast for a metal  
18 halide lamp.

19 "Portable electric spa." A factory-built electric spa or hot  
20 tub, supplied with equipment for heating and circulating water.

21 "Probe-start metal halide ballast." A ballast used to  
22 operate metal halide lamps which does not contain an igniter and  
23 which instead starts lamps by using a third starting electrode  
24 probe in the arc tube.

25 "Residential furnace." A self-contained space heater  
26 designed to supply heated air through ducts of more than ten  
27 inches in length and that utilizes only single-phase electric  
28 current, or single-phase electric current or DC current in  
29 conjunction with natural gas, propane or home heating oil, and  
30 that:

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

3 (2) is not contained within the same cabinet with a  
4 central air conditioner whose rated cooling capacity is more  
5 than 65,000 BTUs per hour; and

6 (3) has a heat input rate of less than 225,000 BTUs per  
7 hour.

8 "Single-voltage external AC to DC power supply." A device  
9 that:

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

12 (2) is able to convert to only one DC output voltage at  
13 a time;

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

17 (4) is contained within a separate physical enclosure  
18 from the end-use product;

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

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

25 (7) does not have a battery chemistry or type selector  
26 switch and indicator light or does not have a battery  
27 chemistry or type selector switch and a state of charge  
28 meter; and

29 (8) has a nameplate output power less than or equal to  
30 250 watts.

1 "State-regulated incandescent reflector lamp." A lamp, not  
2 colored or designed for rough or vibration service applications,  
3 with an inner reflective coating on the outer bulb to direct the  
4 light, an E26 medium screw base, a rated voltage or voltage  
5 range that lies at least partially within 115 to 130 volts and  
6 that falls into either of the following categories: a blown  
7 parabolic aluminized reflector (BPAR), bulged reflector (BR),  
8 elliptical reflector (ER) or similar bulb shape with a diameter  
9 equal to or greater than 2.25 inches, or a reflector (R),  
10 parabolic aluminized reflector (PAR) or similar bulb shape with  
11 a diameter of 2.25 to 2.75 inches, inclusive.

12 "Walk-in refrigerator and freezer." A refrigerated space  
13 that can be walked into and has a total chilled and frozen  
14 storage area of less than 3,000 square feet, operates at  
15 chilled, above 32 degrees Fahrenheit, or frozen, at or below 32  
16 degrees Fahrenheit temperature and is connected to a self-  
17 contained or remote condensing unit. The term excludes products  
18 designed and marketed exclusively for medical, scientific or  
19 research purposes. The term also excludes refrigerated  
20 warehouses.

21 "Water dispenser." A factory-made assembly that mechanically  
22 cools and heats potable water and that dispenses the cooled or  
23 heated water by integral or remote means.

24 Section 4. Scope of act.

25 (a) General rule.--The provisions of this act apply to all  
26 of the following types of new products sold, offered for sale or  
27 installed in this Commonwealth:

- 28 (1) Bottle-type water dispensers.
- 29 (2) Commercial hot food holding cabinets.
- 30 (3) Compact audio products.

1 (4) Digital versatile disc players and digital versatile  
2 disc recorders.

3 (5) Metal halide lamp fixtures.

4 (6) Portable electric spas.

5 (7) Residential furnaces.

6 (8) Single-voltage external AC to DC power supplies.

7 (9) State-regulated incandescent reflector lamps.

8 (10) Walk-in refrigerators and freezers.

9 (11) Any other products designated in accordance with  
10 section 7.

11 (b) Exclusions.--The provisions of this act do not apply to  
12 any of the following:

13 (1) New products manufactured in this Commonwealth and  
14 sold outside this Commonwealth.

15 (2) New products manufactured outside this Commonwealth  
16 and sold at wholesale inside this Commonwealth for final  
17 retail sale and installation outside this Commonwealth.

18 (3) Products installed in mobile manufactured homes at  
19 the time of construction.

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

22 Section 5. Efficiency standards.

23 Not later than one year after the effective date of this act,  
24 the commission shall adopt regulations establishing minimum  
25 efficiency standards for the types of new products set forth in  
26 section 4. The regulations shall provide for the following  
27 minimum efficiency standards:

28 (1) Bottle-type water dispensers designed for dispensing  
29 both hot and cold water shall not have standby energy  
30 consumption greater than 1.2 kilowatt-hours per day, as

1 measured in accordance with the test criteria contained in  
2 version 1 of the Environmental Protection Agency's "Energy  
3 Star Program Requirements for Bottled Water Coolers," except  
4 units with an integral, automatic timer shall not be tested  
5 using section D, "Timer Usage," of the test criteria.

6 (2) Commercial hot food holding cabinets shall have a  
7 maximum idle energy rate of 40 watts per cubic foot of  
8 interior volume, as determined by the "idle energy rate-dry  
9 test" in ASTM F2140-01, "Standard Test Method for Performance  
10 of Hot Food Holding Cabinets" published by ASTM  
11 International. Interior volume shall be measured in  
12 accordance with the method shown in the Environmental  
13 Protection Agency's "Energy Star Program Requirements for  
14 Commercial Hot Food Holding Cabinets" as in effect on August  
15 15, 2003.

16 (3) Compact audio products shall not use more than 2  
17 watts in standby-passive mode for those without a permanently  
18 illuminated clock display and 4 watts in standby-passive mode  
19 for those with a permanently illuminated clock display, as  
20 measured in accordance with International Electrotechnical  
21 Commission (IEC) test method 62087:2002(E), "Methods of  
22 measurement for the power consumption of audio, video, and  
23 related equipment."

24 (4) Digital versatile disc players and digital versatile  
25 disc recorders shall not use more than 3 watts in standby-  
26 passive mode, as measured in accordance with International  
27 Electrotechnical Commission (IEC) test method 62087:2002(E),  
28 "Methods of measurement for the power consumption of audio,  
29 video, and related equipment."

30 (5) Metal halide lamp fixtures designed to be operated

1 with lamps rated greater than or equal to 150 watts but less  
2 than or equal to 500 watts shall not contain a probe-start  
3 metal halide ballast.

4 (6) Portable electric spas shall not have a standby  
5 power greater than  $5(V$  to the two-thirds power) Watts where  $V$   
6 equals the total volume in gallons, as measured in accordance  
7 with the test method for portable electric spas contained in  
8 20 California Code of Regulations section 1604.

9 (7) (i) Residential furnaces that utilize natural gas  
10 or propane shall have a minimum Annual Fuel Utilization  
11 Efficiency (AFUE) of 90% and a maximum electricity ratio  
12 of 2%. AFUE shall be measured in accordance with the  
13 Federal test method for measuring the energy consumption  
14 of furnaces and boilers contained in 10 CFR Pt. 430  
15 Subpt. B App. N (relating to Uniform Test Method for  
16 Measuring the Energy Consumption of Furnaces and  
17 Boilers).

18 (ii) The commission may adopt rules to exempt  
19 compliance with the residential furnace AFUE standards  
20 under subparagraph (i) at any a building, site or  
21 location where complying with the standards would be in  
22 conflict with any local zoning ordinance, building or  
23 plumbing code or other rule regarding installation and  
24 venting of residential furnaces or residential boilers.

25 (8) (i) Single-voltage external AC to DC power supplies  
26 shall meet the energy efficiency requirements in the  
27 following table:

Nameplate Output Power	Minimum Efficiency in Active Mode
0 to less than 1 watt	0.49* (Nameplate Output)

1	1 to 49 watts	0.09 Ln* (Nameplate Output
2		Power + 0.49
3	Greater than 49 watts	0.84
4		Maximum Energy Consumption
5		in No-Load Mode
6	0 to less than 10 watts	0.5 watts
7	10 to 250 watts	0.75 watts

8 \* Where Ln (Nameplate Output) = Natural Logarithm of the  
9 nameplate output expressed in watts

10 (ii) The standard under subparagraph (i) applies to  
11 single-voltage AC to DC power supplies that are sold  
12 individually and to those that are sold as a component of  
13 or in conjunction with another product.

14 (iii) Single-voltage external AD to DC power  
15 supplies that require Food and Drug Administration  
16 listing and approval as a medical device are exempt from  
17 the requirements of this section.

18 (iv) Single-voltage external AC to DC power supplies  
19 made available by a manufacturer directly to a consumer  
20 or to a service or repair facility after and separate  
21 from the original sale of the product requiring the power  
22 supply as a service part or spare part shall not be  
23 required to meet the standards of this section until  
24 January 1, 2013.

25 (v) For purposes of this paragraph, the efficiency  
26 of single-voltage external AC to DC power supplies shall  
27 be measured in accordance with the test methodology  
28 specified by the Environmental Protection Agency's Energy  
29 Star Program "Test Method for Calculating the Energy  
30 Efficiency of Single-Voltage External AC-DC and AC-AC

1 Power Supplies (August 11, 2004)" except that tests shall  
2 be conducted at 115 volts only.

3 (9) (i) State-regulated incandescent reflector lamps  
4 shall meet the minimum average lamp efficacy requirements  
5 for federally regulated incandescent reflector lamps  
6 contained in 42 U.S.C. § 6295(i)(1)(A) (relating to  
7 energy conservation standards).

8 (ii) All of the following types of incandescent  
9 reflector lamps are exempt from the requirements of this  
10 paragraph:

11 (A) Lamps rated at 50 watts or less of the  
12 following types: BR30, ER30, BR40 and ER40.

13 (B) Lamps rated at 65 watts of the following  
14 types: BR30, BR40 and ER40.

15 (C) R20 lamps of 45 watts or less.

16 (10) Walk-in refrigerators and freezers shall meet the  
17 following requirements:

18 (i) All walk-in refrigerators and freezers shall  
19 have:

20 (A) Automatic door closers that firmly close all  
21 reach-in doors and that firmly close walk-in doors no  
22 wider than 3 feet 9 inches and no higher than 6 feet  
23 11 inches that have been closed to within one inch of  
24 full closure.

25 (B) Wall, ceiling and door insulation of at  
26 least R-28 for refrigerators. Door insulation  
27 requirements do not apply to glazed portions of  
28 doors, nor to structural members.

29 (C) Wall, ceiling and door insulation of at  
30 least R-32 for freezers. Door insulation requirements

1 do not apply to glazed portions of doors or to  
2 structural members.

3 (D) Floor insulation of at least R-28 for  
4 freezers.

5 (E) For single-phase evaporator fan motors of  
6 under one horsepower and less than 460 volts,  
7 electronically commutated motors. The commission may  
8 delay implementation of this subparagraph upon a  
9 determination that the motors are only available from  
10 one manufacturer or quantities of motors available  
11 are insufficient to serve the needs of the walk-in  
12 industry for evaporator-fan applications.

13 (F) for condenser fan motors of under one  
14 horsepower, either:

15 (I) electronically commutated motors;

16 (II) permanent split capacitor-type motors;

17 or

18 (III) polyphase motors of one-half

19 horsepower or more; and

20 (G) for all interior lights, light sources with  
21 an efficacy of 40 lumens per watt or more, including  
22 ballast losses, if any. Light sources with an  
23 efficacy of 40 lumens per watt or less, including  
24 ballast losses, if any, may be used in conjunction  
25 with a timer or device that turns off the lights  
26 within 15 minutes of when the walk-in is not  
27 occupied.

28 (ii) In addition to the requirements under  
29 subparagraph (i), walk-in refrigerators and freezers with  
30 transparent reach-in doors shall meet all of the

1 following requirements:

2 (A) Transparent reach-in doors and windows in  
3 walk-in doors for walk-in freezers shall be of  
4 triple-pane glass with either heat-reflective treated  
5 glass or gas fill.

6 (B) Transparent reach-in doors and windows in  
7 walk-in doors for walk-in refrigerators shall be  
8 either:

9 (I) double-pane glass with heat-reflective  
10 treated glass and gas fill; or

11 (II) triple-pane glass with either heat-  
12 reflective treated glass or gas fill.

13 (C) If the appliance has an anti-sweat heater  
14 without anti-sweat heat controls, then the appliance  
15 shall have a total door rail, glass and frame heater  
16 power draw of no more than 7.1 watts per square foot  
17 of door opening for freezers and 3.0 watts per square  
18 foot of door opening for refrigerators.

19 (D) If the appliance has an anti-sweat heater  
20 with anti-sweat heat controls, and the total door  
21 rail, glass and frame heater power draw is more than  
22 7.1 watts per square foot of door opening for  
23 freezers and 3.0 watts per square foot of door  
24 opening for refrigerators, then the anti-sweat heat  
25 controls shall reduce the energy use of the anti-  
26 sweat heater in an amount corresponding to the  
27 relative humidity in the air outside the door or to  
28 the condensation on the inner glass pane.

29 Section 6. Implementation.

30 (a) General rule.--On or after January 1, 2009, no new

1 bottle-type water dispenser, commercial hot food holding  
2 cabinet, compact audio product, digital versatile disc player or  
3 digital versatile disc recorder, metal halide fixture, portable  
4 electric spa, state-regulated incandescent reflector lamp,  
5 single-voltage external AC to DC power supply or walk-in  
6 refrigerator or walk-in freezer may be sold or offered for sale  
7 in this Commonwealth unless the efficiency of the new product  
8 meets or exceeds the efficiency standards set forth in the  
9 regulations adopted pursuant to section 5.

10 (b) Preemption of residential furnace standards.--No later  
11 than six months after the effective date of this act, the  
12 commission, in consultation with the Attorney General, shall  
13 determine if State implementation of residential furnace  
14 standards is preempted by Federal law. The commission shall make  
15 separate determinations with respect to minimum AFUE and maximum  
16 electricity ratio standards. If the commission determines that a  
17 waiver from Federal preemption is not needed, then on or after  
18 January 1, 2009, or the date which is one year after the date of  
19 the determination, if later, no new residential furnace may be  
20 sold or offered for sale in this Commonwealth unless the  
21 efficiency of the new product meets or exceeds the applicable  
22 nonpreempted efficiency standards set forth in the regulations  
23 adopted pursuant to section 5. If the commission determines that  
24 a waiver from Federal preemption is required, then the  
25 commission shall apply for the waiver within one year of the  
26 determination and upon approval of the waiver application, the  
27 applicable State standards shall go into effect at the earliest  
28 date permitted by Federal law.

29 (c) Installation standards.--One year after the date upon  
30 which the sale or offering for sale of certain products becomes

1 subject to the requirements of subsection (a) or (b), no such  
2 products may be installed for compensation in this Commonwealth  
3 unless the efficiency of the new product meets or exceeds the  
4 efficiency standards set forth in the regulations adopted  
5 pursuant to section 5.

6 Section 7. New and revised standards.

7 The commission may adopt regulations to establish increased  
8 efficiency standards for the products listed in section 4. The  
9 commission may also establish standards for products not  
10 specifically listed in section 4. In considering such new or  
11 amended standards, the commission shall set efficiency standards  
12 upon a determination that increased efficiency standards would  
13 promote energy conservation in this Commonwealth and would be  
14 cost-effective for consumers who purchase and use the new  
15 products, provided that no new or increased efficiency standards  
16 may become effective within one year following the adoption of  
17 any amended regulations establishing the increased efficiency  
18 standards. The commission may apply for a waiver of Federal  
19 preemption in accordance with Federal procedures for State  
20 efficiency standards for any product regulated by the Federal  
21 government.

22 Section 8. Administration.

23 (a) Testing.--If the procedures for testing the energy  
24 efficiency of the new products covered by section 4 are not  
25 provided for by State law, the commission shall use the  
26 Department of Energy approved test methods or, in the absence of  
27 such test methods, other appropriate nationally recognized test  
28 methods. The manufacturers of such products shall provide  
29 samples to be tested in accordance with the test procedures  
30 adopted pursuant to this act or those specified in other State

1 law.

2 (b) Manufacturer certification.--Manufacturers of new  
3 products covered by section 4, except for single-voltage  
4 external AC to DC power supplies, walk-in refrigerators and  
5 walk-in freezers, shall certify to the commission that the  
6 products are in compliance with the provisions of this act. The  
7 certification shall be based on test results. The commission  
8 shall promulgate regulations governing the certification of the  
9 products and may coordinate with the certification programs of  
10 other Federal agencies and other states with similar standards.

11 (c) Identification.--Manufacturers of new products covered  
12 by section 4 shall identify each product offered for sale or  
13 installation in this Commonwealth as in compliance with the  
14 provisions of this act by means of a mark, label or tag on the  
15 product and packaging at the time of sale or installation. The  
16 commission shall promulgate regulations governing the  
17 identification of the products and packaging and may coordinate  
18 with the labeling programs of Federal agencies and other states  
19 with equivalent efficiency standards. The commission shall allow  
20 the use of existing marks, labels or tags that connote  
21 compliance with the efficiency requirements of this act.

22 (d) Noncomplying tested products.--The commission may test  
23 products covered by section 4. If a product so tested is found  
24 not to be in compliance with the minimum efficiency standards  
25 established under section 5, the commission shall:

26 (1) Charge the manufacturer of the product for the cost  
27 of the product purchase and testing.

28 (2) Provide information to the public on the product.

29 (e) Periodic inspection.--The commission may cause periodic  
30 inspections to be made of distributors or retailers of new

1 products covered by section 3 in order to determine compliance  
2 with the provisions of this act. The commission shall cooperate  
3 with other administrative departments to coordinate on  
4 inspections for new products that are also covered by other  
5 State laws.

6 (f) Investigations and penalty.--

7 (1) The Attorney General shall investigate complaints  
8 received concerning violations of this act. The Attorney  
9 General may institute proceedings to enforce the provisions  
10 of this act.

11 (2) A manufacturer that violates any provision of this  
12 act shall be issued a warning by the Attorney General for any  
13 first violation.

14 (3) Repeat violations shall be subject to a civil  
15 penalty of not more than \$250. Each violation shall  
16 constitute a separate offense and each day that such  
17 violation continues shall constitute a separate offense.

18 (4) Penalties assessed under this subsection are in  
19 addition to costs assessed under subsection (d).

20 (g) Regulations.--The commission shall adopt regulations as  
21 necessary to ensure the proper implementation and enforcement of  
22 the provisions of this act.

23 Section 9. Severability.

24 The provisions of this act are severable. If any provision of  
25 this act or its application to any person or circumstance is  
26 held invalid, the invalidity shall not affect other provisions  
27 or applications of this act which can be given effect without  
28 the invalid provision or application.

29 Section 10. Effective date.

30 This act shall take effect in 60 days.