
THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 15

Special Session No. 1 of
2007-2008

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

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

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.

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

(5) Metal halide lamp fixtures.

(6) Portable electric spas.

(7) Residential furnaces.

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

(9) State-regulated incandescent reflector lamps.

(10) Walk-in refrigerators and freezers.

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

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

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

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

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

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

Section 5. Efficiency standards.

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

(1) Bottle-type water dispensers designed for dispensing both hot and cold water shall not have standby energy consumption greater than 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	$0.09 \ln^* (\text{Nameplate Output Power} + 0.49)$
2		
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

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

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

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

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

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

(C) R20 lamps of 45 watts or less.

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

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

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

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

(C) Wall, ceiling and door insulation of at 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.