



**Filed: 2/15/2006**

09400HB1614ham001

LRB094 02880 RSP 55144 a

1 AMENDMENT TO HOUSE BILL 1614

2 AMENDMENT NO. \_\_\_\_\_. Amend House Bill 1614 by replacing  
3 everything after the enacting clause with the following:

4 "Section 1. Short title. This Act may be cited as the  
5 Illinois Appliance Efficiency Standards Act.

6 Section 5. Purpose and findings.

7 (a) This Act provides for the establishment of minimum  
8 efficiency standards for certain products sold or installed in  
9 this State.

10 (b) The General Assembly finds that:

11 (1) Efficiency standards for certain products sold or  
12 installed in this State assure consumers and businesses  
13 that the products meet minimum efficiency performance  
14 levels, thus saving money on heating or electric bills.

15 (2) Such efficiency standards save energy and thus  
16 reduce pollution and other environmental impacts  
17 associated with the production, distribution, and use of  
18 electricity and natural gas.

19 (3) Such efficiency standards can make electricity  
20 systems more reliable by reducing the strain on the  
21 electricity grid during peak demand periods.

22 (4) Energy efficiency standards contribute to the  
23 economy of this State by enabling consumers and business  
24 owners to spend less on energy, leaving more for the

1 purchase of local goods and services.

2 Section 10. Definitions. As used in this Act:

3 "Department" means the Department of Commerce and Economic  
4 Opportunity.

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

8 "Boiler" means a self-contained appliance for supplying  
9 steam or hot water primarily intended for space-heating and  
10 which utilizes only single-phase electric current, or  
11 single-phase electric current or DC current in conjunction with  
12 natural gas, propane, or home heating oil, and which:

13 (1) is designed to be the principal heating source for  
14 the living space of one or more residences;

15 (2) has a heat input rate of less than 300,000 Btu per  
16 hour; and

17 (3) is not an appliance designed for the primary  
18 purpose of supplying hot water for purposes other than  
19 heating.

20 "Compensation" means money or any other valuable thing,  
21 regardless of form, received or to be received by a person for  
22 services rendered.

23 "Electricity ratio" means the ratio of furnace electricity  
24 use to total furnace energy use. Electricity ratio =  
25  $(3.412 * E_{AE}) / (1000 * E_F + 3.412 * E_{AE})$  where  $E_{AE}$  and  $E_F$  are defined in  
26 Title 10 of the Code of Federal Regulations.

27 "Furnace" means a self-contained space heater designed to  
28 supply heated air through ducts of more than 10 inches length  
29 and which utilizes only single-phase electric current, or  
30 single-phase electric current or DC current in conjunction with  
31 natural gas, propane, or home heating oil, and which:

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

1           (2) is not contained within the same cabinet with a  
2           central air conditioner whose rated cooling capacity is  
3           above 65,000 Btu per hour; and

4           (3) has a heat input rate of less than 225,000 Btu per  
5           hour.

6           "High-intensity discharge lamp" means a lamp in which light  
7           is produced by the passage of an electric current through a  
8           vapor or gas and in which the light-producing arc is stabilized  
9           by bulb wall temperature and the arc tube has a bulb wall  
10          loading in excess of 3 watts per square centimeter.

11          "Medium voltage dry-type distribution transformer" means a  
12          transformer that:

13                 (1) has an input voltage of more than 600 volts but  
14                 less than or equal to 34,500 volts;

15                 (2) is air-cooled;

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

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

18          "Metal halide lamp" means a high-intensity discharge lamp  
19          in which the major portion of the light is produced by  
20          radiation of metal halides and their products of dissociation,  
21          possibly in combination with metallic vapors.

22          "Metal halide lamp fixture" means a light fixture designed  
23          to be operated with a metal halide lamp and a ballast for a  
24          metal halide lamp.

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

29          "Single-voltage external AC to DC power supply" means a  
30          device that:

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

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

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

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

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

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

12          (7) does not have a battery chemistry or type selector  
13          switch and indicator light, or does not have a battery  
14          chemistry or type selector switch and a state of charge  
15          meter; and

16          (8) has a nameplate output power less than or equal to  
17          250 watts.

18          "State-regulated incandescent reflector lamp" means a  
19          lamp, not colored or designed for rough or vibration service  
20          applications, with an inner reflective coating on the outer  
21          bulb to direct the light, an E26 medium screw base, a rated  
22          voltage or voltage range that lies at least partially within  
23          115 to 130 volts and that falls into either of the following  
24          categories: a bulged reflector, elliptical reflector, blown  
25          parabolic aluminized reflector or similar bulb shape with a  
26          diameter equal to or greater than 2.25 inches; or a reflector,  
27          parabolic aluminized reflector, bulged reflector or similar  
28          bulb shape with a diameter of 2.25 to 2.75 inches, inclusive.

29          "Transformer" means a device consisting of 2 or more coils  
30          of insulated wire and that is designed to transfer alternating  
31          current by electromagnetic induction from one coil to another  
32          to change the original voltage or current value. This term does  
33          not include: (1) devices with multiple voltage taps, with the  
34          highest voltage tap equaling at least 20% more than the lowest

1 voltage tap; or (2) devices, such as those commonly known as  
2 drive transformers, rectifier transformers, auto-transformers,  
3 uninterruptible power system transformers, impedance  
4 transformers, regulating transformers, sealed and  
5 non-ventilating transformers, machine tool transformers,  
6 welding transformers, grounding transformers, or testing  
7 transformers, that are designed to be used in a special-purpose  
8 application and are unlikely to be used in general-purpose  
9 applications.

10 Section 15. Scope.

11 (a) The provisions of this Act apply to the testing,  
12 certification, and enforcement of efficiency standards for the  
13 following types of new products sold, offered for sale, or  
14 installed in this State:

- 15 (1) medium voltage dry-type distribution transformers;
- 16 (2) metal halide lamp fixtures;
- 17 (3) furnaces and boilers;
- 18 (4) single-voltage external AC to DC power supplies;
- 19 and
- 20 (5) State-regulated incandescent reflector lamps.

21 (b) The provisions of this Act do not apply to:

- 22 (1) new products manufactured in this State and sold  
23 outside this State;
- 24 (2) new products manufactured outside this State and  
25 sold at wholesale inside this State for final retail sale  
26 and installation outside this State;
- 27 (3) products installed in mobile manufactured homes at  
28 the time of construction;
- 29 (4) products designed expressly for installation and  
30 use in recreational vehicles; or
- 31 (5) Stock available for sale at retail on the effective  
32 date of this Act.

1 Section 20. Efficiency standards. The initial minimum  
 2 efficiency standards for the types of new products set forth in  
 3 Section 15 are as follows:

4 (1) Medium voltage dry-type distribution transformers  
 5 shall meet minimum efficiency levels three-tenths of a  
 6 percentage point higher than the Class 1 efficiency levels  
 7 for medium voltage distribution transformers specified in  
 8 Table 4-2 of the "Guide for Determining Energy Efficiency  
 9 for Distribution Transformers" published by the National  
 10 Electrical Manufacturers Association (NEMA Standard  
 11 TP-1-2002).

12 (2) Metal halide lamp fixtures designed to be operated  
 13 with lamps rated greater than or equal to 150 watts but  
 14 less than or equal to 500 watts shall not contain a  
 15 probe-start metal halide ballast.

16 (3) Furnaces and boilers shall meet or exceed the  
 17 applicable Annual Fuel Utilization Efficiency (AFUE)  
 18 levels in the following table:

19 Product Type	Minimum Efficiency Level
20 Gas and propane furnaces	90% AFUE
21 Oil furnaces	83% AFUE
22 Gas and propane hot water	
23 boilers	84% AFUE
24 Gas and propane steam	
25 boilers	82% AFUE
26 Oil-fired steam	
27 boilers	82% AFUE

28 Residential furnace air handlers shall have an ER of 2%  
 29 or less, except that residential oil furnaces with a  
 30 capacity of less than 94,000 Btu per hour shall have an ER  
 31 of 2.3% or less.

32 (4) Single-voltage external AC to DC power supplies  
 33 shall meet the tier 1 energy efficiency requirements of  
 34 California Code of Regulations, Title 20, Section 1605.3 as

1 published in April 2005. This standard applies to  
2 single-voltage AC to DC power supplies that are sold  
3 individually and to those that are sold as a component of  
4 or in conjunction with another product.

5 (5) State-regulated incandescent reflector lamps shall  
6 meet the minimum average lamp efficiency requirements for  
7 federally-regulated incandescent reflector lamps contained  
8 in 42 U.S.C. section 6295 (i)(1)(A). The following lamps  
9 are exempt from these requirements: ER30, BR30, BR40, and  
10 ER40 of 50 watts or less; BR30, BR40, and ER40 of 65 watts;  
11 and R20 of 45 watts or less.

12 Section 25. Implementation.

13 (a) On and after January 1, 2008, no new medium voltage  
14 dry-type distribution transformer, single-voltage external AC  
15 to DC power supply, or State-regulated incandescent reflector  
16 lamp may be sold or offered for sale in the State unless the  
17 efficiency of the new product meets or exceeds the efficiency  
18 standards set forth in Section 20.

19 On and after January 1, 2009, no new metal halide lamp  
20 fixture may be sold or offered for sale in the State unless the  
21 efficiency of the product meets or exceeds the efficiency  
22 standards set forth in Section 20.

23 In consultation with the Attorney General, the Department  
24 shall determine if implementation of State standards for  
25 furnaces and boilers requires a waiver from federal preemption,  
26 and, if necessary, shall apply for such waiver within 18 months  
27 of the effective date of this Act. If the Department determines  
28 that a waiver from federal preemption is necessary for State  
29 furnace and boiler standards, the State standards shall go into  
30 effect at the earliest date permitted by federal law. If the  
31 Department determines that a waiver from federal preemption is  
32 not needed for State furnace and boiler standards, then the  
33 State standards shall go into effect on June 1, 2008.

1           (b) One year after the date upon which sale or offering for  
2 sale of certain products is limited pursuant to subsection (a),  
3 no new products may be installed for compensation in the State  
4 unless the efficiency of the new product meets or exceeds the  
5 efficiency standards set forth in Section 20.

6           Section 35. Testing, certification, labeling, and  
7 enforcement.

8           (a) The manufacturers of new products subject to this Act  
9 shall cause samples of such products to be tested in accordance  
10 with the appropriate test procedures. With respect to  
11 efficiency standards adopted by reference under Section 20, the  
12 appropriate test methods shall be those specified in the  
13 adopted standards.

14           (b) Manufacturers of new products subject to this Act shall  
15 certify to the Department that such products are in compliance  
16 with the provisions of this Act. The Department may adopt  
17 procedures and requirements governing the certification of  
18 such products and may work in coordination with the  
19 certification programs of other states. With respect to a  
20 product for which the Illinois efficiency standards and  
21 labeling requirements are the same as those of the federal  
22 government or another state, the Department may accept as  
23 sufficient for compliance with this subsection the  
24 manufacturer's certification to the federal government or that  
25 other state, whichever is applicable, that the product complies  
26 with those standards and requirements.

27           (c) Manufacturers of new products subject to this Act shall  
28 identify each such product offered for sale or installation in  
29 this State as in compliance with the provisions of this Act by  
30 means of a mark, label, or tag on the product and packaging at  
31 the time of sale or installation. The Department shall propose  
32 and shall adopt rules governing the identification of such  
33 products and packaging and may work in coordination with the



1 labeling programs of other states.

2 (d) The Department may cause investigations to be made of  
3 complaints received concerning violations of this Act and may  
4 report the results of such investigations to the Attorney  
5 General. The Attorney General may institute proceedings to  
6 enforce the provisions of this Act.

7 (e) A manufacturer, distributor, retailer, or installer  
8 who violates any provision of this Act shall be issued a  
9 warning by the Department for the first violation. Repeat  
10 violations shall be subject to a civil penalty of not more than  
11 \$250. Each violation shall constitute a separate offense, and  
12 each day that a violation continues shall constitute a separate  
13 offense. Penalties assessed under this subsection are in  
14 addition to costs assessed under subsection (d).

15 (f) The Department may propose and adopt any rules that are  
16 necessary to ensure the proper implementation and enforcement  
17 of this Act.

18 (g) Subject to appropriation, the Department may create and  
19 maintain any programs, including, but not limited to, technical  
20 assistance, education, and public awareness programs, that the  
21 Department deems necessary for the implementation of this Act.

22 Section 97. Severability. The provisions of this Act are  
23 severable under Section 1.31 of the Statute on Statutes.

24 Section 99. Effective date. This Act takes effect upon  
25 becoming law."