## HOUSE BILL 2341

State of Washington60th Legislature2007 Regular SessionBy Representatives Flannigan, B. Sullivan, Ormsby, Lantz and Wallace

Read first time 02/22/2007. Referred to Committee on Technology, Energy & Communications.

AN ACT Relating to the sale of intermediate base light bulbs for residential use; amending RCW 19.260.020, 19.260.030, 19.260.040, 19.260.050, and 19.260.070; adding new sections to chapter 19.260 RCW; creating a new section; and prescribing penalties.

5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

6 <u>NEW SECTION.</u> Sec. 1. The legislature finds and declares that 7 meeting the state's future energy needs through conservation efforts, 8 both large and small, is a priority. Small changes on the part of 9 Washington consumers, such as switching from conventional, incandescent 10 light bulbs to more efficient compact fluorescent bulbs, has the 11 potential to save thousands of kilowatts of electricity each year.

12 The legislature further finds that compact fluorescent bulbs are 13 more efficient, last longer, emit less heat, and draw less current than 14 conventional incandescent bulbs, which make them a safer and more cost-15 effective option for use in the home. Therefore, it is the intent of 16 the legislature to encourage its citizens to participate in cost-17 effective energy conservation by establishing efficiency standards for 18 incandescent bulbs sold in the state. 1 Sec. 2. RCW 19.260.020 and 2006 c 194 s 1 are each amended to read
2 as follows:

3 The definitions in this section apply throughout this chapter 4 unless the context clearly requires otherwise.

5 (1) "Automatic commercial ice cube machine" means a factory-made 6 assembly, not necessarily shipped in one package, consisting of a 7 condensing unit and ice-making section operating as an integrated unit 8 with means for making and harvesting ice cubes. It may also include 9 integrated components for storing or dispensing ice, or both.

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

(3) "Commercial clothes washer" means a soft mount horizontal or vertical-axis clothes washer that: (a) Has a clothes container compartment no greater than 3.5 cubic feet in the case of a horizontalaxis product or no greater than 4.0 cubic feet in the case of a vertical-axis product; and (b) is designed for use by more than one household, such as in multifamily housing, apartments, or coin laundries.

20 (4) "Commercial prerinse spray valve" means a handheld device 21 designed and marketed for use with commercial dishwashing and 22 warewashing equipment and that sprays water on dishes, flatware, and 23 other food service items for the purpose of removing food residue prior 24 to their cleaning.

25 (5)(a) "Commercial refrigerators and freezers" means refrigerators, freezers, or refrigerator-freezers designed for use by commercial or 26 27 institutional facilities for the purpose of storing or merchandising food products, beverages, or ice at specified temperatures that: (i) 28 Incorporate most components involved in the vapor-compression cycle and 29 the refrigerated compartment in a single cabinet; and (ii) may be 30 31 configured with either solid or transparent doors as a reach-in 32 cabinet, pass-through cabinet, roll-in cabinet, or roll-through cabinet. 33

(b) "Commercial refrigerators and freezers" does not include: (i)
Products with 85 cubic feet or more of internal volume; (ii) walk-in
refrigerators or freezers; (iii) consumer products that are federally
regulated pursuant to 42 U.S.C. Sec. 6291 et seq.; (iv) products
without doors; or (v) freezers specifically designed for ice cream.

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

4 (7) "Department" means the department of community, trade, and 5 economic development.

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

11 (9) <u>"Intermediate base lamp" means a lamp designed to be operated</u>
12 with an intermediate-based light fixture for residential use.

13 (10) "Metal halide lamp" means a high-intensity discharge lamp in 14 which the major portion of the light is produced by radiation of metal 15 halides and their products of dissociation, possibly in combination 16 with metallic vapors.

17 ((<del>(10)</del>)) <u>(11)</u> "Metal halide lamp fixture" means a light fixture 18 designed to be operated with a metal halide lamp and a ballast for a 19 metal halide lamp.

20 ((<del>(11)</del>)) <u>(12)</u> "Pass-through cabinet" means a commercial 21 refrigerator or freezer with hinged or sliding doors on both the front 22 and rear of the unit.

23 ((<del>(12)</del>)) <u>(13)</u> "Probe-start metal halide ballast" means a ballast 24 used to operate metal halide lamps which does not contain an igniter 25 and which instead starts lamps by using a third starting electrode 26 "probe" in the arc tube.

27 ((<del>(13)</del>)) <u>(14)</u> "Reach-in cabinet" means a commercial refrigerator or 28 freezer with hinged or sliding doors or lids, but does not include 29 roll-in or roll-through cabinets or pass-through cabinets.

30 ((<del>(14)</del>)) <u>(15)</u>(a) "Roll-in cabinet" means a commercial refrigerator 31 or freezer with hinged or sliding doors that allow wheeled racks of 32 product to be rolled into the unit.

33 (b) "Roll-through cabinet" means a commercial refrigerator or 34 freezer with hinged or sliding doors on two sides of the cabinet that 35 allow wheeled racks of product to be rolled through the unit.

36 (((15))) (16)(a) "Single-voltage external AC to DC power supply" 37 means a device that: (i) Is designed to convert line voltage 38 alternating current input into lower voltage direct current output;

(ii) is able to convert to only one DC output voltage at a time; (iii) is sold with, or intended to be used with, a separate end-use product that constitutes the primary power load; (iv) is contained within a separate physical enclosure from the end-use product; (v) is connected to the end-use product via a removable or hard-wired male/female electrical connection, cable, cord, or other wiring; and (vi) has a nameplate output power less than or equal to 250 watts.

8 (b) "Single-voltage external AC to DC power supply" does not 9 include: (i) Products with batteries or battery packs that physically 10 attach directly to the power supply unit; (ii) products with a battery 11 chemistry or type selector switch and indicator light; or (iii) 12 products with a battery chemistry or type selector switch and a state 13 of charge meter.

14 (((16))) (17) "State-regulated incandescent reflector lamp" means 15 a lamp that is not colored or designed for rough or vibration service 16 applications, that has an inner reflective coating on the outer bulb to 17 direct the light, an E26 medium screw base, and a rated voltage or 18 voltage range that lies at least partially within 115 to 130 volts, and 19 that falls into one of the following categories:

(a) A bulged reflector or elliptical reflector bulb shape and whichhas a diameter which equals or exceeds 2.25 inches;

(b) A reflector, parabolic aluminized reflector, or similar bulbshape and which has a diameter of 2.25 to 2.75 inches.

24 ((<del>(17)</del>)) <u>(18)</u> "Transformer" means a device consisting of two or 25 more coils of insulated wire and that is designed to transfer 26 alternating current by electromagnetic induction from one coil to 27 another to change the original voltage or current value.

((<del>(18)</del>)) <u>(19)</u>(a) "Unit heater" means a self-contained, vented fantype commercial space heater that uses natural gas or propane, and that is designed to be installed without ducts within a heated space.

(b) "Unit heater" does not include any products covered by federal standards established pursuant to 42 U.S.C. Sec. 6291 et seq. or any product that is a direct vent, forced flue heater with a sealed combustion burner.

35 **Sec. 3.** RCW 19.260.030 and 2006 c 194 s 2 are each amended to read 36 as follows:

37 (1) This chapter applies to the following types of new products

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sold, offered for sale, or installed in the state: (a) Automatic 1 2 commercial ice cube machines; (b) commercial clothes washers; (c) commercial prerinse spray valves; (d) commercial refrigerators and 3 freezers; (e) metal halide lamp fixtures; (f) single-voltage external 4 5 AC to DC power supplies; (g) state-regulated incandescent reflector lamps; ((and)) (h) unit heaters; and (i) intermediate base lamps. This 6 7 chapter applies equally to products whether they are sold, offered for sale, or installed as a stand-alone product or as a component of 8 9 another product.

10 (2) This chapter does not apply to (a) new products manufactured in 11 the state and sold outside the state, (b) new products manufactured 12 outside the state and sold at wholesale inside the state for final 13 retail sale and installation outside the state, (c) products installed 14 in mobile manufactured homes at the time of construction, or (d) 15 products designed expressly for installation and use in recreational 16 vehicles.

17 **Sec. 4.** RCW 19.260.040 and 2006 c 194 s 3 are each amended to read 18 as follows:

19The legislature establishes the following minimum efficiency20standards for the types of new products set forth in RCW 19.260.030.

(1)(a) Automatic commercial ice cube machines must have daily energy use and daily water use no greater than the applicable values in the following table:

24				Maximum	Maximum condenser
25			Harvest rate	energy use	water use
26	Equipment type	Type of cooling	(lbs. ice/24 hrs.)	(kWh/100 lbs.)	(gallons/100 lbs. ice)
27	Ice-making head	water	<500	7.800055H	200022H
28			>=500<1436	5.580011H	200022H
29			>=1436	4.0	200022H
30	Ice-making head	air	450	10.260086H	Not applicable
31			>=450	6.890011H	Not applicable
32	Remote condensing but	air	<1000	8.850038	Not applicable
33	not remote compressor		>=1000	5.10	Not applicable
34	Remote condensing and	air	<934	8.850038H	Not applicable
35	remote compressor		>=934	5.3	Not applicable

1	Self-contained models	water	<200	11.400190Н	1910315H
2			>=200	7.60	1910315H
3	Self-contained models	air	<175	18.00469H	Not applicable
4			>=175	9.80	Not applicable

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Where H= harvest rate in pounds per twenty-four hours which must be reported within 5% of the tested value.

6 "Maximum water use" applies only to water used for the condenser.

7 (b) For purposes of this section, automatic commercial ice cube 8 machines shall be tested in accordance with ARI 810-2003 test method as 9 published by the air-conditioning and refrigeration institute. Ice-10 making heads include all automatic commercial ice cube machines that 11 are not split system ice makers or self-contained models as defined in 12 ARI 810-2003.

(2) Commercial clothes washers must have a minimum modified energy factor of 1.26. For the purposes of this section, capacity and modified energy factor are defined and measured in accordance with the current federal test method for clothes washers as found at 10 C.F.R. Sec. 430.23.

(3) Commercial prerinse spray valves must have a flow rate equal to or less than 1.6 gallons per minute when measured in accordance with the American society for testing and materials' "Standard Test Method for Prerinse Spray Valves," ASTM F2324-03.

22 (4)(a) Commercial refrigerators and freezers must meet the 23 applicable requirements listed in the following table:

24	Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
25	Reach-in cabinets, pass-through cabinets,	Solid	0.10V+ 2.04
26	and roll-in or roll-through cabinets that are	Transparent	0.12V+ 3.34
	refrigerators		
27	Reach-in cabinets, pass-through cabinets,	Transparent	.126V+ 3.51
28	and roll-in or roll-through cabinets that are		
29	"pulldown" refrigerators		
30	Reach-in cabinets, pass-through cabinets,	Solid	0.40V+ 1.38
31	and roll-in or roll-through cabinets that are	Transparent	0.75V+ 4.10
	freezers		
32	Reach-in cabinets that are refrigerator-	Solid	0.27AV - 0.71
33	freezers		
34	with an AV of 5.19 or higher		

1 kWh= kilowatt hours

2  $V = \text{total volume (ft}^3)$ 

3 AV= adjusted volume=  $[1.63 \text{ x freezer volume } (\text{ft}^3)]$ + refrigerator volume  $(\text{ft}^3)$ 

4 (b) For purposes of this section, "pulldown" designates products 5 designed to take a fully stocked refrigerator with beverages at 90 6 degrees F and cool those beverages to a stable temperature of 38 7 degrees F within 12 hours or less. Daily energy consumption shall be in accordance with the American national standards 8 measured 9 institute/American society of heating, refrigerating and air-10 conditioning engineers test method 117-2002, except that the backloading doors of pass-through and roll-through refrigerators and 11 freezers must remain closed throughout the test, and except that the 12 13 controls of all appliances must be adjusted to obtain the following 14 product temperatures.

15	Product or compartment type	Integrated average product temperature in degrees Fahrenheit
16	Refrigerator	38 <u>+</u> 2
17	Freezer	$0\pm 2$
18	(5) <u>Intermediate base l</u>	amps designed to be operated with an
19	efficiency of 50 or more and w	with a wattage of 10 watts or less.
20	<u>(6)</u> Metal halide lamp fix	tures designed to be operated with lamps
21	rated greater than or equal to	o 150 watts but less than or equal to 500
22	watts shall not contain a prob	pe-start metal halide lamp ballast.
22	(((6))) $(7)(a)$ gingle-we	Itage external AC to DC never gunnling

23 (((-6))) (7)(a) Single-voltage external AC to DC power supplies 24 shall meet the requirements in the following table:

25	Nameplate output	Minimum Efficiency in Active Mode
26	< 1 Watt	0.49 * Nameplate Output
27	> or= 1 Watt and < or= 49 Watts	0.09 * Ln (Nameplate Output)+ 0.49
28	>49 Watts	0.84
29		Maximum Energy Consumption in No-Load Mode
30	< 10 Watts	0.5 Watts
31	> or= 10 Watts and < or= 250 Watts	0.75 Watts

32 Where Ln (Nameplate Output) - Natural Logarithm of the nameplate output expressed in Watts

(b) For the purposes of this section, efficiency of single-voltage external AC to DC power supplies shall be measured in accordance with the United States environmental protection agency's "Test Method for Calculating the Energy Efficiency of Single-Voltage External AC to DC and AC to AC Power Supplies," by Ecos Consulting and Power Electronics Application Center, dated August 11, 2004.

7 ((<del>(7)</del>)) <u>(8)</u>(a) State-regulated incandescent reflector lamps shall 8 meet the minimum average lamp efficacy requirements for federally 9 regulated incandescent reflector lamps contained in 42 U.S.C. Sec. 10 6295(i)(l)(A).

(b) The following types of incandescent lamps are exempt from these requirements:

(i) Lamps rated at fifty watts or less of the following types: BR30, ER 30, BR 40, and ER 40;

15 (ii) Lamps rated at sixty-five watts of the following types: BR 16 30, BR 40, and ER 40; and

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(iii) R 20 lamps of forty-five watts or less.

18 (((+3))) (9) Unit heaters must be equipped with intermittent 19 ignition devices and must have either power venting or an automatic 20 flue damper.

21 Sec. 5. RCW 19.260.050 and 2006 c 194 s 4 are each amended to read 22 as follows:

23 (1)(a) No new commercial prerinse spray valve, commercial clothes 24 washer, commercial refrigerator or freezer, state-regulated incandescent reflector lamp, or unit heater manufactured on or after 25 26 January 1, 2007, may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency 27 standards set forth in RCW 19.260.040. No new automatic commercial ice 28 cube machine, single-voltage external AC to DC power supply, or metal 29 30 halide lamp fixtures manufactured on or after January 1, 2008, may be 31 sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 32 19.260.040. 33

34 (b) No new intermediate base lamps manufactured after January 1, 35 2010, may be sold or offered for sale in this state unless the 36 efficiency of the new products meets or exceeds the efficiency 37 standards set forth in RCW 19.260.040.

(2) On or after January 1, 2008, no new commercial prerinse spray 1 2 valve, commercial clothes washer, commercial refrigerator or freezer, single-voltage external AC to DC power supply, state-regulated 3 incandescent reflector lamp, or unit heater manufactured on or after 4 5 January 1, 2007, may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency 6 7 standards set forth in RCW 19.260.040. On or after January 1, 2009, no new automatic commercial ice cube machine or metal halide lamp fixtures 8 manufactured on or after January 1, 2008, may be installed for 9 10 compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040. 11 (3) Standards for metal halide lamp fixtures and state-regulated 12 13 incandescent reflector lamps are effective on the dates in subsections 14 (1) and (2) of this section.

15 <u>NEW SECTION.</u> Sec. 6. A new section is added to chapter 19.260 RCW 16 to read as follows:

(1) All intermediate base lamps sold in the state intended for residential use must display the following information on its retail packaging:

20 (a) The brightness or light output of the lamp in lumens;

(b) The efficiency of the lamp as a number, which is the lightoutput divided by the wattage; and

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(c) The actual wattage of the lamp.

(2) In satisfying subsection (1)(c) of this section, the packaging
 may not display the equivalent wattage that would be consumed if the
 lamp were of a different technology.

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(3) The following types of lamps are exempt from this section:

(a) Lamps which consume one watt of power or less, such as night lights and indicator lights;

30 (b) Lamps of a type which are not intended to be replaced or 31 purchased by consumers;

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(c) Lamps that are designed to provide heat;

33 (d) Lamps that are designed to withstand severe environmental 34 conditions, such as oven lights or freezer lights; and

35 (e) Lamps that produce light that is not in the visible spectrum,36 such as ultraviolet lamps intended for disinfection.

1 **Sec. 7.** RCW 19.260.070 and 2005 c 298 s 7 are each amended to read 2 as follows:

3 (1) The manufacturers of products covered by this chapter must test
4 samples of their products in accordance with the test procedures under
5 this chapter or those specified in the state building code.

(2) Manufacturers of new products covered by RCW 19.260.030, except 6 7 for single-voltage external AC to DC power supplies, shall certify to the department that the products are in compliance with this chapter. 8 This certification must be based on test results unless this chapter 9 10 does not specify a test method. The department shall establish rules governing the certification of these products and may coordinate with 11 12 the certification programs of other states and federal agencies with 13 similar standards.

14 (3) Manufacturers of new products covered by RCW 19.260.030 shall identify each product offered for sale or installation in the state as 15 in compliance with this chapter by means of a mark, label, or tag on 16 17 the product and packaging at the time of sale or installation. The department shall establish rules governing the identification of these 18 products and packaging, which shall be coordinated to the greatest 19 practical extent with the labeling programs of other states and federal 20 21 agencies with equivalent efficiency standards.

(4) The department may test products covered by RCW 19.260.030. If products so tested are found not to be in compliance with the minimum efficiency standards established under RCW 19.260.040, the department shall: (a) Charge the manufacturer of the product for the cost of product purchase and testing; and (b) make information available to the public on products found not to be in compliance with the standards.

(5) The department shall obtain in paper form the test methods specified in RCW 19.260.040, which shall be available for public use at the department's energy policy offices.

(6) The department shall investigate complaints received concerning violations of this chapter. Any manufacturer or distributor who violates this chapter shall be issued a warning by the director of the department for any first violation. Repeat violations are subject to a civil penalty of not more than two hundred fifty dollars a day. Penalties assessed under this subsection are in addition to costs assessed under subsection (4) of this section.

1 (7) The department may adopt rules as necessary to ensure the 2 proper implementation and enforcement of this chapter.

3 (8) The proceedings relating to this chapter are governed by the
4 administrative procedure act, chapter 34.05 RCW.

5 (9) This section does not apply to the sale or use of intermediate
6 base lamps.

7 <u>NEW SECTION.</u> Sec. 8. A new section is added to chapter 19.260 RCW 8 to read as follows:

9 The department may investigate complaints received concerning 10 violations of this act. Any manufacturer or distributor who violates 11 this act may be issued a warning by the director of the department for 12 any first violation. Repeat violations may be subject to a civil 13 penalty of not more than two hundred fifty dollars a day.

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