SENATE BILL 6489

State of Washington 61st Legislature 2010 Regular Session

By Senators Oemig, Hobbs, Rockefeller, Fairley, Fraser, Brown, Shin, and Kline

Read first time 01/15/10. Referred to Committee on Environment, Water & Energy.

- 1 AN ACT Relating to the energy efficiency code; amending RCW
- 2 19.260.030, 19.260.040, and 19.260.050; reenacting and amending RCW
- 3 19.260.020; and creating a new section.
- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- 5 NEW SECTION. Sec. 1. The legislature finds that technological
- 6 innovations have led to increased manufacturing and use of large-screen
- 7 flat-panel televisions, which commonly require more energy than older
- 8 televisions. The legislature further finds that setting energy
- 9 efficiency requirements for televisions sold or offered for sale in
- 10 Washington beginning in 2011 will conserve energy, reduce consumer
- 11 energy costs, and encourage manufacturers to produce more energy-
- 12 efficient televisions.
- 13 **Sec. 2.** RCW 19.260.020 and 2009 c 565 s 18 and 2009 c 501 s 1 are each reenacted and amended to read as follows:
- The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.
- 17 (1) "Automatic commercial ice cube machine" means a factory-made
- 18 assembly, not necessarily shipped in one package, consisting of a

p. 1 SB 6489

condensing unit and ice-making section operating as an integrated unit with means for making and harvesting ice cubes. It may also include integrated components for storing or dispensing ice, or both.

- (2) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.
- (3) "Commercial hot food holding cabinet" means a heated, fully enclosed compartment, with one or more solid or partial glass doors, that is designed to maintain the temperature of hot food that has been cooked in a separate appliance. "Commercial hot food holding cabinet" does not include heated glass merchandising cabinets, drawer warmers, or cook and hold appliances.
- (4)(a) "Commercial refrigerators and freezers" means refrigerators, freezers, or refrigerator-freezers designed for use by commercial or institutional facilities for the purpose of storing or merchandising food products, beverages, or ice at specified temperatures that: (i) Incorporate most components involved in the vapor-compression cycle and the refrigerated compartment in a single cabinet; and (ii) may be configured with either solid or transparent doors as a reach-in cabinet, pass-through cabinet, roll-in cabinet, or roll-through cabinet.
- (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.
- (5) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.
- (6) "Cook and hold appliance" means a multiple mode appliance intended for cooking food that may be used to hold the temperature of the food that has been cooked in the same appliance.
 - (7) "Department" means the department of commerce.
- (8) "Drawer warmer" means an appliance that consists of one or more heated drawers and that is designed to hold hot food that has been cooked in a separate appliance at a specified temperature.
- (9) "Heated glass merchandising cabinet" means an appliance with a heated cabinet constructed of glass or clear plastic doors which, with

- seventy percent or more clear area, is designed to display and maintain the temperature of hot food that has been cooked in a separate appliance.
- 4 (10) "Hot water dispenser" means a small electric water heater that 5 has a measured storage volume of no greater than one gallon.

8

2021

22

2526

27

2829

30

33

3435

- (11) "Mini-tank electric water heater" means a small electric water heater that has a measured storage volume of more than one gallon and a rated storage volume of less than twenty gallons.
- 9 (12) "Pass-through cabinet" means a commercial refrigerator or 10 freezer with hinged or sliding doors on both the front and rear of the 11 unit.
- 12 (13) "Point-of-use water dispenser" means a water dispenser that 13 uses a pressurized water utility connection as the source of potable 14 water.
- 15 (14) "Pool heater" means an appliance designed for heating 16 nonpotable water contained at atmospheric pressure for swimming pools, 17 spas, hot tubs, and similar applications.
- 18 (15) "Portable electric spa" means a factory-built electric spa or 19 hot tub, supplied with equipment for heating and circulating water.
 - (16) "Reach-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors or lids, but does not include roll-in or roll-through cabinets or pass-through cabinets.
- 23 (17) "Residential pool pump" means a pump used to circulate and 24 filter pool water in order to maintain clarity and sanitation.
 - (18)(a) "Roll-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors that allow wheeled racks of product to be rolled into the unit.
 - (b) "Roll-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on two sides of the cabinet that allow wheeled racks of product to be rolled through the unit.
- 31 (19) "Showerhead" means a device through which water is discharged 32 for a shower bath.
 - (20) "Showerhead tub spout diverter combination" means a group of plumbing fittings sold as a matched set and consisting of a control valve, a tub spout diverter, and a showerhead.
- 36 (21) "State-regulated incandescent reflector lamp" means a lamp 37 that is not colored or designed for rough or vibration service 38 applications, has an inner reflective coating on the outer bulb to

p. 3 SB 6489

direct the light, an E26 medium screw base, a rated voltage or voltage range that lies at least partially within 115 to 130 volts, and falls into one of the following categories:

- (a) A bulged reflector or elliptical reflector bulb shape and which has a diameter which equals or exceeds 2.25 inches; or
- (b) A reflector, parabolic aluminized reflector, or similar bulb shape and which has a diameter of 2.25 to 2.75 inches.
- (22)(a) "Television" means an analog or digital device designed primarily for the display and reception of a terrestrial, satellite, cable, internet protocol television, or other broadcast or recorded transmission of analog or digital video and audio signals.
- 12 <u>(b) "Television" encompasses any units marketed to consumers as</u> 13 televisions, including:
 - (i) Combination televisions, meaning systems in which a television or television monitor and an additional device or devices, including but not limited to a digital versatile device (DVD) player or a video cassette recorder (VCR), are combined into a single unit in which the additional devices are included in the television casing;
 - (ii) Component televisions, meaning televisions composed of two or more separate components (e.g., separate display device and tuner) marketed and sold as televisions under one model or system designation, and which may have more than one power cord; and
 - (iii) Television monitors, meaning televisions that do not have an internal tuner/receiver or playback device.
 - (c) "Television" does not include:

4

5

7

8

9

10 11

14

15

16

17

18 19

20

21

22

2324

2526

27

28

- (i) Computer monitors, meaning analog or digital devices designed primarily for displaying computer generated signals and not marketed for use as televisions; or
- 29 <u>(ii) Televisions with screen areas greater than one thousand four</u> 30 hundred square inches.
- 31 (23) "Tub spout diverter" means a device designed to stop the flow 32 of water into a bathtub and to divert it so that the water discharges 33 through a showerhead.
- $((\frac{(23)}{(24)}))$ <u>(24)</u> "Wine chillers designed and sold for use by an individual" means refrigerators designed and sold for the cooling and storage of wine by an individual.

- 1 **Sec. 3.** RCW 19.260.030 and 2009 c 501 s 2 are each amended to read 2 as follows:
- 3 (1) This chapter applies to the following types of new products 4 sold, offered for sale, or installed in the state:
 - (a) Automatic commercial ice cube machines;
 - (b) Commercial refrigerators and freezers;
 - (c) State-regulated incandescent reflector lamps;
- 8 (d) Wine chillers designed and sold for use by an individual;
- 9 (e) Hot water dispensers and mini-tank electric water heaters;
 - (f) Bottle-type water dispensers and point-of-use water dispensers;
- 11 (g) Pool heaters, residential pool pumps, and portable electric 12 spas;
- (h) Tub spout diverters; ((and))
- 14 (i) Commercial hot food holding cabinets; and
- 15 <u>(j) Televisions</u>.

6 7

10

- 16 (2) This chapter applies equally to products whether they are sold, 17 offered for sale, or installed as stand-alone products or as components 18 of other products.
- 19 (3) This chapter does not apply to:
- 20 (a) New products manufactured in the state and sold outside the 21 state;
- 22 (b) New products manufactured outside the state and sold at 23 wholesale inside the state for final retail sale and installation 24 outside the state;
- 25 (c) Products installed in mobile manufactured homes at the time of construction; or
- 27 (d) Products designed expressly for installation and use in 28 recreational vehicles.
- 29 **Sec. 4.** RCW 19.260.040 and 2009 c 501 s 3 are each amended to read 30 as follows:
- The minimum efficiency standards specified in this section apply to the types of new products set forth in RCW 19.260.030.
- 33 (1)(a) Automatic commercial ice cube machines must have daily 34 energy use and daily water use no greater than the applicable values in 35 the following table:

p. 5 SB 6489

			Maximum	Maximum condenser
		Harvest rate	energy use	water use
Equipment type	Type of cooling	(lbs. ice/24 hrs.)	(kWh/100 lbs.)	(gallons/100 lbs. ice)
Ice-making head	water	<500	7.800055H	200022H
		>=500<1436	5.580011H	200022H
		>=1436	4.0	200022H
Ice-making head	air	450	10.260086Н	Not applicable
		>=450	6.890011H	Not applicable
Remote condensing but	air	<1000	8.850038	Not applicable
not remote compressor		>=1000	5.10	Not applicable
Remote condensing and	air	<934	8.850038H	Not applicable
remote compressor		>=934	5.3	Not applicable
Self-contained models	water	<200	11.400190H	1910315H
		>=200	7.60	1910315H
Self-contained models	air	<175	18.00469H	Not applicable
		>=175	9.80	Not applicable

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

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

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

27	Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
28	Reach-in cabinets, pass-through cabinets,	Solid	0.10V + 2.04
29	and roll-in or roll-through cabinets that are	Transparent	0.12V+3.34
	refrigerators		
30	Reach-in cabinets, pass-through cabinets,	Transparent	.126V+3.51
31	and roll-in or roll-through cabinets that are		
32	"pulldown" refrigerators		
33	Reach-in cabinets, pass-through cabinets,	Solid	0.40V+1.38
	and roll-in or roll-through cabinets that are		
	freezers		

[&]quot;Maximum water use" applies only to water used for the condenser.

1	Transparent	0.75V+4.10	
2	Reach-in cabinets that are refrigerator-	Solid	0.27AV - 0.71
3	freezers		
4	with an AV of 5.19 or higher		

- 5 kWh= kilowatt hours
- $V = \text{total volume } (ft^3)$

- AV= adjusted volume= $[1.63 \text{ x freezer volume } (\text{ft}^3)]$ + refrigerator volume (ft^3)
 - (b) For purposes of this section, "pulldown" designates products designed to take a fully stocked refrigerator with beverages at 90 degrees Fahrenheit and cool those beverages to a stable temperature of 38 degrees Fahrenheit within 12 hours or less. Daily energy consumption shall be measured in accordance with the American national standards institute/American society of heating, refrigerating and airconditioning engineers test method 117-2002, except that the backloading doors of pass-through and roll-through refrigerators and freezers must remain closed throughout the test, and except that the controls of all appliances must be adjusted to obtain the following product temperatures.

19	Product or compartment type	Integrated average product temperature in degrees Fahrenheit
20	Refrigerator	38±2
21	Freezer	0 <u>±</u> 2

- (3)(a) The lamp electrical power input of state-regulated incandescent reflector lamps shall meet the minimum average lamp efficacy requirements for federally regulated incandescent reflector lamps specified in 42 U.S.C. Sec. 6295(i)(1)(A)-(B).
- (b) The following types of incandescent lamps are exempt from these requirements:
- 28 (i) Lamps rated at fifty watts or less of the following types: BR 29 30, ER 30, BR 40, and ER 40;
- 30 (ii) Lamps rated at sixty-five watts of the following types: BR 30, BR 40, and ER 40; and
- 32 (iii) R 20 lamps of forty-five watts or less.

p. 7 SB 6489

- 1 (4)(a) Wine chillers designed and sold for use by an individual 2 must meet requirements specified in the California Code of Regulations, 3 Title 20, section 1605.3 in effect as of July 26, 2009.
- 4 (b) Wine chillers designed and sold for use by an individual shall 5 be tested in accordance with the method specified in the California 6 Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.
- 8 (5)(a) The standby energy consumption of bottle-type water 9 dispensers, and point-of-use water dispensers, dispensing both hot and 10 cold water, manufactured on or after January 1, 2010, shall not exceed 11 1.2 kWh/day.
- 12 (b) The test method for water dispensers shall be the environmental 13 protection agency energy star program requirements for bottled water 14 coolers version 1.1.
- 15 (6)(a) The standby energy consumption of hot water dispensers and 16 mini-tank electric water heaters manufactured on or after January 1, 17 2010, shall be not greater than 35 watts.
 - (b) This subsection does not apply to any water heater:
- 19 (i) That is within the scope of 42 U.S.C. Sec. 6292(a)(4) or 20 6311(1);
 - (ii) That has a rated storage volume of less than 20 gallons; and
- (iii) For which there is no federal test method applicable to that type of water heater.
 - (c) Hot water dispensers shall be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.
 - (d) Mini-tank electric water heaters shall be tested in accordance with the method specified in the California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009.
- 30 (7) The following standards are established for pool heaters, 31 residential pool pumps, ((and)) portable electric spas and televisions:
- 32 (a) Natural gas pool heaters shall not be equipped with constant 33 burning pilots.
- 34 (b) Residential pool pump motors manufactured on or after January 35 1, 2010, must meet requirements specified in the California Code of 36 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.
- 37 (c) Portable electric spas manufactured on or after January 1,

SB 6489 p. 8

18

21

24

25

26

27

28

29

2010, must meet requirements specified in the California Code of Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

1 2

6 7

8

23

24

25

26

27

2829

30

- 3 (d) Portable electric spas must be tested in accordance with the 4 method specified in the California Code of Regulations, Title 20, 5 section 1604 in effect as of July 26, 2009.
 - (e) Televisions manufactured on or after January 1, 2011, must be tested in accordance with and meet requirements specified in the California Code of Regulations, Title 20, sections 1604 and 1605.3 in effect as of the effective date of this section.
- 10 (8)(a) The leakage rate of tub spout diverters shall be no greater 11 than the applicable requirements shown in the following table:

Maximum Leakage Rate
Appliance Testing Conditions Effective January 1, 2009
When new 0.01 gpm
Tub spout diverters After 15,000 cycles of diverting 0.05 gpm

- 16 (b) Showerhead tub spout diverter combinations shall meet both the 17 federal standard for showerheads established pursuant to 42 U.S.C. Sec. 18 6291 et seq. and the standard for tub spout diverters specified in this 19 section.
- 20 (9)(a) The idle energy rate of commercial hot food holding cabinets 21 manufactured on or after January 1, 2010, shall be no greater than 40 22 watts per cubic foot of measured interior volume.
 - (b) The idle energy rate of commercial hot food holding cabinets shall be determined using ANSI/ASTM F2140-01 standard test method for the performance of hot food holding cabinets (test for idle energy rate dry test). Commercial hot food holding cabinet interior volume shall be calculated using straight line segments following the gross interior dimensions of the appliance and using the following equation: Interior height x interior width x interior depth. Interior volume shall not account for racks, air plenums, or other interior parts.
- 31 **Sec. 5.** RCW 19.260.050 and 2009 c 501 s 4 are each amended to read 32 as follows:
- 33 (1) No new commercial refrigerator or freezer or state-regulated 34 incandescent reflector lamp manufactured on or after January 1, 2007,

p. 9 SB 6489

- may be 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 19.260.040. No new automatic commercial ice cube machine manufactured on or after January 1, 2008, may be 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 19.260.040.
 - (2) On or after January 1, 2008, no new commercial refrigerator or freezer or state-regulated incandescent reflector lamp manufactured on or after January 1, 2007, may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040. On or after January 1, 2009, no new automatic commercial ice cube machine manufactured on or after January 1, 2008, may be installed for compensation in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040.
 - (3) Standards for state-regulated incandescent reflector lamps are effective on the dates specified in subsections (1) and (2) of this section.
 - (4) The following products, if manufactured on or after January 1, 2010, may not be sold or offered <u>for sale</u> in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040:
 - (a) Wine chillers designed and sold for use by an individual;
 - (b) Hot water dispensers and mini-tank electric water heaters;
 - (c) Bottle-type water dispensers and point-of-use water dispensers;
- 26 (d) Pool heaters, residential pool pumps, and portable electric 27 spas;
 - (e) Tub spout diverters; and

8

9

10

1112

13

14

15 16

17

18

19

2021

22

23

24

25

28

29

30

3132

33

3435

- (f) Commercial hot food holding cabinets.
- (5) The following products, if manufactured on or after January 1, 2010, may not be installed for compensation in the state on or after January 1, 2011, unless the efficiency of the new product meets or exceeds the efficiency standards set forth in RCW 19.260.040:
 - (a) Wine chillers designed and sold for use by an individual;
 - (b) Hot water dispensers and mini-tank electric water heaters;
- 36 (c) Bottle-type water dispensers and point-of-use water dispensers;
- 37 (d) Pool heaters, residential pool pumps, and portable electric 38 spas;

2	(f) Commercial hot food holding cabinets.
3	(6) Televisions manufactured on or after January 1, 2011, may not
4	be sold, offered for sale, or installed for compensation in the state
5	unless they meet or exceed the efficiency standards referenced in RCW
6	19.260.040.

1 (e) Tub spout diverters; and

7

8

9

NEW SECTION. Sec. 6. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

--- END ---

p. 11 SB 6489