
SUBSTITUTE HOUSE BILL 1003

State of Washington

62nd Legislature

2011 Regular Session

By House Technology, Energy & Communications (originally sponsored by Representatives Morris, Stanford, Frockt, Moeller, and Upthegrove)

READ FIRST TIME 02/07/11.

1 AN ACT Relating to efficiency standards for consumer products;
2 amending RCW 19.260.030, 19.260.040, and 19.260.050; and reenacting and
3 amending RCW 19.260.020.

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

5 **Sec. 1.** RCW 19.260.020 and 2009 c 565 s 18 and 2009 c 501 s 1 are
6 each reenacted and amended to read as follows:

7 The definitions in this section apply throughout this chapter
8 unless the context clearly requires otherwise.

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

14 (2) "Bottle-type water dispenser" means a water dispenser that uses
15 a bottle or reservoir as the source of potable water.

16 (3) "Commercial hot food holding cabinet" means a heated, fully
17 enclosed compartment, with one or more solid or partial glass doors,
18 that is designed to maintain the temperature of hot food that has been

1 cooked in a separate appliance. "Commercial hot food holding cabinet"
2 does not include heated glass merchandising cabinets, drawer warmers,
3 or cook and hold appliances.

4 (4)(a) "Commercial refrigerators and freezers" means refrigerators,
5 freezers, or refrigerator-freezers designed for use by commercial or
6 institutional facilities for the purpose of storing or merchandising
7 food products, beverages, or ice at specified temperatures that: (i)
8 Incorporate most components involved in the vapor-compression cycle and
9 the refrigerated compartment in a single cabinet; and (ii) may be
10 configured with either solid or transparent doors as a reach-in
11 cabinet, pass-through cabinet, roll-in cabinet, or roll-through
12 cabinet.

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

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

21 (6) "Cook and hold appliance" means a multiple mode appliance
22 intended for cooking food that may be used to hold the temperature of
23 the food that has been cooked in the same appliance.

24 (7) "Department" means the department of commerce.

25 (8) "Drawer warmer" means an appliance that consists of one or more
26 heated drawers and that is designed to hold hot food that has been
27 cooked in a separate appliance at a specified temperature.

28 (9) "Heated glass merchandising cabinet" means an appliance with a
29 heated cabinet constructed of glass or clear plastic doors which, with
30 seventy percent or more clear area, is designed to display and maintain
31 the temperature of hot food that has been cooked in a separate
32 appliance.

33 (10) "Hot water dispenser" means a small electric water heater that
34 has a measured storage volume of no greater than one gallon.

35 (11) "Mini-tank electric water heater" means a small electric water
36 heater that has a measured storage volume of more than one gallon and
37 a rated storage volume of less than twenty gallons.

1 (12) "Pass-through cabinet" means a commercial refrigerator or
2 freezer with hinged or sliding doors on both the front and rear of the
3 unit.

4 (13) "Point-of-use water dispenser" means a water dispenser that
5 uses a pressurized water utility connection as the source of potable
6 water.

7 (14) "Pool heater" means an appliance designed for heating
8 nonpotable water contained at atmospheric pressure for swimming pools,
9 spas, hot tubs, and similar applications.

10 (15) "Portable electric spa" means a factory-built electric spa or
11 hot tub, supplied with equipment for heating and circulating water.

12 (16) "Reach-in cabinet" means a commercial refrigerator or freezer
13 with hinged or sliding doors or lids, but does not include roll-in or
14 roll-through cabinets or pass-through cabinets.

15 (17) "Residential pool pump" means a pump used to circulate and
16 filter pool water in order to maintain clarity and sanitation.

17 (18)(a) "Roll-in cabinet" means a commercial refrigerator or
18 freezer with hinged or sliding doors that allow wheeled racks of
19 product to be rolled into the unit.

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

23 (19) "Showerhead" means a device through which water is discharged
24 for a shower bath.

25 (20) "Showerhead tub spout diverter combination" means a group of
26 plumbing fittings sold as a matched set and consisting of a control
27 valve, a tub spout diverter, and a showerhead.

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

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

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

1 (22) "Tub spout diverter" means a device designed to stop the flow
2 of water into a bathtub and to divert it so that the water discharges
3 through a showerhead.

4 (23) "Wine chillers designed and sold for use by an individual"
5 means refrigerators designed and sold for the cooling and storage of
6 wine by an individual.

7 (24) "Audio standby-passive mode" means the appliance is connected
8 to a power source, produces neither sound nor performs any mechanical
9 function (e.g., playing, recording), but may be switched into another
10 mode with the remote control unit or an internal signal.

11 (25)(a) "Class A external power supply" means an external power
12 supply circuit that is used to convert household electric current into
13 DC current or lower voltage AC current to operate a consumer product
14 and that:

15 (i) Is designed to convert line voltage AC input into lower voltage
16 AC or DC output;

17 (ii) Is able to convert to only one AC or DC output voltage at a
18 time;

19 (iii) Is sold with, or intended to be used with, a separate end-use
20 product that constitutes the primary load;

21 (iv) Is contained in a separate physical enclosure from the end-use
22 product;

23 (v) Is connected to the end-use product via a removable or hard-
24 wired male/female electrical connection, cable, cord, or wiring;

25 (vi) Has nameplate output power that is less than or equal to two
26 hundred fifty watts; and

27 (vii) Is a federally regulated external power supply.

28 (b) The term "class A external power supply" does not include a
29 device that requires federal food and drug administration listing and
30 approval as a medical device in accordance with section 513 of the
31 federal food, drug, and cosmetic act (21 U.S.C. 360c), or a device that
32 powers the charger of a detachable battery pack or charges the battery
33 of a product that is fully or primarily motor operated.

34 (26) "Compact audio product" means an integrated audio system
35 encased in a single housing that includes an amplifier and radio tuner,
36 attachable or separable speakers, and can reproduce audio from one or
37 more of the following media: Magnetic tape, CD, DVD, or flash memory.

1 "Compact audio product" does not include products that can be
2 independently powered by internal batteries or that have a powered
3 external satellite antenna, or that can provide a video output signal.

4 (27) "Digital versatile disc (DVD)" means a laser-encoded plastic
5 medium capable of storing a large amount of digital audio, video, and
6 computer data.

7 (28) "Digital versatile disc player" or "DVD player" means a
8 commercially available electronic product encased in a single housing
9 that includes an integral power supply and for which the sole purpose
10 is the decoding of digitized video signals on a DVD.

11 (29) "Digital versatile disc (DVD) recorder" or "DVD recorder"
12 means a commercially available electronic product encased in a single
13 housing that includes an integral power supply and for which the sole
14 purpose is the production or recording of digitized video signals on a
15 DVD. "DVD recorder" does not include models that have an electronic
16 programming guide function.

17 (30)(a) "State-regulated external power supply" means a single-
18 voltage external AC to DC or AC to AC power supply that:

19 (i) Is designed to convert line voltage AC input into lower voltage
20 DC or AC output;

21 (ii) Is able to convert to only one DC or AC output voltage at a
22 time;

23 (iii) Is sold with, or intended to be used with, a separate end-use
24 product that constitutes the primary load;

25 (iv) Is contained within a separate physical enclosure from the
26 end-use product;

27 (v) Is connected to the end-use product via a removable or hard-
28 wired male/female electrical connection, cable, cord, or other wiring;

29 (vi) Does not have batteries or battery packs that physically
30 attach directly (including those that are removable) to the power
31 supply unit;

32 (vii) Does not have a battery chemistry or type selector switch and
33 an indicator light; or, does not have a battery chemistry or type
34 selector switch and a state of charge meter; and

35 (viii) Has a nameplate output power less than or equal to two
36 hundred fifty watts.

37 (b) "State-regulated external power supply" does not include a

1 device that is a "class A external power supply" that is federally
2 regulated.

3 (31) "Video standby-passive mode" means the appliance is connected
4 to a power source, does not perform any mechanical function (e.g.,
5 playing, recording), does not produce video or audio output signals,
6 but may be switched into another mode with the remote control unit or
7 an internal signal.

8 **Sec. 2.** RCW 19.260.030 and 2009 c 501 s 2 are each amended to read
9 as follows:

10 (1) This chapter applies to the following types of new products
11 sold, offered for sale, or installed in the state:

- 12 (a) Automatic commercial ice cube machines;
- 13 (b) Commercial refrigerators and freezers;
- 14 (c) State-regulated incandescent reflector lamps;
- 15 (d) Wine chillers designed and sold for use by an individual;
- 16 (e) Hot water dispensers and mini-tank electric water heaters;
- 17 (f) Bottle-type water dispensers and point-of-use water dispensers;
- 18 (g) Pool heaters, residential pool pumps, and portable electric
19 spas;
- 20 (h) Tub spout diverters; (~~and~~)
- 21 (i) Commercial hot food holding cabinets;
- 22 (j) Compact audio products, digital versatile disc players, and
23 digital versatile disc recorders; and
- 24 (k) State-regulated external power supplies, which are single
25 voltage external AC to DC or AC to AC power supplies included with
26 other retail products, and single voltage external AC to DC or AC to AC
27 power supplies sold separately, excluding power supplies that are
28 classified as devices for human use under the federal food, drug, and
29 cosmetic act and require the United States food and drug administration
30 listing and approval as a medical device.

31 (2) This chapter applies equally to products whether they are sold,
32 offered for sale, or installed as stand-alone products or as components
33 of other products.

34 (3) This chapter does not apply to:
35 (a) New products manufactured in the state and sold outside the
36 state;

1 (b) New products manufactured outside the state and sold at
 2 wholesale inside the state for final retail sale and installation
 3 outside the state;

4 (c) Products installed in mobile manufactured homes at the time of
 5 construction; or

6 (d) Products designed expressly for installation and use in
 7 recreational vehicles.

8 **Sec. 3.** RCW 19.260.040 and 2009 c 501 s 3 are each amended to read
 9 as follows:

10 The minimum efficiency standards specified in this section apply to
 11 the types of new products set forth in RCW 19.260.030.

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

Equipment type	Type of cooling	Harvest rate (lbs. ice/24 hrs.)	Maximum energy use (kWh/100 lbs.)	Maximum condenser water use (gallons/100 lbs. ice)
Ice-making head	water	<500	7.80 - .0055H	200 - .022H
		>=500<1436	5.58 - .0011H	200 - .022H
		>=1436	4.0	200 - .022H
Ice-making head	air	450	10.26 - .0086H	Not applicable
		>=450	6.89 - .0011H	Not applicable
Remote condensing but not remote compressor	air	<1000	8.85 - .0038	Not applicable
		>=1000	5.10	Not applicable
Remote condensing and remote compressor	air	<934	8.85 - .0038H	Not applicable
		>=934	5.3	Not applicable
Self-contained models	water	<200	11.40 - .0190H	191 - .0315H
		>=200	7.60	191 - .0315H
Self-contained models	air	<175	18.0 - .0469H	Not applicable
		>=175	9.80	Not applicable

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

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

33 (b) For purposes of this section, automatic commercial ice cube
 34 machines shall be tested in accordance with the ARI 810-2003 test

1 method as published by the air-conditioning and refrigeration
 2 institute. Ice- making heads include all automatic commercial ice cube
 3 machines that are not split system ice makers or self-contained models
 4 as defined in ARI 810-2003.

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

7 Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
8 Reach-in cabinets, pass-through cabinets, 9 and roll-in or roll-through cabinets that are refrigerators	Solid	0.10V+2.04
	Transparent	0.12V+3.34
10 Reach-in cabinets, pass-through cabinets, 11 and roll-in or roll-through cabinets that are 12 "pulldown" refrigerators	Transparent	.126V+3.51
13 Reach-in cabinets, pass-through cabinets, 14 and roll-in or roll-through cabinets that are freezers	Solid	0.40V+1.38
	Transparent	0.75V+4.10
15 Reach-in cabinets that are refrigerator- 16 freezers 17 with an AV of 5.19 or higher	Solid	0.27AV - 0.71

18 kWh= kilowatt hours
 19 V= total volume (ft³)
 20 AV= adjusted volume= [1.63 x freezer volume (ft³)]+ refrigerator volume (ft³)

21 (b) For purposes of this section, "pulldown" designates products
 22 designed to take a fully stocked refrigerator with beverages at 90
 23 degrees Fahrenheit and cool those beverages to a stable temperature of
 24 38 degrees Fahrenheit within 12 hours or less. Daily energy
 25 consumption shall be measured in accordance with the American national
 26 standards institute/American society of heating, refrigerating and air-
 27 conditioning engineers test method 117-2002, except that the back-
 28 loading doors of pass-through and roll-through refrigerators and
 29 freezers must remain closed throughout the test, and except that the
 30 controls of all appliances must be adjusted to obtain the following
 31 product temperatures.

32 Product or compartment type	Integrated average product temperature in degrees Fahrenheit
33 Refrigerator	38±2

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2 (3)(a) The lamp electrical power input of state-regulated
3 incandescent reflector lamps shall meet the minimum average lamp
4 efficacy requirements for federally regulated incandescent reflector
5 lamps specified in 42 U.S.C. Sec. 6295(i)(1)(A)-(B).

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

8 (i) Lamps rated at fifty watts or less of the following types: BR
9 30, ER 30, BR 40, and ER 40;

10 (ii) Lamps rated at sixty-five watts of the following types: BR
11 30, BR 40, and ER 40; and

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

13 (4)(a) Wine chillers designed and sold for use by an individual
14 must meet requirements specified in the California Code of Regulations,
15 Title 20, section 1605.3 in effect as of July 26, 2009.

16 (b) Wine chillers designed and sold for use by an individual shall
17 be tested in accordance with the method specified in the California
18 Code of Regulations, Title 20, section 1604 in effect as of July 26,
19 2009.

20 (5)(a) The standby energy consumption of bottle-type water
21 dispensers, and point-of-use water dispensers, dispensing both hot and
22 cold water, manufactured on or after January 1, 2010, shall not exceed
23 1.2 kWh/day.

24 (b) The test method for water dispensers shall be the environmental
25 protection agency energy star program requirements for bottled water
26 coolers version 1.1.

27 (6)(a) The standby energy consumption of hot water dispensers and
28 mini-tank electric water heaters manufactured on or after January 1,
29 2010, shall be not greater than 35 watts.

30 (b) This subsection does not apply to any water heater:

31 (i) That is within the scope of 42 U.S.C. Sec. 6292(a)(4) or
32 6311(1);

33 (ii) That has a rated storage volume of less than 20 gallons; and

34 (iii) For which there is no federal test method applicable to that
35 type of water heater.

36 (c) Hot water dispensers shall be tested in accordance with the

1 method specified in the California Code of Regulations, Title 20,
2 section 1604 in effect as of July 26, 2009.

3 (d) Mini-tank electric water heaters shall be tested in accordance
4 with the method specified in the California Code of Regulations, Title
5 20, section 1604 in effect as of July 26, 2009.

6 (7) The following standards are established for pool heaters,
7 residential pool pumps, and portable electric spas:

8 (a) Natural gas pool heaters shall not be equipped with constant
9 burning pilots.

10 (b) Residential pool pump motors manufactured on or after January
11 1, 2010, must meet requirements specified in the California Code of
12 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

13 (c) Portable electric spas manufactured on or after January 1,
14 2010, must meet requirements specified in the California Code of
15 Regulations, Title 20, section 1605.3 in effect as of July 26, 2009.

16 (d) Portable electric spas must be tested in accordance with the
17 method specified in the California Code of Regulations, Title 20,
18 section 1604 in effect as of July 26, 2009.

19 (8)(a) The leakage rate of tub spout diverters shall be no greater
20 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

25 (b) Showerhead tub spout diverter combinations shall meet both the
26 federal standard for showerheads established pursuant to 42 U.S.C. Sec.
27 6291 et seq. and the standard for tub spout diverters specified in this
28 section.

29 (9)(a) The idle energy rate of commercial hot food holding cabinets
30 manufactured on or after January 1, 2010, shall be no greater than 40
31 watts per cubic foot of measured interior volume.

32 (b) The idle energy rate of commercial hot food holding cabinets
33 shall be determined using ANSI/ASTM F2140-01 standard test method for
34 the performance of hot food holding cabinets (test for idle energy rate
35 dry test). Commercial hot food holding cabinet interior volume shall

1 be calculated using straight line segments following the gross interior
2 dimensions of the appliance and using the following equation: Interior
3 height x interior width x interior depth. Interior volume shall not
4 account for racks, air plenums, or other interior parts.

5 (10) The following standards are established for consumer audio and
6 video equipment:

7 (a) The maximum power usage of compact audio products manufactured
8 on or after January 1, 2012, may not exceed two watts in audio standby-
9 passive mode for those products without a permanently illuminated clock
10 display and four watts in audio standby-passive mode for those products
11 with a permanently illuminated clock display.

12 (b) The maximum power usage of digital versatile disc players and
13 digital versatile disc recorders manufactured on or after January 1,
14 2012, may not exceed three watts in video standby-passive mode.

15 (c) Compact audio products, digital versatile disc players, and
16 digital versatile disc recorders must be tested in accordance with the
17 international electrotechnical commission (IEC) 62087:2002(E) -
18 "Methods of Measurement for the Power Consumption of Audio, Video, and
19 Related Equipment."

20 (11)(a) State-regulated external power supplies manufactured on or
21 after January 1, 2012, must meet the standards in the following table:

<u>Nameplate Output</u>	<u>Minimum Efficiency in Active Mode</u>
<u><1 Watt</u>	<u>0.5 * Nameplate Output</u>
<u>≥ 1 and ≤ 51 Watts</u>	<u>0.09 * Ln(Nameplate Output) + 0.5</u>
<u>>51 Watts</u>	<u>0.85</u>

<u>Any Output</u>	<u>Maximum Energy Consumption in No-Load Mode</u>
<u>Any Output</u>	<u>0.5 Watts</u>

29 Where Ln(Nameplate Output)=Natural Logarithm of the nameplate output expressed in Watts;

30 (b) State-regulated external power supplies must be tested in
31 accordance with the United States environmental protection agency's
32 energy star program, "Test Method for Calculating the Energy Efficiency
33 of Single-Voltage External AC-DC and AC-AC Power Supplies" as it
34 existed on August 11, 2004, provided that the test voltage specified in

1 section 4(d) of the test method must be only one hundred fifteen (115)
2 volts, 60 Hz.

3 **Sec. 4.** RCW 19.260.050 and 2009 c 501 s 4 are each amended to read
4 as follows:

5 (1) No new commercial refrigerator or freezer or state-regulated
6 incandescent reflector lamp manufactured on or after January 1, 2007,
7 may be sold or offered for sale in the state unless the efficiency of
8 the new product meets or exceeds the efficiency standards set forth in
9 RCW 19.260.040. No new automatic commercial ice cube machine
10 manufactured on or after January 1, 2008, may be sold or offered for
11 sale in the state unless the efficiency of the new product meets or
12 exceeds the efficiency standards set forth in RCW 19.260.040.

13 (2) On or after January 1, 2008, no new commercial refrigerator or
14 freezer or state-regulated incandescent reflector lamp manufactured on
15 or after January 1, 2007, may be installed for compensation in the
16 state unless the efficiency of the new product meets or exceeds the
17 efficiency standards set forth in RCW 19.260.040. On or after January
18 1, 2009, no new automatic commercial ice cube machine manufactured on
19 or after January 1, 2008, may be installed for compensation in the
20 state unless the efficiency of the new product meets or exceeds the
21 efficiency standards set forth in RCW 19.260.040.

22 (3) Standards for state-regulated incandescent reflector lamps are
23 effective on the dates specified in subsections (1) and (2) of this
24 section.

25 (4) The following products, if manufactured on or after January 1,
26 2010, may not be sold or offered in the state unless the efficiency of
27 the new product meets or exceeds the efficiency standards set forth in
28 RCW 19.260.040:

- 29 (a) Wine chillers designed and sold for use by an individual;
- 30 (b) Hot water dispensers and mini-tank electric water heaters;
- 31 (c) Bottle-type water dispensers and point-of-use water dispensers;
- 32 (d) Pool heaters, residential pool pumps, and portable electric
33 spas;
- 34 (e) Tub spout diverters; and
- 35 (f) Commercial hot food holding cabinets.

36 (5) The following products, if manufactured on or after January 1,

1 2010, may not be installed for compensation in the state on or after
2 January 1, 2011, unless the efficiency of the new product meets or
3 exceeds the efficiency standards set forth in RCW 19.260.040:

4 (a) Wine chillers designed and sold for use by an individual;

5 (b) Hot water dispensers and mini-tank electric water heaters;

6 (c) Bottle-type water dispensers and point-of-use water dispensers;

7 (d) Pool heaters, residential pool pumps, and portable electric
8 spas;

9 (e) Tub spout diverters; and

10 (f) Commercial hot food holding cabinets.

11 (6)(a) No new compact audio products, digital versatile disc
12 players, or digital versatile disc recorders, if manufactured on or
13 after January 1, 2012, may be sold or offered for sale in the state
14 unless the efficiency of the new product meets or exceeds the
15 efficiency standards set forth in RCW 19.260.040.

16 (b) No new compact audio products, digital versatile disc players,
17 or digital versatile disc recorders, if manufactured on or after
18 January 1, 2012, may be installed for compensation in the state on or
19 after January 1, 2013, unless the efficiency of the new product meets
20 or exceeds the efficiency standards set forth in RCW 19.260.040.

21 (7)(a) No new state-regulated external power supply, if
22 manufactured on or after January 1, 2012, may be sold or offered for
23 sale in the state unless the efficiency of the new product meets or
24 exceeds the efficiency standards set forth in RCW 19.260.040.

25 (b) No new state-regulated external power supply, if manufactured
26 on or after January 1, 2012, may be installed for compensation in the
27 state on or after January 1, 2013, unless the efficiency of the new
28 product meets or exceeds the efficiency standards set forth in RCW
29 19.260.040.

30 NEW SECTION. Sec. 5. If any provision of this act or its
31 application to any person or circumstance is held invalid, the
32 remainder of the act or the application of the provision to other
33 persons or circumstances is not affected.

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