LC 2186 2013 Regular Session 2/18/13 (DLT/ps)

DRAFT

SUMMARY

Establishes minimum energy efficiency standards for certain products. Prohibits sale or installation of products that do not meet standards.

1	A	BILL	FOR.	AN	ACT
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- 2 Relating to minimum energy efficiency standards; creating new provisions; and amending ORS 469.229, 469.233, 469.238 and 469.239.
- 4 Be It Enacted by the People of the State of Oregon:

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DEFINITIONS

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SECTION 1. ORS 469.229 is amended to read:

- 469.229. As used in ORS 469.229 to 469.261, unless the context clearly requires otherwise:
- (1) "Automatic commercial ice cube machine" means a factory-made assembly, not necessarily shipped in one package, consisting of a condensing unit and ice-making section operating as an integrated unit with means for making and harvesting ice cubes, and any integrated components for storing or dispensing ice.
- (2) "Ballast" means a device used with an electric discharge lamp to obtain necessary circuit conditions for starting and operating the lamp.
- (3) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.
- 20 (4) "Commercial clothes washer" means a soft mount horizontal-axis or 21 vertical-axis clothes washer that:

- 1 (a) Has a clothes compartment no greater than 3.5 cubic feet in the case 2 of a horizontal-axis product or no greater than 4 cubic feet in the case of a 3 vertical-axis product; and
- 4 (b) Is designed for use by more than one household.
- (5)(a) "Commercial hot food holding cabinet" means an appliance that is a heated, fully-enclosed compartment with one or more solid doors and is designed to maintain the temperature of hot food that has been cooked in a separate appliance.
- 9 (b) "Commercial hot food holding cabinet" does not include heated glass 10 merchandising cabinets, drawer warmers or cook-and-hold appliances.
 - (6) "Commercial prerinse spray valve" means a handheld device designed and marketed for use with commercial dishwashing equipment and that sprays water on dishes, flatware and other food service items for the purpose of removing food residue prior to their cleaning.
 - (7) "Commercial refrigerators or freezers" means refrigerators, freezers or refrigerator-freezers, smaller than 85 cubic feet of internal volume and designed for use by commercial or institutional facilities for the purpose of storing or merchandising food products, beverages or ice at specified temperatures, other than products without doors, walk-in refrigerators or freezers, consumer products that are federally regulated pursuant to 42 U.S.C. 6291 et seq. or freezers specifically designed for ice cream. "Commercial refrigerators or freezers":
- 23 (a) Must incorporate most components involved in the vapor-compression 24 cycle and the refrigerated compartment in a single cabinet; and
- 25 (b) May be configured with either solid or transparent doors as a reach-in 26 cabinet, pass-through cabinet, roll-in cabinet or roll-through cabinet.
- (8)(a) "Compact audio product," also known as a mini, mid, micro or shelf audio system, means an integrated audio system encased in a single housing that includes an amplifier and radio tuner and attached or separable speakers that can reproduce audio from one or more of the following media:
 - (A) Magnetic tape;

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- 1 (B) Compact disc;
- 2 (C) DVD; or

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- 3 (D) Flash memory.
- (b) "Compact audio product" does not include products that can be independently powered by internal batteries, have a powered external satellite antenna or can provide a video output signal.
- 7 (9) "Compensation" means money or any other valuable thing, regardless 8 of form, received or to be received by a person for services rendered.
- 9 (10) "Digital versatile disc" or "DVD" means a laser-encoded plastic me-10 dium capable of storing a large amount of digital audio, video and computer 11 data.
- 12 (11)(a) "Digital versatile disc player" or "digital versatile disc recorder"
 13 means a commercially available electronic product encased in a single
 14 housing that includes an integral power supply and for which the sole pur15 pose is, respectively, the decoding and the production or recording of
 16 digitized video signal on a DVD.
- (b) "Digital versatile disc recorder" does not include models that have an electronic programming guide function that provides an interactive, onscreen menu of television listings and downloads program information from the vertical blanking interval of a regular television signal.
 - (12) "Dual flush tank-type water closet" means a tank-type water closet that incorporates a feature that allows the user to flush the water closet with a reduced volume of water or a full volume of water.
 - [(12)] (13) "High-intensity discharge lamp" means a lamp in which light is produced by the passage of an electric current through a vapor or gas, and in which the light-producing arc is stabilized by bulb wall temperature and the arc tube has a bulb wall loading in excess of three watts per square centimeter.
- [(13)] (14) "Illuminated exit sign" means an internally illuminated sign that is designed to be permanently fixed in place to identify a building exit, that consists of an electrically powered integral light source that illuminates

- 1 the legend "EXIT" and any directional indicators and that provides contrast
- 2 between the legend, any directional indicators and the background.
- 3 (15) "Inductive charger system" means a small battery charger
- 4 system that transfers power to the charger through magnetic or elec-
- 5 tric induction.
- 6 (16)(a) "Large battery charger system" means a battery charger 7 system with a rated input power of more than two kilowatts.
- 8 (b) "Large battery charger system" does not mean a battery charger 9 system for golf carts.
- 10 (17) "Lavatory faucet" means a plumbing fitting, including flow 11 restrictors, flow regulators, aerator devices and laminar devices, de-12 signed for installation at a washbowl or basin in a room containing a 13 water closet.
- [(14)] (18) "Metal halide lamp" means a high-intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in combination with metal tallic vapors.
- [(15)] (19) "Metal halide lamp fixture" means a light fixture designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.
- [(16)] (20) "Pass-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on both the front and rear of the unit.
- [(17)] (21) "Portable electric spa" means a factory-built electric spa or hot tub supplied with equipment for heating and circulating water.
- [(18)] (22) "Probe-start metal halide lamp ballast" means a ballast used to operate metal halide lamps that does not contain an igniter and that instead starts metal halide lamps by using a third starting electrode probe in the arc tube.
- [(19)] (23) "Reach-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors or lids, other than roll-in or roll-through cabinets or pass-through cabinets.
- 31 [(20)] (24) "Roll-in cabinet" means a commercial refrigerator or freezer

- 1 with hinged or sliding doors that allow wheeled racks to be rolled into the
- 2 unit.
- 3 [(21)] (25) "Roll-through cabinet" means a commercial refrigerator or
- 4 freezer with hinged or sliding doors on two sides of the cabinet that allow
- 5 wheeled racks to be rolled through the unit.
- 6 [(22)(a)] (26)(a) "Single-voltage external AC to DC power supply" means
- 7 a device, other than a product with batteries or battery packs that physically
- 8 attach directly to the power supply unit, a product with a battery chemistry
- 9 or type selector switch and indicator light or a product with a battery
- 10 chemistry or type selector switch and a state of charge meter, that:
- 11 (A) Is designed to convert line voltage alternating current input into
- 12 lower voltage direct current output;
- 13 (B) Is able to convert to only one direct current output voltage at a time;
- (C) Is sold with, or intended to be used with, a separate end-use product
- 15 that constitutes the primary power load;
- (D) Is contained within a separate physical enclosure from the end-use
- 17 product;
- 18 (E) Is connected to the end-use product via a removable or hard-wired
- 19 male or female electrical connection, cable, cord or other wiring; and
- 20 (F) Has a nameplate output power less than or equal to 250 watts.
- 21 (b) "Single-voltage external AC to DC power supply" does not include
- 22 power supplies that are classified as devices for human use under the Federal
- 23 Food, Drug and Cosmetic Act, 21 U.S.C. 360c.
- 24 (27) "Small battery charger system" means:
- 25 (a) A battery charger system with a rated input power of two kilo-
- 26 watts or less.
- 27 (b) A golf cart battery charger system, regardless of input power.
- 28 [(23)] (28) "State-regulated incandescent reflector lamp" means a lamp
- 29 that is not colored or designed for rough or vibrating service applications,
- 30 that has an inner reflective coating on the outer bulb to direct the light, that
- 31 has an E26 medium screw base, that has a rated voltage or voltage range

- 1 that lies at least partially within 115 to 130 volts and that falls into one of
- 2 the following categories:
- 3 (a) A bulged reflector or elliptical reflector bulb shape that has a diam-
- 4 eter that equals or exceeds 2.25 inches; or
- 5 (b) A reflector, parabolic aluminized reflector or similar bulb shape that
- 6 has a diameter of 2.25 to 2.75 inches.
- 7 (29) "Television" means an analog or digital device, including com-
- 8 bination televisions, television monitors and component televisions,
- 9 designed for the display and reception of a terrestrial, satellite, cable
- 10 or Internet protocol or other broadcast or recorded transmission of
- 11 analog or digital video or audio signals.
- 12 [(24)] (30) "Torchiere" means a portable electric lighting fixture with a
- 13 reflective bowl that directs light upward so as to produce indirect illumi-
- 14 nation.
- 15 [(25)] (31) "Traffic signal module" means a standard traffic signal indica-
- 16 tor, consisting of a light source, a lens and all other parts necessary for
- 17 operation, that is:
- (a) Eight inches, or approximately 200 millimeters, in diameter; or
- 19 (b) Twelve inches, or approximately 300 millimeters, in diameter.
- 20 [(26)] (32) "Unit heater" means a self-contained, vented fan-type commer-
- 21 cial space heater, other than a consumer product covered by federal stan-
- 22 dards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent,
- 23 forced flue heater with a sealed combustion burner, that uses natural gas or
- 24 propane and that is designed to be installed without ducts within a heated
- 25 space.
- 26 (33)(a) "Urinal" means a plumbing fixture that receives only liquid
- 27 body waste and then conveys the liquid waste through a trap into a
- 28 drainage system.
- 29 (b) "Urinal" does not mean fixtures designed for installation in
- 30 prisons or other penal institutions.
- [(27)] (34) "Walk-in refrigerator" and "walk-in freezer" mean a space re-

- 1 frigerated to temperatures, respectively, at or above and below 32° F that can
- 2 be walked into.
- 3 (35)(a) "Water closet" means a plumbing fixture with a water con-
- 4 taining receptor that receives liquid body waste and solid body waste
- 5 and upon actuation conveys the wastes through an integral trap into
- 6 a drainage system.
- 7 (b) "Water closet" does not mean fixtures designed for installation
- 8 in prisons or other penal institutions.
- 9 [(28)] (36) "Water dispenser" means a factory-made assembly that me-
- 10 chanically cools and heats potable water and dispenses the cooled or heated
- 11 water by integral or remote means.
- SECTION 2. ORS 469.229, as amended by section 1 of this 2013 Act, is
- 13 amended to read:
- 469.229. As used in ORS 469.229 to 469.261, unless the context clearly re-
- 15 quires otherwise:
- 16 (1) "Automatic commercial ice cube machine" means a factory-made as-
- 17 sembly, not necessarily shipped in one package, consisting of a condensing
- 18 unit and ice-making section operating as an integrated unit with means for
- 19 making and harvesting ice cubes, and any integrated components for storing
- 20 or dispensing ice.
- 21 (2) "Ballast" means a device used with an electric discharge lamp to ob-
- 22 tain necessary circuit conditions for starting and operating the lamp.
- 23 (3) "Bottle-type water dispenser" means a water dispenser that uses a
- 24 bottle or reservoir as the source of potable water.
- 25 (4) "Commercial clothes washer" means a soft mount horizontal-axis or
- 26 vertical-axis clothes washer that:
- (a) Has a clothes compartment no greater than 3.5 cubic feet in the case
- of a horizontal-axis product or no greater than 4 cubic feet in the case of a
- 29 vertical-axis product; and
- 30 (b) Is designed for use by more than one household.
- 31 (5)(a) "Commercial hot food holding cabinet" means an appliance that is

- 1 a heated, fully-enclosed compartment with one or more solid doors and is
- 2 designed to maintain the temperature of hot food that has been cooked in a
- 3 separate appliance.
- 4 (b) "Commercial hot food holding cabinet" does not include heated glass 5 merchandising cabinets, drawer warmers or cook-and-hold appliances.
- 6 (6) "Commercial prerinse spray valve" means a handheld device designed 7 and marketed for use with commercial dishwashing equipment and that 8 sprays water on dishes, flatware and other food service items for the purpose 9 of removing food residue prior to their cleaning.
- (7) "Commercial refrigerators or freezers" means refrigerators, freezers 10 or refrigerator-freezers, smaller than 85 cubic feet of internal volume and 11 12 designed for use by commercial or institutional facilities for the purpose of storing or merchandising food products, beverages or ice at specified tem-13 peratures, other than products without doors, walk-in refrigerators or 14 freezers, consumer products that are federally regulated pursuant to 42 15 U.S.C. 6291 et seq. or freezers specifically designed for ice cream. "Commer-16 cial refrigerators or freezers": 17
- 18 (a) Must incorporate most components involved in the vapor-compression 19 cycle and the refrigerated compartment in a single cabinet; and
- 20 (b) May be configured with either solid or transparent doors as a reach-in 21 cabinet, pass-through cabinet, roll-in cabinet or roll-through cabinet.
- (8)(a) "Compact audio product," also known as a mini, mid, micro or shelf audio system, means an integrated audio system encased in a single housing that includes an amplifier and radio tuner and attached or separable speakers that can reproduce audio from one or more of the following media:
- 26 (A) Magnetic tape;
- 27 (B) Compact disc;
- 28 (C) DVD; or
- 29 (D) Flash memory.
- 30 (b) "Compact audio product" does not include products that can be inde-31 pendently powered by internal batteries, have a powered external satellite

- 1 antenna or can provide a video output signal.
- 2 (9) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.
- 4 (10) "Digital versatile disc" or "DVD" means a laser-encoded plastic me-5 dium capable of storing a large amount of digital audio, video and computer 6 data.
- 7 (11)(a) "Digital versatile disc player" or "digital versatile disc recorder" 8 means a commercially available electronic product encased in a single 9 housing that includes an integral power supply and for which the sole pur10 pose is, respectively, the decoding and the production or recording of digitized video signal on a DVD.
- 12 (b) "Digital versatile disc recorder" does not include models that have an 13 electronic programming guide function that provides an interactive, on-14 screen menu of television listings and downloads program information from 15 the vertical blanking interval of a regular television signal.
- 16 (12) "Dual flush tank-type water closet" means a tank-type water closet 17 that incorporates a feature that allows the user to flush the water closet 18 with a reduced volume of water or a full volume of water.
- 19 (13)(a) "General purpose mercury vapor lamp" means a mercury 20 vapor lamp that:
- 21 (A) Has a screw base:
- 22 (B) Is designed for use in general lighting applications; and
- 23 (C) Is designed to operate on a mercury vapor lamp ballast or to 24 operate as self-ballasted.
- 25 (b) "General purpose mercury vapor lamp" does not mean a special 26 purpose mercury vapor lamp that is:
- 27 (A) Designed to operate on a vapor lamp base;
- 28 **(B) Marked for use as special application only and not for general** 29 **illumination; and**
- 30 (C) Marked to indicate the speciality for which the lamp is designed.
- [(13)] (14) "High-intensity discharge lamp" means a lamp in which light

- 1 is produced by the passage of an electric current through a vapor or gas, and
- 2 in which the light-producing arc is stabilized by bulb wall temperature and
- 3 the arc tube has a bulb wall loading in excess of three watts per square
- 4 centimeter.
- 5 (15)(a) "High light output double-ended quartz halogen lamp" means 6 a lamp that:
- 7 (A) Is designed for general outdoor lighting purposes;
- 8 (B) Contains a tungsten filament;
- 9 (C) Has a rated initial lumen value of greater than 6,000 and less than 40,000 lumens;
- 11 (D) Has at each end a recessed single contact, R7s base;
- 12 (E) Has a maximum overall length between 4 and 11 inches;
- 13 (F) Has a nominal diameter less than three-fourths inch (T6); and
- 14 (G) Is designed to be operated at a voltage between 110 volts and
- 15 200 volts or is designed to be operated at a voltage between 235 volts
- 16 and 300 volts.
- 17 (b) "High light output double-ended quartz halogen lamp" does not 18 mean a lamp that is:
- 19 (A) A tubular quartz infrared heat lamp; or
- 20 (B) Marked and marketed as a stage and studio lamp with a rated life of 500 hours or less.
- 22 [(14)] (16) "Illuminated exit sign" means an internally illuminated sign
- 23 that is designed to be permanently fixed in place to identify a building exit,
- 24 that consists of an electrically powered integral light source that illuminates
- 25 the legend "EXIT" and any directional indicators and that provides contrast
- 26 between the legend, any directional indicators and the background.
- 27 [(15)] (17) "Inductive charger system" means a small battery charger sys-
- 28 tem that transfer power to the charger through magnetic or electric in-
- 29 duction.
- 30 [(16)(a)] (18)(a) "Large battery charger system" means a battery charger
- 31 system with a rated input power of more than two kilowatts.

- 1 (b) "Large battery charger system" does not mean a battery charger system for golf carts.
- [(17)] (19) "Lavatory faucet" means a plumbing fitting, including flow restrictors, flow regulators, aerator devices and laminar devices, designed for installation at a washbowl or basin in a room containing a water closet.
- [(18)] (20) "Metal halide lamp" means a high-intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in combination with metallic vapors.
- [(19)] (21) "Metal halide lamp fixture" means a light fixture designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.
- [(20)] (22) "Pass-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on both the front and rear of the unit.
- 14 [(21)] (23) "Portable electric spa" means a factory-built electric spa or hot 15 tub supplied with equipment for heating and circulating water.
- [(22)] (24) "Probe-start metal halide lamp ballast" means a ballast used to operate metal halide lamps that does not contain an igniter and that instead starts metal halide lamps by using a third starting electrode probe in the arc tube.
- [(23)] (25) "Reach-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors or lids, other than roll-in or roll-through cabinets or pass-through cabinets.
- [(24)] (26) "Roll-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors that allow wheeled racks to be rolled into the unit.
- [(25)] (27) "Roll-through cabinet" means a commercial refrigerator or freezer with hinged or sliding doors on two sides of the cabinet that allow wheeled racks to be rolled through the unit.
- [(26)(a)] (28)(a) "Single-voltage external AC to DC power supply" means a device, other than a product with batteries or battery packs that physically attach directly to the power supply unit, a product with a battery chemistry

- 1 or type selector switch and indicator light or a product with a battery
- 2 chemistry or type selector switch and a state of charge meter, that:
- 3 (A) Is designed to convert line voltage alternating current input into
- 4 lower voltage direct current output;
- 5 (B) Is able to convert to only one direct current output voltage at a time;
- 6 (C) Is sold with, or intended to be used with, a separate end-use product
- 7 that constitutes the primary power load;
- 8 (D) Is contained within a separate physical enclosure from the end-use
- 9 product;
- 10 (E) Is connected to the end-use product via a removable or hard-wired
- 11 male or female electrical connection, cable, cord or other wiring; and
- 12 (F) Has a nameplate output power less than or equal to 250 watts.
- 13 (b) "Single-voltage external AC to DC power supply" does not include
- 14 power supplies that are classified as devices for human use under the Federal
- 15 Food, Drug and Cosmetic Act, 21 U.S.C. 360c.
- 16 [(27)] (29) "Small battery charger system" means:
- 17 (a) a battery charger system with a rated input power of two kilowatts
- 18 or less.
- 19 (b) A golf battery charger system, regardless of input power.
- 20 [(28)] (30) "State-regulated incandescent reflector lamp" means a lamp
- 21 that is not colored or designed for rough or vibrating service applications,
- 22 that has an inner reflective coating on the outer bulb to direct the light, that
- 23 has an E26 medium screw base, that has a rated voltage or voltage range
- 24 that lies at least partially within 115 to 130 volts and that falls into one of
- 25 the following categories:
- 26 (a) A bulged reflector or elliptical reflector bulb shape that has a diam-
- 27 eter that equals or exceeds 2.25 inches; or
- 28 (b) A reflector, parabolic aluminized reflector or similar bulb shape that
- 29 has a diameter of 2.25 to 2.75 inches.
- [(29)] (31) "Television" means an analog or digital device, including com-
- 31 bination televisions, television monitors and component televisions, designed

- 1 for the display and reception of a terrestrial, satellite, cable or Internet
- 2 protocol or other broadcast or recorded transmission of analog or digital
- 3 video or audio signals.
- 4 [(30)] (32) "Torchiere" means a portable electric lighting fixture with a
- 5 reflective bowl that directs light upward so as to produce indirect illumi-
- 6 nation.
- 7 [(31)] (33) "Traffic signal module" means a standard traffic signal indica-
- 8 tor, consisting of a light source, a lens and all other parts necessary for
- 9 operation, that is:
- 10 (a) Eight inches, or approximately 200 millimeters, in diameter; or
- 11 (b) Twelve inches, or approximately 300 millimeters, in diameter.
- 12 [(32)] (34) "Unit heater" means a self-contained, vented fan-type commer-
- 13 cial space heater, other than a consumer product covered by federal stan-
- 14 dards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent,
- 15 forced flue heater with a sealed combustion burner, that uses natural gas or
- 16 propane and that is designed to be installed without ducts within a heated
- 17 space.
- [(33)(a)] (35)(a) "Urinal" means a plumbing fixture that receives only
- 19 liquid body waste and then conveys the liquid waste through a trap into a
- 20 drainage system.
- 21 (b) "Urinal" does not mean fixtures designed for installation in prisons
- 22 or other penal institutions.
- 23 [(34)] (36) "Walk-in refrigerator" and "walk-in freezer" mean a space re-
- 24 frigerated to temperatures, respectively, at or above and below 32° F that can
- 25 be walked into.
- 26 [(35)(a)] (37)(a) "Water closet" means a plumbing fixture with a water
- 27 containing receptor that receives liquid body waste and solid body waste and
- 28 upon actuation conveys the wastes through an integral trap into a drainage
- 29 system.
- 30 (b) "Water closet" does not mean fixtures designed for installation in
- 31 prisons or other penal institutions.

[(36)] (38) "Water dispenser" means a factory-made assembly that mechanically cools and heats potable water and dispenses the cooled or heated water by integral or remote means.

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MINIMUM ENERGY EFFICIENCY STANDARDS

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SECTION 3. ORS 469.233 is amended to read:

469.233. The following minimum energy efficiency standards for new products are established:

(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:

13					
14	Equipment type	Type of	Harvest rate	Maximum	Maximum
15		cooling	(lbs. ice/24 hrs.)	energy use	condenser
16				(kWh/100 lbs.)	water use
17					(gallons/100 lbs. ice)
18					
19	Ice-making head	water	< 500	7.800055H	200022H
20			≥ 500<1436	5.580011H	200022H
21			≥ 1436	4.0	200022H
22	Ice-making head	air	<450	10.260086Н	Not applicable
23			≥ 450	6.890011H	Not applicable
24	Remote condensing				
25	but not remote				
26	compressor	air	<1000	8.850038	Not applicable
27			≥ 1000	5.10	Not applicable
28	Remote condensing				
29	and remote				
30	compressor	air	<934	8.850038H	Not applicable
31			≥ 934	5.30	Not applicable

1	Self-contained				
2	models	water	<200	11.400190H	1910315H
3			≥ 200	7.60	1910315H
4	Self-contained				
5	models	air	<175	18.00469H	Not applicable
6			≥ 175	9.80	Not applicable

Where H = harvest rate in pounds per 24 hours, which must be reported within 5 percent of the tested value. Maximum water use applies only to water used for the condenser.

- (b) For purposes of this subsection, 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) Commercial clothes washers must have a minimum modified energy factor of 1.26 and a maximum water consumption factor of 9.5. For purposes of this subsection, capacity, modified energy factor and water consumption factor are defined and shall be measured in accordance with the federal test method for commercial clothes washers under 10 C.F.R. 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 ASTM International's "Standard Test Method for Prerinse Spray Valves," ASTM F2324-03.
- (4)(a) Commercial refrigerators or freezers must meet the applicable requirements listed in the following table:

27			
28	Equipment Type	Doors	Maximum Daily
29			Energy Consumption (kWh)

31 Reach-in cabinets, pass-through

1	cabinets and roll-in or roll-through	Solid	0.10V + 2.04
2	2 cabinets that are refrigerators Transparent 0.12V + 3.34		
3			
4	Reach-in cabinets, pass-through		
5	cabinets and roll-in or roll-through		
6	cabinets that are "pulldown"		
7	refrigerators	Transparent	0.126V + 3.51
8			
9	Reach-in cabinets, pass-through		
10	cabinets and roll-in or roll-through	Solid	0.40V + 1.38
11	cabinets that are freezers	Transparent	0.75V + 4.10
12			
13	Reach-in cabinets that are		
14	refrigerator-freezers with an		
15	AV of 5.19 or higher	Solid	0.27AV - 0.71
16			
17	kWh = kilowatt hours		
18			
19	$V = total volume (ft^3)$		
20			
21	AV = adjusted volume = 1.63 x freezer volum	e (ft ³) + refrigerator	volume (ft)
22			

(b) For purposes of this subsection:

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- 24 (A) "Pulldown" designates products designed to take a fully stocked 25 refrigerator with beverages at 90 degrees Fahrenheit and cool those 26 beverages to a stable temperature of 38 degrees Fahrenheit within 12 hours 27 or less.
- 28 (B) Daily energy consumption shall be measured in accordance with the 29 American National Standards Institute/American Society of Heating, Refrig-30 erating and Air-Conditioning Engineers test method 117-2002, except that:
 - (i) The back-loading doors of pass-through and roll-through refrigerators

1 and freezers must remain closed throughout the test; and

(ii) The controls of all commercial refrigerators or freezers shall be adjusted to obtain the following product temperatures, in accordance with the California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, section 1604, table A-2, effective November 27, 2002:

О		
7	Product or compartment type	Integrated average product temperature
8		in degrees Fahrenheit
9		
10	Refrigerator	38 ± 2
11	Freezer	0 ± 2
12		

- (5) Illuminated exit signs must have an input power demand of five watts or less per illuminated face. For purposes of this subsection, input power demand shall be measured in accordance with the conditions for testing established by the United States Environmental Protection Agency's Energy Star exit sign program version 3.0. Illuminated exit signs must also meet all applicable building and safety codes.
- (6) Metal halide lamp fixtures designed to be operated with lamps rated greater than or equal to 150 watts but less than or equal to 500 watts may not contain a probe-start metal halide lamp ballast.
- (7)(a) Single-voltage external AC to DC power supplies manufactured on or after July 1, 2008, must meet the requirements in the following table:

24		
25	Nameplate output	Minimum Efficiency in Active Mode
26		
27	<1 Watt	0.5 * Nameplate Output
28	≥ 1 Watt	
29	and ≤ 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
30	> 51 Watts	0.85
31		

1		Maximum Energy Consumption in No-Load Mode
2		
3	Any Output	0.5 Watts
4		
5		
6	Where Ln (Nameplate Output) - Natural Logarithm of the nameplate output
7	expressed in Watts	
8		
9	(b) For the purposes of the	his subsection, efficiency of single-voltage ex-
10	ternal AC to DC power suppl	lies shall be measured in accordance with the
11	United States Environmental	Protection Agency's "Test Method for Calcu-
12	lating the Energy Efficiency	of Single-Voltage External AC to DC and AC
13	to AC Power Supplies," dated	d August 11, 2004. The efficiency in the active
14	and no-load modes of power s	upplies shall be tested only at 115 volts at 60
15	Hz.	
16	(8)(a) State-regulated inca	ndescent reflector lamps manufactured on or
17	after January 1, 2008, must n	neet the minimum efficiencies in the following
18	table:	
19		
20	Wattage	Minimum average lamp efficiency
21		(lumens per watt)
22		
23	40 - 50	10.5
24	51 - 66	11.0
25	67 - 85	12.5
26	86 - 115	14.0

14.5

15.0

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116 - 155

156 - 205

⁽b) Lamp efficiency shall be measured in accordance with the applicable test method found in 10 C.F.R. 430.23.

(9) Torchieres may not use more than 190 watts. A torchiere uses more than 190 watts if any commercially available lamp or combination of lamps can be inserted in a socket and cause the torchiere to draw more than 190 watts when operated at full brightness.

(10)(a) Traffic signal modules must have maximum and nominal wattage that does not exceed the applicable values in the following table:

7			
8	Module Type	Maximum Wattage	Nominal Wattage
9		(at 74°C)	(at 25°C)
10			
11	12" red ball (or 300 mm circular)	17	11
12	8" red ball (or 200 mm circular)	13	8
13	12" red arrow (or 300 mm arrow)	12	9
14			
15	12" green ball (or 300 mm circular)	15	15
16	8" green ball (or 200 mm circular)	12	12
17	12" green arrow (or 300 mm arrow)	11	11
18			

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- (b) For purposes of this subsection, maximum wattage and nominal wattage shall be measured in accordance with and under the testing conditions specified by the Institute for Transportation Engineers "Interim LED Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light Emitting Diode Vehicle Traffic Signal Modules."
- (11) Unit heaters must be equipped with intermittent ignition devices and must have either power venting or an automatic flue damper.
- (12) Bottle-type water dispensers designed for dispensing both hot and cold water may not have standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance with the test criteria contained in Version 1 of the United States Environmental Protection Agency's "Energy Star Program Requirements for Bottled Water Coolers," except that units with an integral, automatic timer may not be tested using

- 1 Section D, "Timer Usage," of the test criteria.
- (13) Commercial hot food holding cabinets shall have a maximum idle 2 energy rate of 40 watts per cubic foot of interior volume, as determined by
- the "Idle Energy Rate-dry Test" in ASTM F2140-01, "Standard Test Method
- for Performance of Hot Food Holding Cabinets" published by ASTM Inter-5
- national. Interior volume shall be measured in accordance with the method 6
- shown in the United States Environmental Protection Agency's "Energy Star 7
- Program Requirements for Commercial Hot Food Holding Cabinets," as in 8
- effect on August 15, 2003. 9

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- (14) Compact audio products may not use more than two watts in standby 10
- passive mode for those without a permanently illuminated clock display and 11
- 12 four watts in standby passive mode for those with a permanently illuminated
- clock display, as measured in accordance with International Electrotechnical 13
- Commission (IEC) test method 62087:2002(E), "Methods of Measurement for 14
- the Power Consumption of Audio, Video, and Related Equipment." 15
- (15) Digital versatile disc players and digital versatile disc recorders may 16
- not use more than three watts in standby passive mode, as measured in ac-17
- cordance with International Electrotechnical Commission (IEC) test method 18
- 62087:2002(E), "Methods of Measurement for the Power Consumption of Au-19
- dio, Video, and Related Equipment." 20
- (16) Portable electric spas may not have a standby power greater than 21
- 5(V^{2/3}) Watts where V=the total volume in gallons, as measured in accord-22
- ance with the test method for portable electric spas contained in the 23
- California Code of Regulations, Title 20, Division 2, Chapter 4, section 1604. 24
- (17)(a) Walk-in refrigerators and walk-in freezers with the applicable mo-25
- tor types shown in the table below shall include the required components 26
- shown. 27

28

Motor Type 29

Required Components

30

All 31 Interior lights: light sources with an efficacy of 45

1		lumens per watt or more, including ballast losses
2		(if any)
3		
4	All	Automatic door closers that firmly close all
5		reach-in doors
6		
7	All	Automatic door closers that firmly close all walk-in
8		doors no wider than 3.9 feet and no higher than
9		6.9 feet that have been closed to within one
10		inch of full closure
11		
12	All	Wall, ceiling and door insulation at least R-28 for
13		refrigerators and at least R-34 for freezers
14		
15	All	Floor insulation at least R-28 for freezers (no
16		requirement for refrigerators)
17		
18	Condenser fan motors of	(i) Electronically commutated motors,
19	under one horsepower	(ii) Permanent split capacitor-type motors, or
20		(iii) Polyphase motors of ½ horsepower or more
21		
22	Single-phase evaporator	Electronically commutated motors
23	fan motors of under one	
24	horsepower and less	
25	than 460 volts	
26		
o -	(1) T 11'1' 1 11	1 () () 1

- (b) In addition to the requirements in paragraph (a) of this subsection, walk-in refrigerators and walk-in freezers with transparent reach-in doors shall meet the following requirements:
- (A) Transparent reach-in doors shall be of triple pane glass with either 30 heat-reflective treated glass or gas fill;

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- (B) If the appliance has an anti-sweat heater without anti-sweat controls, the appliance shall have a total door rail, glass and frame heater power draw of no more than 40 watts if it is a freezer or 17 watts if it is a refrigerator per foot of door frame width; and
 - (C) If the appliance has an anti-sweat heater with anti-sweat heat controls, and the total door rail, glass, and frame heater power draw is 40 watts or greater per foot of door frame width if it is a freezer or 17 watts or greater per foot of door frame width if it is a refrigerator, the anti-sweat heat controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.
 - (18)(a) Lavatory faucets must have a maximum water use of 1.5 gallons per minute when tested at a flowing water pressure of 60 pounds per square inch in accordance with the flow rate test procedure contained in section 5.4 of ASME A112.18.1-2011, "Plumbing Supply Fittings," published by the American Society of Mechanical Engineers, as in effect on _____.
 - (b) Water closets, except for dual flush tank-type water closets, must have a maximum water use of 1.3 gallons per flush when tested in accordance with the water consumption test contained in section 7.4 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on
 - (c) Dual flush tank-type water closets must have a maximum effective water use of 1.3 gallons per flush when tested in accordance with the water consumption test contained in section 7.4 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on _____. The effective flush volume is the composite average flush volume of two reduced flushes and one full flush.
 - (d) Urinals, except for floor mounted urinals, must have a maxi-

mum water use of 0.125 gallons per flush when tested in accordance with the water consumption test contained in section 8.6 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on _____.

(e) Floor mounted urinals must have a maximum water use of 0.5 gallons per flush when tested in accordance with the water consumption test contained in section 8.6 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on _____.

(19) A television must automatically enter standby-passive mode or standby-active mode after a maximum of 15 minutes without video or audio input on the selected input mode. A television must enter standby-passive mode when turned off by remote or integrated button switch. The peak luminance of a television in home mode, or in the default mode as shipped, may not be less than 65 percent of the peak luminance of the retail mode or the brightest selectable preset mode of the television. A television must meet the standards in the following table:

19				
20	Standby-	Maximum On	Minimum	
21	passive Mode	Mode Power	Power	
22	Power Usage	Usage (P	Factor for	
23	(Watts)	in Watts)	$(P \ge 100W)$	
24				
25	1 W	$P \leq 0.12 x A + 25$	0.9	
26				

(20)(a) Large battery charger systems must meet the minimum efficiencies in the following table:

Standards for Large Battery Charger Systems

31 Performance

1	Parameter		Standard
2			
3	Charge Return		
4	Factor	100 percent,	$\mathbf{Crf} \leq 1.10$
5		80 percent	
6		Depth of	
7		Discharge	
8			
9		40 percent	$\mathbf{Crf} \leq 1.15$
10		Depth of	
11		Discharge	
12			
13	Power Conversion		
14	Efficiency		≥ 89 percent
15			
16	Power Factor		≥ 0.90
17			
18	Maintenance		
19	Mode Power		\leq 10 +0.00125 E_b W
20	$(E_b = battery)$		
21	capacity of		
22	tested battery)		
23			
24	No Battery		
25	Mode Power		\leq 10 W
26			1 (D) 0 (1)
27			paragraph (B) of this paragraph, inductive
28			battery charger systems must meet the
29	requirements in	n the followin	ng table:
30			

Standards for Inductive and Small Battery Charger Systems

1	Performance	Standard	
2	Parameter		
3			
4	Maximum 24-hour	For E _b of 2.5 Wh or less: 16 x N	
5	charge and		
6	maintenance	For E _b >2.5 Wh and	
7	energy (Wh)	\leq 100 Wh: 12 x N+1.5E $_{\mathbf{b}}$	
8	$(E_b = capacity)$		
9	of all batteries in	For E _b >100 Wh and	
10	ports and N =	\leq 1000 Wh: 22 x N+1.5E $_{\mathbf{b}}$	
11	number of charger		
12	ports)	For E _b > 1000 Wh:	
13		$36.4 \times N + 1.486E_{b}$	
14			
15	Maintenance Mode	The sum of maintenance mode power and no	
16	Power and No	battery mode power must be less than or equal to:	
17	Battery Mode	$1 \times N + 0.0021 \times E_{b}$	
18	Power (W)		
19	Power Factor		
20	$(E_b = capacity)$		
21	of all batteries in		
22	ports and N =		
23	number of charger		
24	ports)		
25			
26	(B) The requirement	s in subparagraph (A) of this paragraph must	
27	be met by:		
28	(i) Small battery char	rger systems for sale at retail that are not USB	

- (i) Small battery charger systems for sale at retail that are not USB charger systems with a battery capacity of 20 watt-hours or more and 29 that are manufactured on or after January 1, 2014. 30
 - (ii) Small battery charger systems for sale at retail that are USB

- charger systems with a battery capacity of 20 watt-hours or more and that are manufactured on or after January 1, 2014.
- 3 (iii) Small battery charger systems that are not sold at retail that 4 are manufactured on or after January 1, 2017.
- (iv) Inductive charger systems manufactured on or after February 1, 2013, unless the inductive charger systems uses less than one watt in maintenance mode, less than one watt in no battery mode and an average of one watt or less over the duration of the charge and maintenance mode test.
- 10 (v) Battery backup and uninterruptible power supplies, manufac-11 tured on or after February 1, 2013, for small battery charger systems 12 for sale at retail.
- (vi) Small battery charger systems not sold at retail, manufactured after January 1, 2017, may not consume more than $0.8 (0.0021 \text{xE}_{b})$ watts in maintenance mode where (E_{b}) is the battery capacity in watt-hours.
- 16 (C) The requirements in subparagraph (A) of this paragraph do not 17 need to be meet by an a la carte charger that:
- 18 (i) Is provided separately from and subsequent to the sale of a small 19 battery charger system described in this paragraph;
- 20 (ii) Necessary as a replacement for, or as a replacement component 21 of, a small battery charger system; and
- 22 (iii) Provided by a manufacturer directly to a consumer or to a 23 service or repair facility.
- SECTION 4. ORS 469.233, as amended by section 3 of this 2013 Act, is amended to read:
- 469.233. The following minimum energy efficiency standards for new products are established:
- (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:

1	Equipment type	Type of	Harvest rate	Maximum	Maximum
2		cooling	(lbs. ice/24 hrs.)	energy use	condenser
3				(kWh/100 lbs.)	water use
4					(gallons/100 lbs. ice)
5					
6	Ice-making head	water	< 500	7.800055H	200022H
7			≥ 500<1436	5.580011H	200022H
8			≥ 1436	4.0	200022H
9	Ice-making head	air	<450	10.260086H	Not applicable
10			≥ 450	6.890011H	Not applicable
11	Remote condensing				
12	but not remote				
13	compressor	air	<1000	8.850038	Not applicable
14			≥ 1000	5.10	Not applicable
15	Remote condensing				
16	and remote				
17	compressor	air	<934	8.850038H	Not applicable
18			≥ 934	5.30	Not applicable
19	Self-contained				
20	models	water	<200	11.400190H	1910315H
21			≥ 200	7.60	1910315H
22	Self-contained				
23	models	air	<175	18.00469H	Not applicable
24			≥ 175	9.80	Not applicable

Where H = harvest rate in pounds per 24 hours, which must be reported within 5 percent of the tested value. Maximum water use applies only to water used for the condenser.

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⁽b) For purposes of this subsection, 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

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- 1 heads include all automatic commercial ice cube machines that are not split 2 system ice makers or self-contained models as defined in ARI 810-2003.
 - (2) Commercial clothes washers must have a minimum modified energy factor of 1.26 and a maximum water consumption factor of 9.5. For purposes of this subsection, capacity, modified energy factor and water consumption factor are defined and shall be measured in accordance with the federal test method for commercial clothes washers under 10 C.F.R. 430.23.
- 8 (3) Commercial prerinse spray valves must have a flow rate equal to or 9 less than 1.6 gallons per minute when measured in accordance with the 10 ASTM International's "Standard Test Method for Prerinse Spray Valves," 11 ASTM F2324-03.
 - (4)(a) Commercial refrigerators or freezers must meet the applicable requirements listed in the following table:

14	- 		
15	Equipment Type	Doors	Maximum Daily
16			Energy Consumption (kWh)
17			
18	Reach-in cabinets, pass-through		
19	cabinets and roll-in or roll-through	Solid	0.10V + 2.04
20	cabinets that are refrigerators	Transparent	0.12V + 3.34
21			
22	Reach-in cabinets, pass-through		
23	cabinets and roll-in or roll-through		
24	cabinets that are "pulldown"		
25	refrigerators	Transparent	0.126V + 3.51
26			
27	Reach-in cabinets, pass-through		
28	cabinets and roll-in or roll-through	Solid	0.40V + 1.38
29	cabinets that are freezers	Transparent	0.75V + 4.10
30			
31	Reach-in cabinets that are		

```
1 refrigerator-freezers with an
2 AV of 5.19 or higher Solid 0.27AV - 0.71
3
4 kWh = kilowatt hours
5
6 V = total volume (ft<sup>3</sup>)
7
8 AV = adjusted volume = 1.63 x freezer volume (ft<sup>3</sup>) + refrigerator volume (ft<sup>3</sup>)
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(b) For purposes of this subsection:

- (A) "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.
- (B) Daily energy consumption shall be measured in accordance with the American National Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers test method 117-2002, except that:
 - (i) The back-loading doors of pass-through and roll-through refrigerators and freezers must remain closed throughout the test; and
- (ii) The controls of all commercial refrigerators or freezers shall be adjusted to obtain the following product temperatures, in accordance with the California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, section 1604, table A-2, effective November 27, 2002:

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25 Product or compartment type Integrated average product temperature 26 in degrees Fahrenheit 27 28 Refrigerator 38 \pm 2 29 Freezer 0 \pm 2
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(5) Illuminated exit signs must have an input power demand of five watts

- 1 or less per illuminated face. For purposes of this subsection, input power
- 2 demand shall be measured in accordance with the conditions for testing es-
- 3 tablished by the United States Environmental Protection Agency's Energy
- 4 Star exit sign program version 3.0. Illuminated exit signs must also meet all
- 5 applicable building and safety codes.
- 6 (6) Metal halide lamp fixtures designed to be operated with lamps rated 7 greater than or equal to 150 watts but less than or equal to 500 watts may 8 not contain a probe-start metal halide lamp ballast.
- 9 (7)(a) Single-voltage external AC to DC power supplies manufactured on or after July 1, 2008, must meet the requirements in the following table:

11		
12	Nameplate output	Minimum Efficiency in Active Mode
13		
14	<1 Watt	0.5 * Nameplate Output
15	≥ 1 Watt	
16	and ≤ 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
17	> 51 Watts	0.85
18		
19		Maximum Energy Consumption in No-Load Mode
20		
21	Any Output	0.5 Watts
22		

2324

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

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⁽b) For the purposes of this subsection, 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," dated August 11, 2004. The efficiency in the active

- and no-load modes of power supplies shall be tested only at 115 volts at 60 Hz.
- 3 (8)(a) State-regulated incandescent reflector lamps manufactured on or 4 after January 1, 2008, must meet the minimum efficiencies in the following 5 table:

6		
7	Wattage	Minimum average lamp efficiency
8		(lumens per watt)
9		
10	40 - 50	10.5
11	51 - 66	11.0
12	67 - 85	12.5
13	86 - 115	14.0
14	116 - 155	14.5
15	156 - 205	15.0
16		

(b) Lamp efficiency shall be measured in accordance with the applicable test method found in 10 C.F.R. 430.23.

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- (9) Torchieres may not use more than 190 watts. A torchiere uses more than 190 watts if any commercially available lamp or combination of lamps can be inserted in a socket and cause the torchiere to draw more than 190 watts when operated at full brightness.
- (10)(a) Traffic signal modules must have maximum and nominal wattage that does not exceed the applicable values in the following table:

25			
26	Module Type	Maximum Wattage	Nominal Wattage
27		(at 74°C)	(at 25°C)
28			
29	12" red ball (or 300 mm circular)	17	11
30	8" red ball (or 200 mm circular)	13	8
31	12" red arrow (or 300 mm arrow)	12	9

1	12" green ball (or 300 mm circular)	15	15
2	8" green ball (or 200 mm circular)	12	12
3	12" green arrow (or 300 mm arrow)	11	11

5

- (b) For purposes of this subsection, maximum wattage and nominal wattage shall be measured in accordance with and under the testing conditions specified by the Institute for Transportation Engineers "Interim LED Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light Emitting Diode Vehicle Traffic Signal Modules."
- (11) Unit heaters must be equipped with intermittent ignition devices and must have either power venting or an automatic flue damper.
- (12) Bottle-type water dispensers designed for dispensing both hot and cold water may not have standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance with the test criteria contained in Version 1 of the United States Environmental Protection Agency's "Energy Star Program Requirements for Bottled Water Coolers," except that units with an integral, automatic timer may not be tested using Section D, "Timer Usage," of the test criteria.
- (13) Commercial hot food holding cabinets shall have a maximum idle energy rate of 40 watts per cubic foot of interior volume, as determined by the "Idle Energy Rate-dry Test" in ASTM F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by ASTM International. Interior volume shall be measured in accordance with the method shown in the United States Environmental Protection Agency's "Energy Star Program Requirements for Commercial Hot Food Holding Cabinets," as in effect on August 15, 2003.
- (14) Compact audio products may not use more than two watts in standby passive mode for those without a permanently illuminated clock display and four watts in standby passive mode for those with a permanently illuminated clock display, as measured in accordance with International Electrotechnical Commission (IEC) test method 62087:2002(E), "Methods of Measurement for

1 the Power Consumption of Audio, Video, and Related Equipment."

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- 2 (15) Digital versatile disc players and digital versatile disc recorders may 3 not use more than three watts in standby passive mode, as measured in ac-4 cordance with International Electrotechnical Commission (IEC) test method 5 62087:2002(E), "Methods of Measurement for the Power Consumption of Au-6 dio, Video, and Related Equipment."
 - (16) Portable electric spas may not have a standby power greater than $5(V^{2/3})$ Watts where V=the total volume in gallons, as measured in accordance with the test method for portable electric spas contained in the California Code of Regulations, Title 20, Division 2, Chapter 4, section 1604.
 - (17)(a) Walk-in refrigerators and walk-in freezers with the applicable motor types shown in the table below shall include the required components shown.

14		
15	Motor Type	Required Components
16		
17	All	Interior lights: light sources with an efficacy of 45
18		lumens per watt or more, including ballast losses
19		(if any)
20		
21	All	Automatic door closers that firmly close all
22		reach-in doors
23		
24	All	Automatic door closers that firmly close all walk-in
25		doors no wider than 3.9 feet and no higher than
26		6.9 feet that have been closed to within one
27		inch of full closure
28		
29	All	Wall, ceiling and door insulation at least R-28 for
30		refrigerators and at least R-34 for freezers
31		

1	All	Floor insulation at least R-28 for freezers (no
2		requirement for refrigerators)
3		
4	Condenser fan motors of	(i) Electronically commutated motors,
5	under one horsepower	(ii) Permanent split capacitor-type motors, or
6		(iii) Polyphase motors of ½ horsepower or more
7		
8	Single-phase evaporator	Electronically commutated motors
9	fan motors of under one	
10	horsepower and less	
11	than 460 volts	
12		

(b) In addition to the requirements in paragraph (a) of this subsection, walk-in refrigerators and walk-in freezers with transparent reach-in doors shall meet the following requirements:

- (A) Transparent reach-in doors shall be of triple pane glass with either heat-reflective treated glass or gas fill;
- (B) If the appliance has an anti-sweat heater without anti-sweat controls, the appliance shall have a total door rail, glass and frame heater power draw of no more than 40 watts if it is a freezer or 17 watts if it is a refrigerator per foot of door frame width; and
- (C) If the appliance has an anti-sweat heater with anti-sweat heat controls, and the total door rail, glass, and frame heater power draw is 40 watts or greater per foot of door frame width if it is a freezer or 17 watts or greater per foot of door frame width if it is a refrigerator, the anti-sweat heat controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.
- (18)(a) Lavatory faucets must have a maximum water use of 1.5 gallons per minute when tested at a flowing water pressure of 60 pounds per square inch in accordance with the flow rate test procedure contained in section 5.4

- of ASME A112.18.1-2011, "Plumbing Supply Fittings," published by the American Society of Mechanical Engineers, as in effect on _____.
- 3 (b) Water closets, except for dual flush tank-type water closets, must have
 4 a maximum water use of 1.3 gallons per flush when tested in accordance with
 5 the water consumption test contained in section 7.4 of ASME A112.19.2-2008,
 6 "Ceramic Plumbing Fixtures," published by the American Society of Me7 chanical Engineers, as in effect on ______.
- 8 (c) Dual flush tank-type water closets must have a maximum effective water use of 1.3 gallons per flush when tested in accordance with the water consumption test contained in section 7.4 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on ______. The effective flush volume is the composite average flush volume of two reduced flushes and one full flush.
- (d) Urinals, except for floor mounted urinals, must have a maximum water use of 0.125 gallons per flush when tested in accordance with the water consumption test contained in section 8.6 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechanical Engineers, as in effect on _____.
- 19 (e) Floor mounted urinals must have a maximum water use of 0.5 gallons 20 per flush when tested in accordance with the water consumption test con-21 tained in section 8.6 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," 22 published by the American Society of Mechanical Engineers, as in effect on 23 _____.
- (19) A television must automatically enter standby-passive mode or 24 standby-active mode after a maximum of 15 minutes without video or audio 25 input on the selected input mode. A television must enter standby-passive 26 mode when turned off by remote or integrated button switch. The peak 27 luminance of a television in home mode, or in the default mode as shipped, 28 may not be less than 65 percent of the peak luminance of the retail mode 29 or the brightest selectable preset mode of the television. A television must 30 meet the standards in the following table: 31

1				
2	Standby	у-	Maximum On	Minimum
3	passive	Mode	Mode Power	Power
4	Power	Usage	Usage (P	Factor for
5	(Watts)		in Watts)	$(P \ge 100W)$
6				
7	1 W		$P \le 0.12 \times A + 25$	0.9
8				
9	(20)(a) Large	battery char	ger systems must mee	t the minimum efficiencies
10	in the following	table:		
11				
12	:	Standards for	· Large Battery Charge	er Systems
13	Performance			
14	Parameter		Standard	
15				
16	Charge Return			
17	Factor	100 percent,	$Crf \leq 1.10$	
18		80 percent		
19		Depth of		
20		Discharge		
21				
22		40 percent	$Crf \leq 1.15$	
23		Depth of		
24		Discharge		
25				
26	Power Conversion			
27	Efficiency		≥ 89 percent	
28				
29	Power Factor		≥ 0.90	
30				
31	Maintenance			

1	Mode Power	\leq 10 +0.00125E $_{ m b}$ W
2	(E _b = battery	
3	capacity of	
4	tested battery)	
5		
6	No Battery	
7	Mode Power	≤ 10 W
8		
9	(b)(A) As described in	subparagraph (B) of this paragraph, inductive
10	charger systems and small	battery charger systems must meet the minimum
11	efficiencies in the following	ng table:
12		
13	Standards for Inde	uctive and Small Battery Charger Systems
14	Performance	Standard
15	Parameter	
16		
17	Maximum 24-hour	For E_b of 2.5 Wh or less: 16 x N
18	charge and	
19	maintenance	For $E_b > 2.5$ Wh and
20	energy (Wh)	\leq 100 Wh: 12 x N+1.5E $_{b}$
21	(E _b = capacity	
22	of all batteries in	For E _b >100 Wh and
23	ports and $N =$	\leq 1000 Wh: 22 x N+1.5E $_{ m b}$
24	number of charger	
25	ports)	For $E_b > 1000$ Wh:
26		$36.4 \times N + 1.486E_{b}$
27		
28	Maintenance Mode	The sum of maintenance mode power and no
29	Power and No	battery mode power must be less than or equal to:
30	Battery Mode	$1 \times N + 0.0021 \times E_{b}$
31	Power (W)	

```
1 Power Factor  2 \quad (E_b = capacity \\ 3 \quad of all batteries in \\ 4 \quad ports and N =
```

5 number of charger

6 ports)

7

22

- 8 (B) The requirements in subparagraph (A) of this paragraph must be met 9 by:
- (i) Small battery charger systems for sale at retail that are not USB charger systems with a battery capacity of 20 watt-hours or more and that are manufactured on or after January 1, 2014.
- (ii) Small battery charger systems for sale at retail that are USB charger systems with a battery capacity of 20 watt-hours or more and that are manufactured on or after January 1, 2014.
- 16 (iii) Small battery charger systems that are not sold at retail that are 17 manufactured on or after January 1, 2017.
- (iv) Inductive charger systems manufactured on or after February 1, 2013, unless the inductive charger systems uses less than one watt in maintenance mode, less than one watt in no battery mode and an average of one watt or less over the duration of the charge and maintenance mode test.
 - (v) Battery backup and uninterruptible power supplies, manufactured on or after February 1, 2013, for small battery charger systems for sale at retail.
- (vi) Small battery charger systems not sold at retail, manufactured after January 1, 2017, may not consume more than $0.8 (0.0021xE_b)$ watts in maintenance mode where (E_b) is the battery capacity in watt-hours.
- (C) The requirements in subparagraph (A) of this paragraph do not need to be meet by an a la carte charger that:
- 29 (i) Is provided separately from and subsequent to the sale of a small bat-30 tery charger system described in this paragraph;
- 31 (ii) Necessary as a replacement for, or as a replacement component of, a

- 1 small battery charger system; and
- 2 (iii) Provided by a manufacturer directly to a consumer or to a service 3 or repair facility.
 - (21)(a) A high light output double-ended quartz halogen lamp must have a minimum efficiency of:
 - (A) 27 lumens per watt for lamps with a minimum rated initial lumen value of greater than 6,000 and a maximum initial lumen value of 15,000; or
 - (B) 34 lumens per watt for lamps with a rated initial lumen value of greater than 15,000 and less than 40,000.
 - (b) A general purpose mercury vapor lamp may not be manufactured in this state.

14 SALE

SECTION 5. ORS 469.238 is amended to read:

469.238. (1) Except as provided in subsection (2) of this section, a person may not sell or offer for sale a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact audio product, digital versatile disc player, digital versatile disc recorder, portable electric spa, walk-in refrigerator, [or] walk-in freezer, dual flush tank-type water closet, lavatory faucet, urinal, floor mounted urinal, water closet, television, inductive charger system, large battery charger system or small battery charger system unless the energy efficiency of the new product meets or exceeds the minimum energy efficiency standards specified in ORS 469.233.

(2) A person may sell or offer for sale a new product not meeting effi-

- 1 ciency standards specified in subsection (1) of this section if the product is:
- 2 (a) Manufactured in this state and sold outside this state;
- 3 (b) Manufactured outside this state and sold at wholesale inside this state
- 4 for final retail sale and installation outside this state;
- 5 (c) Installed in a mobile or manufactured home at the time of con-6 struction; or
- 7 (d) Designed expressly for installation and use in recreational vehicles.
- 8 **SECTION 6.** ORS 469.238, as amended by section 5 of this 2013 Act, is amended to read:
- 469.238. (1) Except as provided in subsection (2) of this section, a person
- 11 may not sell or offer for sale a new commercial clothes washer, commercial
- 12 prerinse spray valve, commercial refrigerator or freezer, illuminated exit
- 13 sign, single-voltage external AC to DC power supply, state-regulated incan-
- 14 descent reflector lamp, torchiere, traffic signal module, automatic commer-
- 15 cial ice cube machine, metal halide lamp fixture, unit heater, bottle-type
- 16 water dispenser, commercial hot food holding cabinet, compact audio prod-
- 17 uct, digital versatile disc player, digital versatile disc recorder, portable
- 18 electric spa, walk-in refrigerator, walk-in freezer, dual flush tank-type water
- 19 closet, lavatory faucet, urinal, floor mounted urinal, water closet, television,
- 20 inductive charger system, large battery charger system, [or] small battery
- 21 charger system or high light output double-ended quartz halogen lamp
- 22 unless the energy efficiency of the new product meets or exceeds the mini-
- 23 mum energy efficiency standards specified in ORS 469.233.
- 24 (2) A person may sell or offer for sale a new product not meeting effi-
- 25 ciency standards specified in subsection (1) of this section if the product is:
- 26 (a) Manufactured in this state and sold outside this state;
- 27 (b) Manufactured outside this state and sold at wholesale inside this state
- 28 for final retail sale and installation outside this state;
- 29 (c) Installed in a mobile or manufactured home at the time of con-
- 30 struction; or
- 31 (d) Designed expressly for installation and use in recreational vehicles.

INSTALLATION

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SECTION 7. ORS 469.239 is amended to read:

- 469.239. (1) Except as provided in subsection (2) of this section, a person 4 may not install a new commercial clothes washer, commercial prerinse spray 5 valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage 6 external AC to DC power supply, state-regulated incandescent reflector lamp, 7 torchiere, traffic signal module, automatic commercial ice cube machine, 8 metal halide lamp fixture, unit heater, bottle-type water dispenser, commer-9 cial hot food holding cabinet, compact audio product, digital versatile disc 10 player, digital versatile disc recorder, portable electric spa, walk-in 11 refrigerator, [or] walk-in freezer, dual flush tank-type water closet, 12 lavatory faucet, urinal, floor mounted urinal, water closet, television, 13 inductive charger system, large battery charger system or small bat-14 tery charger system for compensation unless the energy efficiency of the 15 new product meets or exceeds the minimum energy efficiency standards 16 specified in ORS 469.233. 17
- 18 (2) A person may install a new product not meeting efficiency standards 19 specified in subsection (1) of this section if the product is:
- 20 (a) Installed in a mobile or manufactured home at the time of con-21 struction; or
- 22 (b) Designed expressly for installation and use in recreational vehicles.
- 23 **SECTION 8.** ORS 469.239, as amended by section 7 of this 2013 Act, is 24 amended to read:
- 469.239. (1) Except as provided in subsection (2) of this section, a person may not install a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact audio product, digital versatile disc

- 1 player, digital versatile disc recorder, portable electric spa, walk-in
- refrigerator, walk-in freezer, dual flush tank-type water closet, lavatory fau-
- cet, urinal, floor mounted urinal, water closet, television, inductive charger 3
- system, large battery charger system, [or] small battery charger system or
- high light output double-ended quartz halogen lamp for compensation
- unless the energy efficiency of the new product meets or exceeds the mini-6
- mum energy efficiency standards specified in ORS 469.233. 7
- (2) A person may install a new product not meeting efficiency standards 8 specified in subsection (1) of this section if the product is: 9
- (a) Installed in a mobile or manufactured home at the time of con-10 struction; or 11
- 12 (b) Designed expressly for installation and use in recreational vehicles.

13

14

MISCELLANEOUS

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- SECTION 9. The unit captions used in this 2013 Act are provided only for the convenience of the reader and do not become part of the statutory law of this state or express any legislative intent in the enactment of this 2013 Act.
- SECTION 10. (1) The amendments to ORS 469.229 by section 2 of this 20 2013 Act become operative on January 1, 2016. 21
- (2) The amendments to ORS 469.233 by section 4 of this 2013 Act 22become operative on January 1, 2016.
- (3) The amendments to ORS 469.238 by section 6 of this 2013 Act 24 become operative on January 1, 2016. 25
- (4) The amendments to ORS 469.239 by section 8 of this 2013 Act 26 become operative on January 1, 2016. 27
- (5) The minimum energy efficiency standards specified in ORS 28 469.233 (20)(b) do not apply to a small battery charger system that is 29 made available by a manufacturer directly to a consumer or to a ser-30 vice or repair facility, as a service part or spare part, after and sepa-31

- 1 rate from the original sale of the product that requires the small
- 2 battery charger system as a service part or spare part, or for a battery

3 charger that is not sold at retail, before July 1, 2017.
