Senate Bill 692

Sponsored by COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure **as introduced.**

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

A BILL FOR AN ACT

Relating to minimum energy efficiency standards; creating new provisions; and amending ORS 469.229, 469.233, 469.238 and 469.239.

Be It Enacted by the People of the State of Oregon:

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DEFINITIONS

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30 31 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.
- (4) "Commercial clothes washer" means a soft mount horizontal-axis or 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 vertical-axis product; and
 - (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.
- (b) "Commercial hot food holding cabinet" does not include heated glass 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,

NOTE: Matter in **boldfaced** type in an amended section is new; matter [italic and bracketed] is existing law to be omitted. New sections are in **boldfaced** type.

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":

- (a) Must incorporate most components involved in the vapor-compression cycle and the refrigerated compartment in a single cabinet; and
- (b) May be configured with either solid or transparent doors as a reach-in 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;
- (B) Compact disc;
- (C) DVD; or

- (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.
 - (9) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.
 - (10) "Digital versatile disc" or "DVD" means a laser-encoded plastic medium capable of storing a large amount of digital audio, video and computer data.
 - (11)(a) "Digital versatile disc player" or "digital versatile disc recorder" means a commercially available electronic product encased in a single housing that includes an integral power supply and for which the sole purpose is, respectively, the decoding and the production or recording of 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, on-screen 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 the legend "EXIT" and any directional indicators and that provides contrast between the legend, any directional indicators and the background.
 - (15) "Inductive charger system" means a small battery charger system that transfers power to the charger through magnetic or electric induction.
 - (16)(a) "Large battery charger system" means a battery charger system with a rated input power of more than two kilowatts.

- (b) "Large battery charger system" does not mean a battery charger system for golf carts.
- (17) "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.
- [(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 metallic 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.
- [(20)] (24) "Roll-in cabinet" means a commercial refrigerator or freezer with hinged or sliding doors that allow wheeled racks to be rolled into the unit.
- [(21)] (25) "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.
- [(22)(a)] (26)(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 or type selector switch and indicator light or a product with a battery chemistry or type selector switch and a state of charge meter, that:
- (A) Is designed to convert line voltage alternating current input into lower voltage direct current output;
 - (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 that constitutes the primary power load;
 - (D) Is contained within a separate physical enclosure from the end-use product;
 - (E) Is connected to the end-use product via a removable or hard-wired male or female electrical connection, cable, cord or other wiring; and
 - (F) Has a nameplate output power less than or equal to 250 watts.
 - (b) "Single-voltage external AC to DC power supply" does not include power supplies that are classified as devices for human use under the Federal Food, Drug and Cosmetic Act, 21 U.S.C. 360c.
 - (27) "Small battery charger system" means:
 - (a) A battery charger system with a rated input power of two kilowatts or less.
 - (b) A golf cart battery charger system, regardless of input power.
 - [(23)] (28) "State-regulated incandescent reflector lamp" means a lamp that is not colored or designed for rough or vibrating service applications, that has an inner reflective coating on the outer bulb to direct the light, that has an E26 medium screw base, that has a rated voltage or voltage range that lies at least partially within 115 to 130 volts and that falls into one of the fol-

lowing categories:

- (a) A bulged reflector or elliptical reflector bulb shape that has a diameter that equals or exceeds 2.25 inches; or
- (b) A reflector, parabolic aluminized reflector or similar bulb shape that has a diameter of 2.25 to 2.75 inches.
- (29) "Television" means an analog or digital device, including combination televisions, television monitors and component televisions, designed for the display and reception of a terrestrial, satellite, cable or Internet protocol or other broadcast or recorded transmission of analog or digital video or audio signals.
- [(24)] (30) "Torchiere" means a portable electric lighting fixture with a reflective bowl that directs light upward so as to produce indirect illumination.
- [(25)] (31) "Traffic signal module" means a standard traffic signal indicator, consisting of a light source, a lens and all other parts necessary for operation, that is:
 - (a) Eight inches, or approximately 200 millimeters, in diameter; or
 - (b) Twelve inches, or approximately 300 millimeters, in diameter.
- [(26)] (32) "Unit heater" means a self-contained, vented fan-type commercial space heater, other than a consumer product covered by federal standards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent, forced flue heater with a sealed combustion burner, that uses natural gas or propane and that is designed to be installed without ducts within a heated space.
- (33)(a) "Urinal" means a plumbing fixture that receives only liquid body waste and then conveys the liquid waste through a trap into a drainage system.
- (b) "Urinal" does not mean fixtures designed for installation in prisons or other penal institutions.
- [(27)] (34) "Walk-in refrigerator" and "walk-in freezer" mean a space refrigerated to temperatures, respectively, at or above and below 32° F that can be walked into.
- (35)(a) "Water closet" means a plumbing fixture with a water containing receptor that receives liquid body waste and solid body waste and upon actuation conveys the wastes through an integral trap into a drainage system.
- (b) "Water closet" does not mean fixtures designed for installation in prisons or other penal institutions.
- [(28)] (36) "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.
 - SECTION 2. ORS 469.229, as amended by section 1 of this 2013 Act, 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.
- (4) "Commercial clothes washer" means a soft mount horizontal-axis or 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 vertical-axis product; and
 - (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.
 - (b) "Commercial hot food holding cabinet" does not include heated glass 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":
 - (a) Must incorporate most components involved in the vapor-compression cycle and the refrigerated compartment in a single cabinet; and
 - (b) May be configured with either solid or transparent doors as a reach-in 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;
- 26 (B) Compact disc;
- 27 (C) DVD; or

- (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.
- (9) "Compensation" means money or any other valuable thing, regardless of form, received or to be received by a person for services rendered.
- (10) "Digital versatile disc" or "DVD" means a laser-encoded plastic medium capable of storing a large amount of digital audio, video and computer data.
- (11)(a) "Digital versatile disc player" or "digital versatile disc recorder" means a commercially available electronic product encased in a single housing that includes an integral power supply and for which the sole purpose is, respectively, the decoding and the production or recording of 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, on-screen 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.

(13)(a) "General purpose mercury vapor lamp" means a mercury vapor lamp that:

1 (A) Has a screw base;

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- (B) Is designed for use in general lighting applications; and
- (C) Is designed to operate on a mercury vapor lamp ballast or to operate as self-ballasted.
- (b) "General purpose mercury vapor lamp" does not mean a special purpose mercury vapor lamp that is:
 - (A) Designed to operate on a vapor lamp base;
 - (B) Marked for use as special application only and not for general illumination; and
 - (C) Marked to indicate the speciality for which the lamp is designed.
 - [(13)] (14) "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.
 - (15)(a) "High light output double-ended quartz halogen lamp" means a lamp that:
- (A) Is designed for general outdoor lighting purposes;
- 15 (B) Contains a tungsten filament;
 - (C) Has a rated initial lumen value of greater than 6,000 and less than 40,000 lumens;
 - (D) Has at each end a recessed single contact, R7s base;
 - (E) Has a maximum overall length between 4 and 11 inches;
 - (F) Has a nominal diameter less than three-fourths inch (T6); and
 - (G) Is designed to be operated at a voltage between 110 volts and 200 volts or is designed to be operated at a voltage between 235 volts and 300 volts.
 - (b) "High light output double-ended quartz halogen lamp" does not mean a lamp that is:
 - (A) A tubular quartz infrared heat lamp; or
 - (B) Marked and marketed as a stage and studio lamp with a rated life of 500 hours or less.
 - [(14)] (16) "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 the legend "EXIT" and any directional indicators and that provides contrast between the legend, any directional indicators and the background.
 - [(15)] (17) "Inductive charger system" means a small battery charger system that transfer power to the charger through magnetic or electric induction.
 - [(16)(a)] (18)(a) "Large battery charger system" means a battery charger system with a rated input power of more than two kilowatts.
 - (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.
 - [(21)] (23) "Portable electric spa" means a factory-built electric spa or hot tub supplied with

1 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 or type selector switch and indicator light or a product with a battery chemistry or type selector switch and a state of charge meter, that:
- (A) Is designed to convert line voltage alternating current input into lower voltage direct current output;
 - (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 that constitutes the primary power load;
 - (D) Is contained within a separate physical enclosure from the end-use product;
- (E) Is connected to the end-use product via a removable or hard-wired male or female electrical connection, cable, cord or other wiring; and
 - (F) Has a nameplate output power less than or equal to 250 watts.
- (b) "Single-voltage external AC to DC power supply" does not include power supplies that are classified as devices for human use under the Federal Food, Drug and Cosmetic Act, 21 U.S.C. 360c.
 - [(27)] (29) "Small battery charger system" means:
 - (a) a battery charger system with a rated input power of two kilowatts or less.
 - (b) A golf battery charger system, regardless of input power.
- [(28)] (30) "State-regulated incandescent reflector lamp" means a lamp that is not colored or designed for rough or vibrating service applications, that has an inner reflective coating on the outer bulb to direct the light, that has an E26 medium screw base, that has a rated voltage or voltage range that lies at least partially within 115 to 130 volts and that falls into one of the following categories:
- (a) A bulged reflector or elliptical reflector bulb shape that has a diameter that equals or exceeds 2.25 inches; or
- 36 (b) A reflector, parabolic aluminized reflector or similar bulb shape that has a diameter of 2.25 to 2.75 inches.
 - [(29)] (31) "Television" means an analog or digital device, including combination televisions, television monitors and component televisions, designed for the display and reception of a terrestrial, satellite, cable or Internet protocol or other broadcast or recorded transmission of analog or digital video or audio signals.
 - [(30)] (32) "Torchiere" means a portable electric lighting fixture with a reflective bowl that directs light upward so as to produce indirect illumination.
 - [(31)] (33) "Traffic signal module" means a standard traffic signal indicator, consisting of a light source, a lens and all other parts necessary for operation, that is:

(a) Eight inches, or approximately 200 millimeters, in diameter; or

- (b) Twelve inches, or approximately 300 millimeters, in diameter.
- [(32)] (34) "Unit heater" means a self-contained, vented fan-type commercial space heater, other than a consumer product covered by federal standards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent, forced flue heater with a sealed combustion burner, that uses natural gas or propane and that is designed to be installed without ducts within a heated space.
- [(33)(a)] (35)(a) "Urinal" means a plumbing fixture that receives only liquid body waste and then conveys the liquid waste through a trap into a drainage system.
- (b) "Urinal" does not mean fixtures designed for installation in prisons or other penal institutions.
- [(34)] (36) "Walk-in refrigerator" and "walk-in freezer" mean a space refrigerated to temperatures, respectively, at or above and below 32° F that can be walked into.
- [(35)(a)] (37)(a) "Water closet" means a plumbing fixture with a water containing receptor that receives liquid body waste and solid body waste and upon actuation conveys the wastes through an integral trap into a drainage system.
- (b) "Water closet" does not mean fixtures designed for installation in 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.

MINIMUM ENERGY EFFICIENCY STANDARDS

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:

28					
29	Equipment type	Type of	Harvest rate	Maximum	Maximum
30		cooling	(lbs. ice/24 hrs.)	energy use	condenser
31				(kWh/100 lbs.)	water use
32					(gallons/100 lbs. ice)
33					
34	Ice-making head	water	< 500	7.800055H	200022H
35			≥ 500<1436	5.580011H	200022H
36			≥ 1436	4.0	200022H
37	Ice-making head	air	<450	10.260086H	Not applicable
38			≥ 450	6.890011H	Not applicable
39	Remote condensing				
40	but not remote				
41	compressor	air	<1000	8.850038	Not applicable
42			≥ 1000	5.10	Not applicable
43	Remote condensing				
44	and remote				
45	compressor	air	<934	8.850038H	Not applicable

1			≥ 934	5.30	Not applicable
2	Self-contained				
3	models	water	<200	11.400190H	1910315H
4			≥ 200	7.60	1910315H
5	Self-contained				
6	models	air	<175	18.00469H	Not applicable
7			≥ 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:

26			
27	Equipment Type	Doors	Maximum Daily
28			Energy Consumption (kWh)
29			
30	Reach-in cabinets, pass-through		
31	cabinets and roll-in or roll-through	Solid	0.10V + 2.04
32	cabinets that are refrigerators	Transparent	0.12V + 3.34
33			
34	Reach-in cabinets, pass-through		
35	cabinets and roll-in or roll-through		
36	cabinets that are "pulldown"		
37	refrigerators	Transparent	0.126V + 3.51
38			
39	Reach-in cabinets, pass-through		
40	cabinets and roll-in or roll-through	Solid	0.40V + 1.38
41	cabinets that are freezers	Transparent	0.75V + 4.10
42			
43	Reach-in cabinets that are		
44	refrigerator-freezers with an		
45	AV of 5.19 or higher	Solid	0.27AV - 0.71

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1  kWh = kilowatt hours
2
3  V = total volume (ft<sup>3</sup>)
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5  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:

Product or compartment type	Integrated average product temperature in degrees Fahrenheit
Refrigerator Freezer	38 ± 2 0 ± 2

- (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:

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41 Nameplate output Minimum Efficiency in Active Mode 42 43 < 1 \text{ Watt} \qquad 0.5 * \text{Nameplate Output} 
44 \geq 1 \text{ Watt} \qquad 0.09 * \text{Ln (Nameplate Output)} + 0.5
```

1	> 51 Watts	0.85
2		
3		Maximum Energy Consumption in No-Load Mode
4		

 Any Output

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

0.5 Watts

(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.

(8)(a) State-regulated incandescent reflector lamps manufactured on or after January 1, 2008, must meet the minimum efficiencies in the following 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
27	116 - 155	14.5
28	156 - 205	15.0
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- (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:

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40	Module Type	Maximum Wattage	Nominal Wattage
41		(at 74°C)	(at 25°C)
42			
43	12" red ball (or 300 mm circular)	17	11
44	8" red ball (or 200 mm circular)	13	8
45	12" red arrow (or 300 mm arrow)	12	9

L	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

- (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 the Power Consumption of Audio, Video, and Related Equipment."
- (15) Digital versatile disc players and digital versatile disc recorders may not use more than three watts in standby passive mode, as measured in accordance with International Electrotechnical Commission (IEC) test method 62087:2002(E), "Methods of Measurement for the Power Consumption of Audio, 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.

39	Motor Type	Required Components
40		
41	All	Interior lights: light sources with an efficacy of 45
42		lumens per watt or more, including ballast losses
43		(if any)
44		
45	All	Automatic door closers that firmly close all

1		reach-in doors
2		
3	All	Automatic door closers that firmly close all walk-in
4		doors no wider than 3.9 feet and no higher than
5		6.9 feet that have been closed to within one
6		inch of full closure
7		
8	All	Wall, ceiling and door insulation at least R-28 for
9		refrigerators and at least R-34 for freezers
10		
11	All	Floor insulation at least R-28 for freezers (no
12		requirement for refrigerators)
13		
14	Condenser fan motors of	(i) Electronically commutated motors,
15	under one horsepower	(ii) Permanent split capacitor-type motors, or
16		(iii) Polyphase motors of ½ horsepower or more
17		
18	Single-phase evaporator	Electronically commutated motors
19	fan motors of under one	
20	horsepower and less	
21	than 460 volts	
22		

(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

⁽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

Performance

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 _____.
- (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:

	•			
21				
22	Standby-	Maximum On	Minimum	
23	passive Mode	Mode Power	Power	
24	Power Usage	Usage (P	Factor for	
25	(Watts)	in Watts)	$(P \ge 100W)$	
26				
27	1 W	$P \leq 0.12 x A + 25$	0.9	
28				

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

Standards for Large Battery Charger Systems

36	Parameter		Standard
37			
38	Charge Return		
39	Factor	100 percent,	$\mathbf{Crf} \leq 1.10$
40		80 percent	
41		Depth of	
42		Discharge	
43			
44		40 percent	$\mathbf{Crf} \leq 1.15$
45		Depth of	

```
1
                           Discharge
2
3
     Power Conversion
     Efficiency
                                                89 percent
 4
5
     Power Factor
                                              ≥ 0.90
6
7
8
     Maintenance
9
     Mode Power
                                              \leq 10 +0.00125E<sub>b</sub> W
     (E_b = battery)
10
     capacity of
11
12
     tested battery)
13
     No Battery
14
15
     Mode Power
                                              \leq 10 W
16
17
18
         (b)(A) As described in subparagraph (B) of this paragraph, inductive charger systems and
19
     small battery charger systems must meet the requirements in the following table:
20
21
22
                      Standards for Inductive and Small Battery Charger Systems
23
     Performance
                                       Standard
24
     Parameter
25
                                       For E_{_{h}} of 2.5 Wh or less: 16 x N
     Maximum 24-hour
26
27
     charge and
28
     maintenance
                                       For E_{b} > 2.5 Wh and
                                       \leq 100 Wh: 12 x N+1.5E
29
     energy (Wh)
     (E_{b} = capacity)
30
31
     of all batteries in
                                       For E_b > 100 Wh and
     ports and N =
                                       \leq 1000 Wh: 22 x N+1.5E
32
     number of charger
33
34
     ports)
                                       For E_b > 1000 Wh:
                                       36.4 \times N + 1.486E_{b}
35
36
                                       The sum of maintenance mode power and no
37
     Maintenance Mode
38
     Power and No
                                       battery mode power must be less than or equal to:
     Battery Mode
                                       1 \times N + 0.0021 \times E_{h}
39
40
     Power (W)
41
     Power Factor
     (E_{b} = capacity)
42
     of all batteries in
43
44
     ports and N =
```

number of charger

ports)

2 3 4

5

6

7

8 9

10

11 12

13

14 15

16

17

18

19

20

21 22

23 24

25

26 27

28

29 30

31

32

1

- (B) The requirements in subparagraph (A) of this paragraph must be met 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.
- (iii) Small battery charger systems that are not sold at retail that 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.
- (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) watts in maintenance mode where (E) 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:
- (i) Is provided separately from and subsequent to the sale of a small battery charger system described in this paragraph;
- (ii) Necessary as a replacement for, or as a replacement component of, a small battery charger system; and
 - (iii) Provided by a manufacturer directly to a consumer or to a 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:

33	
34	

34					
35	Equipment type	Type of	Harvest rate	Maximum	Maximum
36		cooling	(lbs. ice/24 hrs.)	energy use	condenser
37				(kWh/100 lbs.)	water use
38					(gallons/100 lbs. ice)
39					
40	Ice-making head	water	< 500	7.800055H	200022H
41			≥ 500<1436	5.580011H	200022H
42			≥ 1436	4.0	200022H
43	Ice-making head	air	<450	10.260086H	Not applicable
44			≥ 450	6.890011H	Not applicable
45	Remote condensing				

Remote condensing

1	but not remote				
2	compressor	air	<1000	8.850038	Not applicable
3			≥ 1000	5.10	Not applicable
4	Remote condensing				
5	and remote				
6	compressor	air	<934	8.850038H	Not applicable
7			≥ 934	5.30	Not applicable
8	Self-contained				
9	models	water	<200	11.400190H	1910315H
10			≥ 200	7.60	1910315H
11	Self-contained				
12	models	air	<175	18.00469H	Not applicable
13			≥ 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:

02			
33	Equipment Type	Doors	Maximum Daily
34			Energy Consumption (kWh)
35			
36	Reach-in cabinets, pass-through		
37	cabinets and roll-in or roll-through	Solid	0.10V + 2.04
38	cabinets that are refrigerators	Transparent	0.12V + 3.34
39			
40	Reach-in cabinets, pass-through		
41	cabinets and roll-in or roll-through		
42	cabinets that are "pulldown"		
43	refrigerators	Transparent	0.126V + 3.51
44			

Reach-in cabinets, pass-through

1	cabinets and roll-in or roll-through	Solid	0.40V + 1.38
2	cabinets that are freezers	Transparent	0.75V + 4.10
3			
4	Reach-in cabinets that are		
5	refrigerator-freezers with an		
6	AV of 5.19 or higher	Solid	0.27AV - 0.71
7			
8	kWh = kilowatt hours		
9			
10	V = total volume (ft ³)		
11		9	
12	AV = adjusted volume = 1.63 x freezer volume	e (ft ³) + refrigerato	r volume (ft ³)
13			

15 (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:

Product or compartment type	Integrated average product temperature in degrees Fahrenheit
Refrigerator Freezer	38 ± 2 0 ± 2

36 (5) Illuminated exit signs must have an input power demand of five watts or less per illuminated 37 face. For purposes of this subsection, input power demand shall be measured in accordance with the 38 conditions for testing established by the United States Environmental Protection Agency's Energy 39 Star exit sign program version 3.0. Illuminated exit signs must also meet all applicable building and

40 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:

1		
2		
3	Nameplate output	Minimum Efficiency in Active Mode
4		
5	<1 Watt	0.5 * Nameplate Output
6	≥ 1 Watt	
7	and \leq 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
8	> 51 Watts	0.85
9		
10		Maximum Energy Consumption in No-Load Mode
11		
12	Any Output	0.5 Watts
13		

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

(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.

(8)(a) State-regulated incandescent reflector lamps manufactured on or after January 1, 2008, must meet the minimum efficiencies in the following table:

20		
27	Wattage	Minimum average lamp efficiency
28		(lumens per watt)
29		
30	40 - 50	10.5
31	51 - 66	11.0
32	67 - 85	12.5
33	86 - 115	14.0
34	116 - 155	14.5
35	156 - 205	15.0
36		

- (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:

1			
2	Module Type	Maximum Wattage	Nominal Wattage
3		(at 74°C)	(at 25°C)
4			
5	12" red ball (or 300 mm circular)	17	11
6	8" red ball (or 200 mm circular)	13	8
7	12" red arrow (or 300 mm arrow)	12	9
8			
9	12" green ball (or 300 mm circular)	15	15
10	8" green ball (or 200 mm circular)	12	12
11	12" green arrow (or 300 mm arrow)	11	11
12			

 $\frac{41}{42}$

- (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 the Power Consumption of Audio, Video, and Related Equipment."
- (15) Digital versatile disc players and digital versatile disc recorders may not use more than three watts in standby passive mode, as measured in accordance with International Electrotechnical Commission (IEC) test method 62087:2002(E), "Methods of Measurement for the Power Consumption of Audio, Video, and Related Equipment."
- (16) Portable electric spas may not have a standby power greater than $5(V^2)$ 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.

1		
2	Motor Type	Required Components
3		
4	All	Interior lights: light sources with an efficacy of 45
5		lumens per watt or more, including ballast losses
6		(if any)
7		
8	All	Automatic door closers that firmly close all
9		reach-in doors
10		
11	All	Automatic door closers that firmly close all walk-in
12		doors no wider than 3.9 feet and no higher than
13		6.9 feet that have been closed to within one
14		inch of full closure
15		
16	All	Wall, ceiling and door insulation at least R-28 for
17		refrigerators and at least R-34 for freezers
18		
19	All	Floor insulation at least R-28 for freezers (no
20		requirement for refrigerators)
21		(O. 71)
22	Condenser fan motors of	(i) Electronically commutated motors,
23	under one horsepower	(ii) Permanent split capacitor-type motors, or
24		(iii) Polyphase motors of ½ horsepower or more
25	C: 1 1	
26	Single-phase evaporator	Electronically commutated motors
27	fan motors of under one	
28	horsepower and less than 460 volts	
29	than 400 voits	
30		

- (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

1	procedure contained in section	n 5.4 of ASME A112.18.1-2011,	, "Plumbing Supply Fittings," published
2	by the American Society of M	Mechanical Engineers, as in effe	ect on
3	(b) Water closets, except	for dual flush tank-type water c	losets, must have a maximum water use
4	of 1.3 gallons per flush when	n tested in accordance with th	e water consumption test contained in
5	section 7.4 of ASME A112.19	.2-2008, "Ceramic Plumbing Fix	tures," published by the American Soci-
6	ety of Mechanical Engineers,	as in effect on	
7	(c) Dual flush tank-type	water closets must have a maxi	imum effective water use of 1.3 gallons
8	per flush when tested in acc	cordance with the water consu	mption test contained in section 7.4 of
9	ASME A112.19.2-2008, "Cera	mic Plumbing Fixtures," publi	shed by the American Society of Me-
10	chanical Engineers, as in eff	ect on The effective	flush volume is the composite average
11	flush volume of two reduced t		
12	(d) Urinals, except for flo	or mounted urinals, must have	a maximum water use of 0.125 gallons
13	per flush when tested in acc	cordance with the water consu	mption test contained in section 8.6 of
14	ASME A112.19.2-2008, "Cera	amic Plumbing Fixtures," publi	shed by the American Society of Me-
15	chanical Engineers, as in effe		·
16			use of 0.5 gallons per flush when tested
17			n section 8.6 of ASME A112.19.2-2008,
18		•	Society of Mechanical Engineers, as in
19	effect on	1	,
20		tomatically enter standby-passi	ve mode or standby-active mode after a
21			selected input mode. A television must
22		-	r integrated button switch. The peak
23			ode as shipped, may not be less than 65
24			orightest selectable preset mode of the
25		meet the standards in the follow	
26			
27			
28	Standby-	Maximum On	Minimum
29	passive Mode	Mode Power	Power
30	Power Usage	Usage (P	Factor for
31	(Watts)	in Watts)	(P ≥ 100W)
32	(11 2002)	111 (1/4002)	(1 = 100 11)
33	1 W	$P \le 0.12 \times A + 25$	0.9
34	- ''		
35			
36	(20)(a) Large hattery char	gar systems must meet the min	imum efficiencies in the following table:
37	(20)(a) Large battery char	ger systems must meet the min	inium emelencies in the following table.
38			
39	St.	andards for Large Battery Char	gran Systams
	Performance	andards for Large Battery Char	ger Systems
40		Cton doud	
41	Parameter	Standard	
42	Chausa Datuur		
43	Charge Return	0.6 < 1.10	
44	Factor 100 pe		
45	80 per	cent	

```
Depth of
 1
 2
                              Discharge
                                                  Crf \leq 1.15
                              40 percent
5
                              Depth of
                              Discharge
 6
 7
     Power Conversion
 8
9
     Efficiency
                                                     89 percent
10
11
     Power Factor
                                                  ≥ 0.90
12
13
     Maintenance
                                                  \leq 10 +0.00125E<sub>b</sub> W
     Mode Power
14
     (E_{b} = battery)
15
16
     capacity of
     tested battery)
17
18
19
     No Battery
20
     Mode Power
                                                  \leq 10 W
21
22
23
          (b)(A) As described in subparagraph (B) of this paragraph, inductive charger systems and small
     battery charger systems must meet the minimum efficiencies in the following table:
24
25
26
27
                          Standards for Inductive and Small Battery Charger Systems
28
     Performance
                                           Standard
29
     Parameter
30
31
     Maximum 24-hour
                                           For E<sub>b</sub> of 2.5 Wh or less: 16 x N
     charge and
32
     maintenance
                                           For E_{k} > 2.5 Wh and
33
                                           \leq 100 Wh: 12 x N+1.5E<sub>b</sub>
34
     energy (Wh)
35
     (E_{b} = capacity)
36
     of all batteries in
                                           For E_h > 100 Wh and
37
     ports and N =
                                           \leq 1000 Wh: 22 x N+1.5E<sub>1</sub>
38
     number of charger
     ports)
                                           For E_{b} > 1000 Wh:
39
                                           36.4 \times N + 1.486E_{b}
40
41
42
     Maintenance Mode
                                           The sum of maintenance mode power and no
43
     Power and No
                                           battery mode power must be less than or equal to:
     Battery Mode
                                           1 \times N + 0.0021 \times E_{1}
44
45
     Power (W)
```

```
    Power Factor
    (E<sub>b</sub> = capacity
    of all batteries in
    ports and N =
    number of charger
    ports)
```

(B) The requirements in subparagraph (A) of this paragraph must be met 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.
- (iii) Small battery charger systems that are not sold at retail that 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.
- (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:
- (i) Is provided separately from and subsequent to the sale of a small battery charger system described in this paragraph;
- (ii) Necessary as a replacement for, or as a replacement component of, a small battery charger system; and
 - (iii) Provided by a manufacturer directly to a consumer or to a service 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.

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 efficiency standards specified in subsection (1) of this section if the product is:
 - (a) Manufactured in this state and sold outside this state;
- (b) Manufactured outside this state and sold at wholesale inside this state for final retail sale and installation outside this state;
 - (c) Installed in a mobile or manufactured home at the time of construction; or
 - (d) Designed expressly for installation and use in recreational vehicles.

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 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, 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 or high light output double-ended quartz halogen lamp 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 efficiency standards specified in subsection (1) of this section if the product is:
 - (a) Manufactured in this state and sold outside this state;
- (b) Manufactured outside this state and sold at wholesale inside this state for final retail sale and installation outside this state;
 - (c) Installed in a mobile or manufactured home at the time of construction; or
 - (d) Designed expressly for installation and use in recreational vehicles.

INSTALLATION

SECTION 7. ORS 469.239 is 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 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 for compensation 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 install a new product not meeting efficiency standards specified in subsection (1) of this section if the product is:
 - (a) Installed in a mobile or manufactured home at the time of construction; or
 - (b) Designed expressly for installation and use in recreational vehicles.

SECTION 8. ORS 469.239, as amended by section 7 of this 2013 Act, is 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 player, digital versatile disc recorder, portable electric spa, walk-in refrigerator, 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 or high light output double-ended quartz halogen lamp for compensation 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 install a new product not meeting efficiency standards specified in subsection (1) of this section if the product is:
 - (a) Installed in a mobile or manufactured home at the time of construction; or
 - (b) Designed expressly for installation and use in recreational vehicles.

MISCELLANEOUS

 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 2013 Act become operative on January 1, 2016.

- (2) The amendments to ORS 469.233 by section 4 of this 2013 Act become operative on January 1, 2016.
- (3) The amendments to ORS 469.238 by section 6 of this 2013 Act become operative on January 1, 2016.
- (4) The amendments to ORS 469.239 by section 8 of this 2013 Act become operative on January 1, 2016.
- (5) The minimum energy efficiency standards specified in ORS 469.233 (20)(b) do not apply to a small battery charger system that is made available by a manufacturer directly to a consumer or to a service or repair facility, as a service part or spare part, after and separate from the original sale of the product that requires the small battery charger system as a service part or spare part, or for a battery charger that is not sold at retail, before July 1, 2017.