

A-Engrossed
Senate Bill 692

Ordered by the Senate April 12
Including Senate Amendments dated April 12

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.

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

A BILL FOR AN ACT

1
2 Relating to minimum energy efficiency standards; creating new provisions; and amending ORS
3 469.229, 469.233, 469.238 and 469.239.

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

5
6 **DEFINITIONS**

7
8 **SECTION 1.** ORS 469.229 is amended to read:

9 469.229. As used in ORS 469.229 to 469.261, unless the context clearly requires otherwise:

10 (1) **“À la carte charger” means a battery charger that is individually packaged without**
11 **batteries, including a multiport charger or a charger with multi-voltage capability.**

12 [(1)] (2) **“Automatic commercial ice cube machine” means a factory-made assembly, not neces-**
13 **sarily shipped in one package, consisting of a condensing unit and ice-making section operating as**
14 **an integrated unit with means for making and harvesting ice cubes, and any integrated components**
15 **for storing or dispensing ice.**

16 [(2)] (3) **“Ballast” means a device used with an electric discharge lamp to obtain necessary cir-**
17 **cuit conditions for starting and operating the lamp.**

18 (4) **“Battery” or “battery pack” means an assembly of one or more rechargeable cells**
19 **intended to provide electrical energy to a product, in one of the following forms:**

20 (a) **A detachable battery that is contained in an enclosure separate from the product and**
21 **that is intended to be removed or disconnected from the product for charging; or**

22 (b) **An integral battery that is contained within the product and is not removed from the**
23 **product for charging.**

24 (5) **“Battery analyzer” means a device:**

25 (a) **Used to analyze and report a battery’s performance and overall condition;**

26 (b) **Capable of being programmed and performing service functions to restore capability**
27 **in deficient batteries; and**

28 (c) **Not intended or marketed to be used on a daily basis for the purpose of charging**

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.

1 **batteries.**

2 (6) **“Battery backup” or “uninterruptible power supply charger (UPS)” means a small**
3 **battery charger system that is voltage and frequency dependent (VFD) and designed to pro-**
4 **vide power to an end-use product in the event of a power outage, including a UPS as defined**
5 **in International Electrotechnical Commission (IEC) publication 62040-3 (March 2011 edition),**
6 **where the output of the VFD UPS is dependent on changes in AC input voltage and frequency**
7 **and is not intended to provide additional corrective functions, such as those relating to the**
8 **use of tapped transformers.**

9 (7)(a) **“Battery charger system” means a battery charger coupled with its batteries, in-**
10 **cluding:**

11 (A) **Electronic devices with a battery that are normally charged from AC line voltage or**
12 **DC input voltage through an internal or external power supply and a dedicated battery**
13 **charger;**

14 (B) **The battery and battery charger components of devices that are designed to run on**
15 **battery power during part or all of their operations;**

16 (C) **Dedicated battery systems primarily designed for electrical or emergency backup; and**

17 (D) **Devices whose primary function is to charge batteries, along with the batteries the**
18 **devices are designed to charge, including chargers for power tool batteries and chargers for**
19 **automotive, AA, AAA, C, D, or nine-volt rechargeable batteries and chargers for batteries**
20 **used in larger industrial motive equipment and à la carte chargers.**

21 (b) **“Battery charger system” does not mean a battery charger:**

22 (A) **Used to charge a motor vehicle that is powered by an electric motor drawing current**
23 **from rechargeable storage batteries, fuel cells or other portable sources of electrical current,**
24 **including a nonelectrical source of power designed to charge batteries and components**
25 **thereof, except for battery chargers for forklifts, electric personal assistive mobility devices**
26 **or low-speed vehicles;**

27 (B) **That is classified as a Class II or Class III device for human use under the Federal**
28 **Food, Drug, and Cosmetic Act, as in effect on the effective date of this 2013 Act, and that**
29 **requires listing and approval as a medical device;**

30 (C) **Used to charge a battery or batteries in an illuminated exit sign, including those**
31 **products that are a combination illuminated exit sign and emergency egress lighting;**

32 (D) **With input that is three phases of line-to-line 300 volts root mean square or more**
33 **and is designed for a stationary power application;**

34 (E) **That is a battery analyzer; or**

35 (F) **That is a voltage independent or voltage and frequency independent uninterruptible**
36 **power supply as defined in International Electrotechnical Commission (IEC) publication**
37 **62040-3 (March 2011 edition).**

38 (c) **The charging circuitry of battery charger systems may or may not be located within**
39 **the housing of the end-use device. In many cases, the battery may be charged with a dedi-**
40 **cated external charger and power supply combination that is separate from the device that**
41 **runs on power from the battery.**

42 (8) **“Battery maintenance mode” means the mode of operation when the battery charger**
43 **system is connected to the main electricity supply and the battery is fully charged and con-**
44 **connected to the charger.**

45 [(3)] (9) **“Bottle-type water dispenser” means a water dispenser that uses a bottle or reservoir**

1 as the source of potable water.

2 **(10) “Charge return factor” means the number of ampere-hours returned to the battery**
3 **during the charge cycle divided by the number of ampere-hours delivered by the battery**
4 **during discharge.**

5 **(11) “Combination television” means a system in which a television or television monitor**
6 **and an additional device or devices, including a video cassette recorder, are combined into a**
7 **single unit in which the additional device or devices are included in the television casing.**

8 [(4)] **(12) “Commercial clothes washer” means a soft mount horizontal-axis or vertical-axis**
9 **clothes washer that:**

10 (a) Has a clothes compartment no greater than 3.5 cubic feet in the case of a horizontal-axis
11 product or no greater than 4 cubic feet in the case of a vertical-axis product; and

12 (b) Is designed for use by more than one household.

13 [(5)(a)] **(13)(a) “Commercial hot food holding cabinet” means an appliance that is a heated,**
14 **fully-enclosed compartment with one or more solid doors and is designed to maintain the temper-**
15 **ature of hot food that has been cooked in a separate appliance.**

16 (b) “Commercial hot food holding cabinet” does not include heated glass merchandising cabinets,
17 drawer warmers or cook-and-hold appliances.

18 [(6)] **(14) “Commercial prerinse spray valve” means a handheld device designed and marketed for**
19 **use with commercial dishwashing equipment and that sprays water on dishes, flatware and other**
20 **food service items for the purpose of removing food residue prior to their cleaning.**

21 [(7)] **(15) “Commercial refrigerators or freezers” means refrigerators, freezers or refrigerator-**
22 **freezers, smaller than 85 cubic feet of internal volume and designed for use by commercial or insti-**
23 **tutional facilities for the purpose of storing or merchandising food products, beverages or ice at**
24 **specified temperatures, other than products without doors, walk-in refrigerators or freezers, con-**
25 **sumer products that are federally regulated pursuant to 42 U.S.C. 6291 et seq. or freezers specifically**
26 **designed for ice cream. “Commercial refrigerators or freezers”:**

27 (a) Must incorporate most components involved in the vapor-compression cycle and the refrig-
28 erated compartment in a single cabinet; and

29 (b) May be configured with either solid or transparent doors as a reach-in cabinet, pass-through
30 cabinet, roll-in cabinet or roll-through cabinet.

31 [(8)(a)] **(16)(a) “Compact audio product,” also known as a mini, mid, micro or shelf audio system,**
32 **means an integrated audio system encased in a single housing that includes an amplifier and radio**
33 **tuner and attached or separable speakers that can reproduce audio from one or more of the fol-**
34 **lowing media:**

35 (A) Magnetic tape;

36 (B) Compact disc;

37 (C) DVD; or

38 (D) Flash memory.

39 (b) “Compact audio product” does not include products that can be independently powered by
40 internal batteries, have a powered external satellite antenna or can provide a video output signal.

41 [(9)] **(17) “Compensation” means money or any other valuable thing, regardless of form, received**
42 **or to be received by a person for services rendered.**

43 **(18) “Component television” means a television composed of two or more separate com-**
44 **ponents, including separate display device and tuner, marketed as a television under one**
45 **model or system designation and having one or more power cords.**

1 **(19) “Computer monitor” means an analog or digital device that is designed primarily for**
2 **the display of computer-generated signals and that is not marketed for use as a television.**

3 [(10)] **(20) “Digital versatile disc” or “DVD” means a laser-encoded plastic medium capable of**
4 **storing a large amount of digital audio, video and computer data.**

5 [(11)(a)] **(21)(a) “Digital versatile disc player” or “digital versatile disc recorder” means a com-**
6 **mercially available electronic product encased in a single housing that includes an integral power**
7 **supply and for which the sole purpose is, respectively, the decoding and the production or recording**
8 **of digitized video signal on a DVD.**

9 (b) “Digital versatile disc recorder” does not include models that have an electronic program-
10 **ming guide function that provides an interactive, on-screen menu of television listings and down-**
11 **loads program information from the vertical blanking interval of a regular television signal.**

12 **(22) “Electronic programming guide” means an application that provides an interactive,**
13 **on-screen menu of television listings that downloads program information from the vertical**
14 **blanking interval of a regular television signal.**

15 [(12)] **(23) “High-intensity discharge lamp” means a lamp in which light is produced by the pas-**
16 **sage of an electric current through a vapor or gas, and in which the light-producing arc is stabilized**
17 **by bulb wall temperature and the arc tube has a bulb wall loading in excess of three watts per**
18 **square centimeter.**

19 [(13)] **(24) “Illuminated exit sign” means an internally illuminated sign that is designed to be**
20 **permanently fixed in place to identify a building exit, that consists of an electrically powered inte-**
21 **gral light source that illuminates the legend “EXIT” and any directional indicators and that pro-**
22 **vides contrast between the legend, any directional indicators and the background.**

23 **(25) “Inductive charger system” means a small battery charger system that transfers**
24 **power to the charger through magnetic or electric induction.**

25 **(26)(a) “Large battery charger system” means a battery charger system with a rated in-**
26 **put power of more than two kilowatts.**

27 **(b) “Large battery charger system” does not mean a battery charger system for golf**
28 **carts.**

29 [(14)] **(27) “Metal halide lamp” means a high-intensity discharge lamp in which the major portion**
30 **of the light is produced by radiation of metal halides and their products of dissociation, possibly in**
31 **combination with metallic vapors.**

32 [(15)] **(28) “Metal halide lamp fixture” means a light fixture designed to be operated with a metal**
33 **halide lamp and a ballast for a metal halide lamp.**

34 **(29) “Multiport charger” means a battery charger that is capable of simultaneously**
35 **charging two or more batteries and that may have multivoltage capability, allowing two or**
36 **more batteries of different voltages to charge simultaneously.**

37 **(30) “No battery mode” means the mode of operation in which a battery charger is con-**
38 **nected to the main electricity supply and the battery is not connected to the charger.**

39 [(16)] **(31) “Pass-through cabinet” means a commercial refrigerator or freezer with hinged or**
40 **sliding doors on both the front and rear of the unit.**

41 [(17)] **(32) “Portable electric spa” means a factory-built electric spa or hot tub supplied with**
42 **equipment for heating and circulating water.**

43 **(33) “Power conversion efficiency” means the instantaneous DC output power of the**
44 **battery charger system divided by the simultaneous utility AC input power.**

45 [(18)] **(34) “Probe-start metal halide lamp ballast” means a ballast used to operate metal halide**

1 lamps that does not contain an igniter and that instead starts metal halide lamps by using a third
2 starting electrode probe in the arc tube.

3 [(19)] (35) "Reach-in cabinet" means a commercial refrigerator or freezer with hinged or sliding
4 doors or lids, other than roll-in or roll-through cabinets or pass-through cabinets.

5 [(20)] (36) "Roll-in cabinet" means a commercial refrigerator or freezer with hinged or sliding
6 doors that allow wheeled racks to be rolled into the unit.

7 [(21)] (37) "Roll-through cabinet" means a commercial refrigerator or freezer with hinged or
8 sliding doors on two sides of the cabinet that allow wheeled racks to be rolled through the unit.

9 (38) "Selected input mode" means the input port selected that the television uses as a
10 source to produce a visible or audible output and that is required for televisions with multi-
11 ple possible inputs, including coaxial, composite, S-Video, HDMI and component connectors.

12 [(22)(a)] (39)(a) "Single-voltage external AC to DC power supply" means a device, other than a
13 product with batteries or battery packs that physically attach directly to the power supply unit, a
14 product with a battery chemistry or type selector switch and indicator light or a product with a
15 battery chemistry or type selector switch and a state of charge meter, that:

16 (A) Is designed to convert line voltage alternating current input into lower voltage direct cur-
17 rent output;

18 (B) Is able to convert to only one direct current output voltage at a time;

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

21 (D) Is contained within a separate physical enclosure from the end-use product;

22 (E) Is connected to the end-use product via a removable or hard-wired male or female electrical
23 connection, cable, cord or other wiring; and

24 (F) Has a nameplate output power less than or equal to 250 watts.

25 (b) "Single-voltage external AC to DC power supply" does not include power supplies that are
26 classified as devices for human use under the Federal Food, Drug and Cosmetic Act, 21 U.S.C. 360c.

27 (40) "Small battery charger system" means:

28 (a) A battery charger system with a rated input power of two kilowatts or less.

29 (b) A golf cart battery charger system, regardless of input power or battery capacity.

30 [(23)] (41) "State-regulated incandescent reflector lamp" means a lamp that is not colored or
31 designed for rough or vibrating service applications, that has an inner reflective coating on the
32 outer bulb to direct the light, that has an E26 medium screw base, that has a rated voltage or
33 voltage range that lies at least partially within 115 to 130 volts and that falls into one of the fol-
34 lowing categories:

35 (a) A bulged reflector or elliptical reflector bulb shape that has a diameter that equals or ex-
36 ceeds 2.25 inches; or

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

39 (42)(a) "Television" means an analog or digital device, including a combination television,
40 a television monitor, a component television and any unit marketed as a television, designed
41 for the display and reception of a terrestrial, satellite, cable or Internet protocol or other
42 broadcast or recorded transmission of analog or digital video or audio signals.

43 (b) "Television" does not mean a computer monitor.

44 (43) "Television monitor" means a television that does not have an internal tuner, re-
45 ceiver or playback device.

1 **(44) “Television standby-passive mode” means the mode of operation in which the tele-**
2 **vision is connected to a power source, produces neither sound nor picture but can be**
3 **switched into another mode with the remote control unit or via an internal signal.**

4 [(24)] **(45) “Torchiere” means a portable electric lighting fixture with a reflective bowl that di-**
5 **rects light upward so as to produce indirect illumination.**

6 [(25)] **(46) “Traffic signal module” means a standard traffic signal indicator, consisting of a light**
7 **source, a lens and all other parts necessary for operation, that is:**

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

9 (b) Twelve inches, or approximately 300 millimeters, in diameter.

10 [(26)] **(47) “Unit heater” means a self-contained, vented fan-type commercial space heater, other**
11 **than a consumer product covered by federal standards established pursuant to 42 U.S.C. 6291 et seq.**
12 **or that is a direct vent, forced flue heater with a sealed combustion burner, that uses natural gas**
13 **or propane and that is designed to be installed without ducts within a heated space.**

14 **(48) “USB charger system” means a small battery charger system that uses a universal**
15 **serial bus (USB) connector as the only power source to charge the battery, and is packaged**
16 **with an external power supply rated with a voltage output of five volts and a power output**
17 **of 15 watts or less.**

18 [(27)] **(49) “Walk-in refrigerator” and “walk-in freezer” mean a space refrigerated to temper-**
19 **atures, respectively, at or above and below 32° F that can be walked into.**

20 [(28)] **(50) “Water dispenser” means a factory-made assembly that mechanically cools and heats**
21 **potable water and dispenses the cooled or heated water by integral or remote means.**

22 **SECTION 2. ORS 469.229, as amended by section 1 of this 2013 Act, is amended to read:**

23 (1) “À la carte charger” means a battery charger that is individually packaged d without bat-
24 teries, including a multiport charger or a charger with multi-voltage capability.

25 (2) “Automatic commercial ice cube machine” means a factory-made assembly, not necessarily
26 shipped in one package, consisting of a condensing unit and ice-making section operating as an in-
27 tegrated unit with means for making and harvesting ice cubes, and any integrated components for
28 storing or dispensing ice.

29 (3) “Ballast” means a device used with an electric discharge lamp to obtain necessary circuit
30 conditions for starting and operating the lamp.

31 (4) “Battery” or “battery pack” means an assembly of one or more rechargeable cells intended
32 to provide electrical energy to a product, in one of the following forms:

33 (a) A detachable battery that is contained in an enclosure separate from the product and that
34 is intended to be removed or disconnected from the product for charging; or

35 (b) An integral battery that is contained within the product and is not removed from the product
36 for charging.

37 (5) “Battery analyzer” means a device:

38 (a) Used to analyze and report a battery’s performance and overall condition;

39 (b) Capable of being programmed and performing service functions to restore capability in defi-
40 cient batteries; and

41 (c) Not intended or marketed to be used on a daily basis for the purpose of charging batteries.

42 (6) “Battery backup” or “uninterruptible power supply charger (UPS)” means a small battery
43 charger system that is voltage and frequency dependent (VFD) and designed to provide power to an
44 end-use product in the event of a power outage, including a UPS as defined in International
45 Electrotechnical Commission (IEC) publication 62040-3 (March 2011 edition), where the output of the

1 VFD UPS is dependent on changes in AC input voltage and frequency and is not intended to provide
2 additional corrective functions, such as those relating to the use of tapped transformers.

3 (7)(a) "Battery charger system" means a battery charger coupled with its batteries, including:

4 (A) Electronic devices with a battery that are normally charged from AC line voltage or DC
5 input voltage through an internal or external power supply and a dedicated battery charger;

6 (B) The battery and battery charger components of devices that are designed to run on battery
7 power during part or all of their operations;

8 (C) Dedicated battery systems primarily designed for electrical or emergency backup; and

9 (D) Devices whose primary function is to charge batteries, along with the batteries the devices
10 are designed to charge, including chargers for power tool batteries and chargers for automotive,
11 AA, AAA, C, D, or nine-volt rechargeable batteries and chargers for batteries used in larger indus-
12 trial motive equipment and à la carte chargers.

13 (b) "Battery charger system" does not mean a battery charger:

14 (A) Used to charge a motor vehicle that is powered by an electric motor drawing current from
15 rechargeable storage batteries, fuel cells or other portable sources of electrical current, including
16 a nonelectrical source of power designed to charge batteries and components thereof, except for
17 battery chargers for forklifts, electric personal assistive mobility devices or low-speed vehicles;

18 (B) That is classified as a Class II or Class III device for human use under the Federal Food,
19 Drug, and Cosmetic Act, as in effect on the effective date of this 2013 Act, and that requires listing
20 and approval as a medical device;

21 (C) Used to charge a battery or batteries in an illuminated exit sign, including those products
22 that are a combination illuminated exit sign and emergency egress lighting;

23 (D) With input that is three phases of line-to-line 300 volts root mean square or more and is
24 designed for a stationary power application;

25 (E) That is a battery analyzer; or

26 (F) That is a voltage independent or voltage and frequency independent uninterruptible power
27 supply as defined in International Electrotechnical Commission (IEC) publication 62040-3 (March
28 2011 edition).

29 (c) The charging circuitry of battery charger systems may or may not be located within the
30 housing of the end-use device. In many cases, the battery may be charged with a dedicated external
31 charger and power supply combination that is separate from the device that runs on power from the
32 battery.

33 (8) "Battery maintenance mode" means the mode of operation when the battery charger system
34 is connected to the main electricity supply and the battery is fully charged and connected to the
35 charger.

36 (9) "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the
37 source of potable water.

38 (10) "Charge return factor" means the number of ampere-hours returned to the battery during
39 the charge cycle divided by the number of ampere-hours delivered by the battery during discharge.

40 (11) "Combination television" means a system in which a television or television monitor and
41 an additional device or devices, including a video cassette recorder, are combined into a single unit
42 in which the additional device or devices are included in the television casing.

43 (12) "Commercial clothes washer" means a soft mount horizontal-axis or vertical-axis clothes
44 washer that:

45 (a) Has a clothes compartment no greater than 3.5 cubic feet in the case of a horizontal-axis

1 product or no greater than 4 cubic feet in the case of a vertical-axis product; and

2 (b) Is designed for use by more than one household.

3 (13)(a) "Commercial hot food holding cabinet" means an appliance that is a heated, fully-
4 enclosed compartment with one or more solid doors and is designed to maintain the temperature of
5 hot food that has been cooked in a separate appliance.

6 (b) "Commercial hot food holding cabinet" does not include heated glass merchandising cabinets,
7 drawer warmers or cook-and-hold appliances.

8 (14) "Commercial prerinse spray valve" means a handheld device designed and marketed for use
9 with commercial dishwashing equipment and that sprays water on dishes, flatware and other food
10 service items for the purpose of removing food residue prior to their cleaning.

11 (15) "Commercial refrigerators or freezers" means refrigerators, freezers or refrigerator-freezers,
12 smaller than 85 cubic feet of internal volume and designed for use by commercial or institutional
13 facilities for the purpose of storing or merchandising food products, beverages or ice at specified
14 temperatures, other than products without doors, walk-in refrigerators or freezers, consumer pro-
15 ducts that are federally regulated pursuant to 42 U.S.C. 6291 et seq. or freezers specifically designed
16 for ice cream. "Commercial refrigerators or freezers":

17 (a) Must incorporate most components involved in the vapor-compression cycle and the refrig-
18 erated compartment in a single cabinet; and

19 (b) May be configured with either solid or transparent doors as a reach-in cabinet, pass-through
20 cabinet, roll-in cabinet or roll-through cabinet.

21 (16)(a) "Compact audio product," also known as a mini, mid, micro or shelf audio system, means
22 an integrated audio system encased in a single housing that includes an amplifier and radio tuner
23 and attached or separable speakers that can reproduce audio from one or more of the following
24 media:

25 (A) Magnetic tape;

26 (B) Compact disc;

27 (C) DVD; or

28 (D) Flash memory.

29 (b) "Compact audio product" does not include products that can be independently powered by
30 internal batteries, have a powered external satellite antenna or can provide a video output signal.

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

33 (18) "Component television" means a television composed of two or more separate components,
34 including separate display device and tuner, marketed as a television under one model or system
35 designation and having one or more power cords.

36 (19) "Computer monitor" means an analog or digital device that is designed primarily for the
37 display of computer-generated signals and that is not marketed for use as a television.

38 (20) "Digital versatile disc" or "DVD" means a laser-encoded plastic medium capable of storing
39 a large amount of digital audio, video and computer data.

40 (21)(a) "Digital versatile disc player" or "digital versatile disc recorder" means a commercially
41 available electronic product encased in a single housing that includes an integral power supply and
42 for which the sole purpose is, respectively, the decoding and the production or recording of digitized
43 video signal on a DVD.

44 (b) "Digital versatile disc recorder" does not include models that have an electronic program-
45 ming guide function that provides an interactive, on-screen menu of television listings and down-

1 loads program information from the vertical blanking interval of a regular television signal.

2 **(22) “Dual flush tank-type water closet” means a tank-type water closet that incorpo-**
3 **rates a feature that allows the user to flush the water closet with a reduced volume of water**
4 **or a full volume of water.**

5 [(22)] **(23) “Electronic programming guide” means an application that provides an interactive,**
6 **on-screen menu of television listings that downloads program information from the vertical blanking**
7 **interval of a regular television signal.**

8 [(23)] **(24) “High-intensity discharge lamp” means a lamp in which light is produced by the pas-**
9 **sage of an electric current through a vapor or gas, and in which the light-producing arc is stabilized**
10 **by bulb wall temperature and the arc tube has a bulb wall loading in excess of three watts per**
11 **square centimeter.**

12 **(25)(a) “High light output double-ended quartz halogen lamp” means a lamp that:**

13 **(A) Is designed for general outdoor lighting purposes;**

14 **(B) Contains a tungsten filament;**

15 **(C) Has a rated initial lumen value of greater than 6,000 and less than 40,000 lumens;**

16 **(D) Has at each end a recessed single contact, R7s base;**

17 **(E) Has a maximum overall length between four and 11 inches;**

18 **(F) Has a nominal diameter less than three-fourths inch (T6); and**

19 **(G) Is designed to be operated at a voltage between 110 volts and 200 volts or is designed**
20 **to be operated at a voltage between 235 volts and 300 volts.**

21 **(b) “High light output double-ended quartz halogen lamp” does not mean a lamp that is:**

22 **(A) A tubular quartz infrared heat lamp; or**

23 **(B) Marked and marketed as a stage and studio lamp with a rated life of 500 hours or**
24 **less.**

25 [(24)] **(26) “Illuminated exit sign” means an internally illuminated sign that is designed to be**
26 **permanently fixed in place to identify a building exit, that consists of an electrically powered inte-**
27 **gral light source that illuminates the legend “EXIT” and any directional indicators and that pro-**
28 **vides contrast between the legend, any directional indicators and the background.**

29 [(25)] **(27) “Inductive charger system” means a small battery charger system that transfers**
30 **power to the charger through magnetic or electric induction.**

31 [(26)(a)] **(28)(a) “Large battery charger system” means a battery charger system with a rated**
32 **input power of more than two kilowatts.**

33 **(b) “Large battery charger system” does not mean a battery charger system for golf carts.**

34 **(29) “Lavatory faucet” means a plumbing fitting, including flow restrictors, flow regula-**
35 **tors, aerator devices and laminar flow devices, designed for installation at a sink or basin in**
36 **a room containing a water closet.**

37 [(27)] **(30) “Metal halide lamp” means a high-intensity discharge lamp in which the major portion**
38 **of the light is produced by radiation of metal halides and their products of dissociation, possibly in**
39 **combination with metallic vapors.**

40 [(28)] **(31) “Metal halide lamp fixture” means a light fixture designed to be operated with a metal**
41 **halide lamp and a ballast for a metal halide lamp.**

42 [(29)] **(32) “Multiport charger” means a battery charger that is capable of simultaneously**
43 **charging two or more batteries and that may have multivoltage capability, allowing two or more**
44 **batteries of different voltages to charge simultaneously.**

45 [(30)] **(33) “No battery mode” means the mode of operation in which a battery charger is con-**

1 nected to the main electricity supply and the battery is not connected to the charger.

2 [(31)] (34) “Pass-through cabinet” means a commercial refrigerator or freezer with hinged or
3 sliding doors on both the front and rear of the unit.

4 [(32)] (35) “Portable electric spa” means a factory-built electric spa or hot tub supplied with
5 equipment for heating and circulating water.

6 [(33)] (36) “Power conversion efficiency” means the instantaneous DC output power of the bat-
7 tery charger system divided by the simultaneous utility AC input power.

8 [(34)] (37) “Probe-start metal halide lamp ballast” means a ballast used to operate metal halide
9 lamps that does not contain an igniter and that instead starts metal halide lamps by using a third
10 starting electrode probe in the arc tube.

11 [(35)] (38) “Reach-in cabinet” means a commercial refrigerator or freezer with hinged or sliding
12 doors or lids, other than roll-in or roll-through cabinets or pass-through cabinets.

13 [(36)] (39) “Roll-in cabinet” means a commercial refrigerator or freezer with hinged or sliding
14 doors that allow wheeled racks to be rolled into the unit.

15 [(37)] (40) “Roll-through cabinet” means a commercial refrigerator or freezer with hinged or
16 sliding doors on two sides of the cabinet that allow wheeled racks to be rolled through the unit.

17 [(38)] (41) “Selected input mode” means the input port selected that the television uses as a
18 source to produce a visible or audible output and that is required for televisions with multiple pos-
19 sible inputs, including coaxial, composite, S-Video, HDMI and component connectors.

20 [(39)(a)] (42)(a) “Single-voltage external AC to DC power supply” means a device, other than a
21 product with batteries or battery packs that physically attach directly to the power supply unit, a
22 product with a battery chemistry or type selector switch and indicator light or a product with a
23 battery chemistry or type selector switch and a state of charge meter, that:

24 (A) Is designed to convert line voltage alternating current input into lower voltage direct cur-
25 rent output;

26 (B) Is able to convert to only one direct current output voltage at a time;

27 (C) Is sold with, or intended to be used with, a separate end-use product that constitutes the
28 primary power load;

29 (D) Is contained within a separate physical enclosure from the end-use product;

30 (E) Is connected to the end-use product via a removable or hard-wired male or female electrical
31 connection, cable, cord or other wiring; and

32 (F) Has a nameplate output power less than or equal to 250 watts.

33 (b) “Single-voltage external AC to DC power supply” does not include power supplies that are
34 classified as devices for human use under the Federal Food, Drug and Cosmetic Act, 21 U.S.C. 360c.

35 [(40)] (43) “Small battery charger system” means:

36 (a) A battery charger system with a rated input power of two kilowatts or less.

37 (b) A golf cart battery charger system, regardless of input power or battery capacity.

38 [(41)] (44) “State-regulated incandescent reflector lamp” means a lamp that is not colored or
39 designed for rough or vibrating service applications, that has an inner reflective coating on the
40 outer bulb to direct the light, that has an E26 medium screw base, that has a rated voltage or
41 voltage range that lies at least partially within 115 to 130 volts and that falls into one of the fol-
42 lowing categories:

43 (a) A bulged reflector or elliptical reflector bulb shape that has a diameter that equals or ex-
44 ceeds 2.25 inches; or

45 (b) A reflector, parabolic aluminized reflector or similar bulb shape that has a diameter of 2.25

1 to 2.75 inches.

2 [(42)(a)] (45)(a) "Television" means an analog or digital device, including a combination tele-
3 vision, a television monitor, a component television and any unit marketed as a television, designed
4 for the display and reception of a terrestrial, satellite, cable or Internet protocol or other broadcast
5 or recorded transmission of analog or digital video or audio signals.

6 (b) "Television" does not mean a computer monitor.

7 [(43)] (46) "Television monitor" means a television that does not have an internal tuner, receiver
8 or playback device.

9 [(44)] (47) "Television standby-passive mode" means the mode of operation in which the tele-
10 vision is connected to a power source, produces neither sound nor picture but can be switched into
11 another mode with the remote control unit or via an internal signal.

12 [(45)] (48) "Torchiere" means a portable electric lighting fixture with a reflective bowl that di-
13 rects light upward so as to produce indirect illumination.

14 [(46)] (49) "Traffic signal module" means a standard traffic signal indicator, consisting of a light
15 source, a lens and all other parts necessary for operation, that is:

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

17 (b) Twelve inches, or approximately 300 millimeters, in diameter.

18 [(47)] (50) "Unit heater" means a self-contained, vented fan-type commercial space heater, other
19 than a consumer product covered by federal standards established pursuant to 42 U.S.C. 6291 et seq.
20 or that is a direct vent, forced flue heater with a sealed combustion burner, that uses natural gas
21 or propane and that is designed to be installed without ducts within a heated space.

22 (51)(a) "Urinal" means a plumbing fixture that receives only liquid body waste and then
23 conveys the liquid waste through a trap into a drainage system.

24 (b) "Urinal" does not mean fixtures designed for installation in prisons or other penal
25 institutions.

26 [(48)] (52) "USB charger system" means a small battery charger system that uses a universal
27 serial bus (USB) connector as the only power source to charge the battery, and is packaged with
28 an external power supply rated with a voltage output of five volts and a power output of 15 watts
29 or less.

30 [(49)] (53) "Walk-in refrigerator" and "walk-in freezer" mean a space refrigerated to temper-
31 atures, respectively, at or above and below 32° F that can be walked into.

32 (54)(a) "Water closet" means a plumbing fixture with a water containing receptor that
33 receives liquid body waste and solid body waste and upon actuation conveys the wastes
34 through an integral trap into a drainage system.

35 (b) "Water closet" does not mean fixtures designed for installation in prisons or other
36 penal institutions.

37 [(50)] (55) "Water dispenser" means a factory-made assembly that mechanically cools and heats
38 potable water and dispenses the cooled or heated water by integral or remote means.

39
40 **MINIMUM ENERGY EFFICIENCY STANDARDS**

41
42 **SECTION 3.** ORS 469.233 is amended to read:

43 469.233. The following minimum energy efficiency standards for new products are established:

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

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Equipment type	Type of cooling	Harvest rate (lbs. ice/24 hrs.)	Maximum energy use (kWh/100 lbs.)	Maximum condenser water use (gallons/100 lbs. ice)
Ice-making head	water	<500	7.80 -.0055H	200 -.022H
		≥ 500<1436	5.58 -.0011H	200 -.022H
		≥ 1436	4.0	200 -.022H
Ice-making head	air	<450	10.26 -.0086H	Not applicable
		≥ 450	6.89 -.0011H	Not applicable
Remote condensing but not remote compressor				
	air	<1000	8.85 -.0038	Not applicable
		≥ 1000	5.10	Not applicable
Remote condensing and remote compressor				
	air	<934	8.85 -.0038H	Not applicable
		≥ 934	5.30	Not applicable
Self-contained models				
	water	<200	11.40 -.0190H	191 -.0315H
		≥ 200	7.60	191 -.0315H
Self-contained models				
	air	<175	18.0 -.0469H	Not applicable
		≥ 175	9.80	Not applicable

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:

Equipment Type	Doors	Maximum Daily Energy Consumption (kWh)
Reach-in cabinets, pass-through cabinets and roll-in or roll-through cabinets that are refrigerators	Solid Transparent	$0.10V + 2.04$ $0.12V + 3.34$
Reach-in cabinets, pass-through cabinets and roll-in or roll-through cabinets that are "pulldown" refrigerators	Transparent	$0.126V + 3.51$
Reach-in cabinets, pass-through cabinets and roll-in or roll-through cabinets that are freezers	Solid Transparent	$0.40V + 1.38$ $0.75V + 4.10$
Reach-in cabinets that are refrigerator-freezers with an AV of 5.19 or higher	Solid	$0.27AV - 0.71$

kWh = kilowatt hours

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

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

(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	38 ± 2

1 Freezer 0 ± 2

2

3

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

9 (6) Metal halide lamp fixtures designed to be operated with lamps rated greater than or equal
 10 to 150 watts but less than or equal to 500 watts may not contain a probe-start metal halide lamp
 11 ballast.

12 (7)(a) Single-voltage external AC to DC power supplies manufactured on or after July 1, 2008,
 13 must meet the requirements in the following table:

14

15

Nameplate output	Minimum Efficiency in Active Mode
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17

<1 Watt	0.5 * Nameplate Output
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≥ 1 Watt	
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and ≤ 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
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> 51 Watts	0.85
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22

	Maximum Energy Consumption in No-Load Mode
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Any Output	0.5 Watts
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26

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

29

30

31 (b) For the purposes of this subsection, efficiency of single-voltage external AC to DC power
 32 supplies shall be measured in accordance with the United States Environmental Protection Agency’s
 33 “Test Method for Calculating the Energy Efficiency of Single-Voltage External AC to DC and AC
 34 to AC Power Supplies,” dated August 11, 2004. The efficiency in the active and no-load modes of
 35 power supplies shall be tested only at 115 volts at 60 Hz.

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

38

39

Wattage	Minimum average lamp efficiency (lumens per watt)
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42

40 - 50	10.5
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51 - 66	11.0
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67 - 85	12.5
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1	86 - 115	14.0
2	116 - 155	14.5
3	156 - 205	15.0

5
6 (b) Lamp efficiency shall be measured in accordance with the applicable test method found in
7 10 C.F.R. 430.23.

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

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

15	Module Type	Maximum Wattage (at 74°C)	Nominal Wattage (at 25°C)
18	12" red ball (or 300 mm circular)	17	11
19	8" red ball (or 200 mm circular)	13	8
20	12" red arrow (or 300 mm arrow)	12	9
22	12" green ball (or 300 mm circular)	15	15
23	8" green ball (or 200 mm circular)	12	12
24	12" green arrow (or 300 mm arrow)	11	11

26
27 (b) For purposes of this subsection, maximum wattage and nominal wattage shall be measured
28 in accordance with and under the testing conditions specified by the Institute for Transportation
29 Engineers "Interim LED Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light
30 Emitting Diode Vehicle Traffic Signal Modules."

31 (11) Unit heaters must be equipped with intermittent ignition devices and must have either
32 power venting or an automatic flue damper.

33 (12) Bottle-type water dispensers designed for dispensing both hot and cold water may not have
34 standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance
35 with the test criteria contained in Version 1 of the United States Environmental Protection
36 Agency's "Energy Star Program Requirements for Bottled Water Coolers," except that units with
37 an integral, automatic timer may not be tested using Section D, "Timer Usage," of the test criteria.

38 (13) Commercial hot food holding cabinets shall have a maximum idle energy rate of 40 watts
39 per cubic foot of interior volume, as determined by the "Idle Energy Rate-dry Test" in ASTM
40 F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by
41 ASTM International. Interior volume shall be measured in accordance with the method shown in the
42 United States Environmental Protection Agency's "Energy Star Program Requirements for Com-
43 mercial Hot Food Holding Cabinets," as in effect on August 15, 2003.

44 (14) Compact audio products may not use more than two watts in standby passive mode for those
45 without a permanently illuminated clock display and four watts in standby passive mode for those

1 with a permanently illuminated clock display, as measured in accordance with International
 2 Electrotechnical Commission (IEC) test method 62087:2002(E), "Methods of Measurement for the
 3 Power Consumption of Audio, Video, and Related Equipment."

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

8 (16) Portable electric spas may not have a standby power greater than $5(V^{2/3})$ Watts where
 9 V=the total volume in gallons, as measured in accordance with the test method for portable electric
 10 spas contained in the California Code of Regulations, Title 20, Division 2, Chapter 4, section 1604.

11 (17)(a) Walk-in refrigerators and walk-in freezers with the applicable motor types shown in the
 12 table below shall include the required components shown.

14	15 Motor Type	16 Required Components
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		
32	All	Floor insulation at least R-28 for freezers (no
33		requirement for refrigerators)
34		
35	Condenser fan motors of	(i) Electronically commutated motors,
36	under one horsepower	(ii) Permanent split capacitor-type motors, or
37		(iii) Polyphase motors of ½ horsepower or more
38		
39	Single-phase evaporator	Electronically commutated motors
40	fan motors of under one	
41	horsepower and less	
42	than 460 volts	

44
 45 (b) In addition to the requirements in paragraph (a) of this subsection, walk-in refrigerators and

1 walk-in freezers with transparent reach-in doors shall meet the following requirements:

2 (A) Transparent reach-in doors shall be of triple pane glass with either heat-reflective treated
3 glass or gas fill;

4 (B) If the appliance has an anti-sweat heater without anti-sweat controls, the appliance shall
5 have a total door rail, glass and frame heater power draw of no more than 40 watts if it is a freezer
6 or 17 watts if it is a refrigerator per foot of door frame width; and

7 (C) If the appliance has an anti-sweat heater with anti-sweat heat controls, and the total door
8 rail, glass, and frame heater power draw is 40 watts or greater per foot of door frame width if it is
9 a freezer or 17 watts or greater per foot of door frame width if it is a refrigerator, the anti-sweat
10 heat controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to
11 the relative humidity in the air outside the door or to the condensation on the inner glass pane.

12 (18) **A television must automatically enter television standby-passive mode after a maxi-**
13 **imum of 15 minutes without video or audio input on the selected input mode. A television**
14 **must enter television standby-passive mode when turned off with the remote control unit**
15 **or via an internal signal. The peak luminance of a television in home mode, or in the default**
16 **mode as shipped, may not be less than 65 percent of the peak luminance of the retail mode**
17 **or the brightest selectable preset mode of the television. A television must meet the stan-**
18 **dards in the following table:**

Television Standby- passive Mode Power Usage (Watts)	Maximum On Mode Power Usage (P in Watts, A is Viewable Screen area)	Minimum Power Factor for (P ≥ 100W)
1 W	$P \leq 0.12 \times A + 25$	0.9

31 (19)(a) **Large battery charger systems must meet the minimum efficiencies in the fol-**
32 **lowing table:**

Standards for Large Battery Charger Systems		
Performance		
Parameter		Standard
Charge Return		
Factor	100 percent Depth of Discharge	$Crf \leq 1.10$
	80 percent Depth of	$Crf \leq 1.10$

1	Discharge	
2		
3	40 percent	Crf ≤ 1.15
4	Depth of	
5	Discharge	
6		
7	Power Conversion	
8	Efficiency	≥ 89 percent
9		
10	Power Factor	≥ 0.90
11		
12	Battery	
13	Maintenance	
14	Mode Power	≤ 10 +0.0012E_b W
15	(E_b = battery	
16	capacity of	
17	tested battery)	
18		
19	No Battery	
20	Mode Power	≤ 10 W

(b)(A) As described in subparagraph (B) of this paragraph, inductive charger systems and small battery charger systems must meet the minimum energy efficiency standards in the following table:

Standards for Inductive and Small Battery Charger Systems	
Performance	Standard
Parameter	
32 Maximum 24-hour	For E_b of 2.5 Wh or less: 16 x N
33 charge and	
34 maintenance	For E_b >2.5 Wh and
35 energy (Wh)	≤ 100 Wh: 12 x N+1.5E_b
36 (E_b = capacity	
37 of all batteries in	For E_b >100 Wh and
38 ports and N =	≤ 1000 Wh: 22 x N+1.6E_b
39 number of charger	
40 ports)	For E_b > 1000 Wh:
41	36.4 x N + 1.486E_b
42	
43 Battery Maintenance	The sum of battery maintenance mode power and no
44 Mode Power and No	battery mode power must be less than or equal to:
45 Battery Mode	1 x N+0.0021xE_b

1 **Power (W)**
 2 **Power Factor**
 3 **(E_b = capacity**
 4 **of all batteries in**
 5 **ports and N =**
 6 **number of charger**
 7 **ports)**

8
 9
 10 **(B) The requirements in subparagraph (A) of this paragraph must be met by:**

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

14 **(ii) Small battery charger systems for sale at retail that are USB charger systems with**
 15 **a battery capacity of 20 watt-hours or more and that are manufactured on or after January**
 16 **1, 2014.**

17 **(iii) Small battery charger systems that are not sold at retail and that are manufactured**
 18 **on or after January 1, 2017.**

19 **(iv) Inductive charger systems manufactured on or after January 1, 2014, unless the in-**
 20 **ductive charger system uses less than one watt in battery maintenance mode, less than one**
 21 **watt in no battery mode and an average of one watt or less over the duration of the charge**
 22 **and battery maintenance mode test.**

23 **(v) Battery backups and uninterruptible power supplies, manufactured on or after Janu-**
 24 **ary 1, 2014, for small battery charger systems for sale at retail, which may not consume**
 25 **more than 0.8 ($0.0021 \times E_b$) watts in battery maintenance mode, where (E_b) is the battery ca-**
 26 **capacity in watt-hours.**

27 **(vi) Small battery charger systems not sold at retail, manufactured after January 1, 2017,**
 28 **which may not consume more than 0.8 ($0.0021 \times E_b$) watts in battery maintenance mode, where**
 29 **(E_b) is the battery capacity in watt-hours.**

30 **(C) The requirements in subparagraph (A) of this paragraph do not need to be met by**
 31 **an à la carte charger that is:**

32 **(i) Provided separately from and subsequent to the sale of a small battery charger system**
 33 **described in this paragraph;**

34 **(ii) Necessary as a replacement for, or as a replacement component of, a small battery**
 35 **charger system; and**

36 **(iii) Provided by a manufacturer directly to a consumer or to a service or repair facility.**

37 **SECTION 4.** ORS 469.233, as amended by section 3 of this 2013 Act, is amended to read:

38 469.233. The following minimum energy efficiency standards for new products are established:

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

43 Equipment type	Type of	Harvest rate	Maximum	Maximum
44	cooling	(lbs. ice/24 hrs.)	energy use	condenser
45			(kWh/100 lbs.)	water use

(gallons/100 lbs. ice)

1					
2					
3	Ice-making head	water	<500	7.80 -.0055H	200 -.022H
4			≥ 500<1436	5.58 -.0011H	200 -.022H
5			≥ 1436	4.0	200 -.022H
6	Ice-making head	air	<450	10.26 -.0086H	Not applicable
7			≥ 450	6.89 -.0011H	Not applicable
8	Remote condensing				
9	but not remote				
10	compressor	air	<1000	8.85 -.0038	Not applicable
11			≥ 1000	5.10	Not applicable
12	Remote condensing				
13	and remote				
14	compressor	air	<934	8.85 -.0038H	Not applicable
15			≥ 934	5.30	Not applicable
16	Self-contained				
17	models	water	<200	11.40 -.0190H	191 -.0315H
18			≥ 200	7.60	191 -.0315H
19	Self-contained				
20	models	air	<175	18.0 -.0469H	Not applicable
21			≥ 175	9.80	Not applicable

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

24
 25
 26 (b) For purposes of this subsection, automatic commercial ice cube machines shall be tested in
 27 accordance with the ARI 810-2003 test method as published by the Air-Conditioning and Refriger-
 28 ation Institute. Ice-making heads include all automatic commercial ice cube machines that are not
 29 split system ice makers or self-contained models as defined in ARI 810-2003.

30 (2) Commercial clothes washers must have a minimum modified energy factor of 1.26 and a
 31 maximum water consumption factor of 9.5. For purposes of this subsection, capacity, modified energy
 32 factor and water consumption factor are defined and shall be measured in accordance with the fed-
 33 eral test method for commercial clothes washers under 10 C.F.R. 430.23.

34 (3) Commercial prerinse spray valves must have a flow rate equal to or less than 1.6 gallons per
 35 minute when measured in accordance with the ASTM International’s “Standard Test Method for
 36 Prerinse Spray Valves,” ASTM F2324-03.

37 (4)(a) Commercial refrigerators or freezers must meet the applicable requirements listed in the
 38 following table:

41	Equipment Type	Doors	Maximum Daily
42			Energy Consumption (kWh)
43			
44	Reach-in cabinets, pass-through		
45	cabinets and roll-in or roll-through	Solid	0.10V + 2.04

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

-
- 22
- 23 (b) For purposes of this subsection:
- 24 (A) “Pulldown” designates products designed to take a fully stocked refrigerator with beverages
- 25 at 90 degrees Fahrenheit and cool those beverages to a stable temperature of 38 degrees Fahrenheit
- 26 within 12 hours or less.
- 27 (B) Daily energy consumption shall be measured in accordance with the American National
- 28 Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers test
- 29 method 117-2002, except that:
- 30 (i) The back-loading doors of pass-through and roll-through refrigerators and freezers must re-
- 31 main closed throughout the test; and
- 32 (ii) The controls of all commercial refrigerators or freezers shall be adjusted to obtain the fol-
- 33 lowing product temperatures, in accordance with the California Code of Regulations, Title 20, Divi-
- 34 sion 2, Chapter 4, Article 4, section 1604, table A-2, effective November 27, 2002:

37	Product or compartment type	Integrated average product temperature
38		in degrees Fahrenheit
39		
40	Refrigerator	38 ± 2
41	Freezer	0 ± 2

42

43

44 (5) Illuminated exit signs must have an input power demand of five watts or less per illuminated

45 face. For purposes of this subsection, input power demand shall be measured in accordance with the

1 conditions for testing established by the United States Environmental Protection Agency’s Energy
 2 Star exit sign program version 3.0. Illuminated exit signs must also meet all applicable building and
 3 safety codes.

4 (6) Metal halide lamp fixtures designed to be operated with lamps rated greater than or equal
 5 to 150 watts but less than or equal to 500 watts may not contain a probe-start metal halide lamp
 6 ballast.

7 (7)(a) Single-voltage external AC to DC power supplies manufactured on or after July 1, 2008,
 8 must meet the requirements in the following table:

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

23 Where Ln (Nameplate Output) - Natural Logarithm of the nameplate output expressed in Watts
 24

25
 26 (b) For the purposes of this subsection, efficiency of single-voltage external AC to DC power
 27 supplies shall be measured in accordance with the United States Environmental Protection Agency’s
 28 “Test Method for Calculating the Energy Efficiency of Single-Voltage External AC to DC and AC
 29 to AC Power Supplies,” dated August 11, 2004. The efficiency in the active and no-load modes of
 30 power supplies shall be tested only at 115 volts at 60 Hz.

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

35 Wattage	Minimum average lamp efficiency
36	(lumens per watt)
37	
38 40 - 50	10.5
39 51 - 66	11.0
40 67 - 85	12.5
41 86 - 115	14.0
42 116 - 155	14.5
43 156 - 205	15.0
44	

1 (b) Lamp efficiency shall be measured in accordance with the applicable test method found in
 2 10 C.F.R. 430.23.

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

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

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

21
 22 (b) For purposes of this subsection, maximum wattage and nominal wattage shall be measured
 23 in accordance with and under the testing conditions specified by the Institute for Transportation
 24 Engineers "Interim LED Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light
 25 Emitting Diode Vehicle Traffic Signal Modules."

26 (11) Unit heaters must be equipped with intermittent ignition devices and must have either
 27 power venting or an automatic flue damper.

28 (12) Bottle-type water dispensers designed for dispensing both hot and cold water may not have
 29 standby energy consumption greater than 1.2 kilowatt-hours per day, as measured in accordance
 30 with the test criteria contained in Version 1 of the United States Environmental Protection
 31 Agency's "Energy Star Program Requirements for Bottled Water Coolers," except that units with
 32 an integral, automatic timer may not be tested using Section D, "Timer Usage," of the test criteria.

33 (13) Commercial hot food holding cabinets shall have a maximum idle energy rate of 40 watts
 34 per cubic foot of interior volume, as determined by the "Idle Energy Rate-dry Test" in ASTM
 35 F2140-01, "Standard Test Method for Performance of Hot Food Holding Cabinets" published by
 36 ASTM International. Interior volume shall be measured in accordance with the method shown in the
 37 United States Environmental Protection Agency's "Energy Star Program Requirements for Com-
 38 mercial Hot Food Holding Cabinets," as in effect on August 15, 2003.

39 (14) Compact audio products may not use more than two watts in standby passive mode for those
 40 without a permanently illuminated clock display and four watts in standby passive mode for those
 41 with a permanently illuminated clock display, as measured in accordance with International
 42 Electrotechnical Commission (IEC) test method 62087:2002(E), "Methods of Measurement for the
 43 Power Consumption of Audio, Video, and Related Equipment."

44 (15) Digital versatile disc players and digital versatile disc recorders may not use more than
 45 three watts in standby passive mode, as measured in accordance with International Electrotechnical

1 Commission (IEC) test method 62087:2002(E), “Methods of Measurement for the Power Consumption
2 of Audio, Video, and Related Equipment.”

3 (16) Portable electric spas may not have a standby power greater than $5(V^{2/3})$ Watts where
4 V =the total volume in gallons, as measured in accordance with the test method for portable electric
5 spas contained in the California Code of Regulations, Title 20, Division 2, Chapter 4, section 1604.

6 (17)(a) Walk-in refrigerators and walk-in freezers with the applicable motor types shown in the
7 table below shall include the required components shown.

10 Motor Type	Required Components
12 All	Interior lights: light sources with an efficacy of 45 lumens per watt or more, including ballast losses (if any)
16 All	Automatic door closers that firmly close all reach-in doors
19 All	Automatic door closers that firmly close all walk-in doors no wider than 3.9 feet and no higher than 6.9 feet that have been closed to within one inch of full closure
24 All	Wall, ceiling and door insulation at least R-28 for refrigerators and at least R-34 for freezers
27 All	Floor insulation at least R-28 for freezers (no requirement for refrigerators)
30 Condenser fan motors of under one horsepower	(i) Electronically commutated motors, (ii) Permanent split capacitor-type motors, or (iii) Polyphase motors of ½ horsepower or more
34 Single-phase evaporator fan motors of under one horsepower and less than 460 volts	Electronically commutated motors

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

42 (A) Transparent reach-in doors shall be of triple pane glass with either heat-reflective treated
43 glass or gas fill;

44 (B) If the appliance has an anti-sweat heater without anti-sweat controls, the appliance shall
45 have a total door rail, glass and frame heater power draw of no more than 40 watts if it is a freezer

1 or 17 watts if it is a refrigerator per foot of door frame width; and

2 (C) If the appliance has an anti-sweat heater with anti-sweat heat controls, and the total door
 3 rail, glass, and frame heater power draw is 40 watts or greater per foot of door frame width if it is
 4 a freezer or 17 watts or greater per foot of door frame width if it is a refrigerator, the anti-sweat
 5 heat controls shall reduce the energy use of the anti-sweat heater in an amount corresponding to
 6 the relative humidity in the air outside the door or to the condensation on the inner glass pane.

7 (18) A television must automatically enter television standby-passive mode after a maximum of
 8 15 minutes without video or audio input on the selected input mode. A television must enter tele-
 9 vision standby-passive mode when turned off with the remote control unit or via an internal signal.
 10 The peak luminance of a television in home mode, or in the default mode as shipped, may not be less
 11 than 65 percent of the peak luminance of the retail mode or the brightest selectable preset mode
 12 of the television. A television must meet the standards in the following table:

Television Standby- passive Mode Power Usage (Watts)	Maximum On Mode Power Usage (P in Watts, A is Viewable Screen area)	Minimum Power Factor for (P ≥ 100W)
1 W	$P \leq 0.12 \times A + 25$	0.9

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

Standards for Large Battery Charger Systems		
Performance		
Parameter	Standard	
Charge Return Factor	100 percent Depth of Discharge	$Crf \leq 1.10$
	80 percent Depth of Discharge	$Crf \leq 1.10$
	40 percent Depth of Discharge	$Crf \leq 1.15$
Power Conversion		

1	Efficiency	≥ 89 percent
2		
3	Power Factor	≥ 0.90
4		
5	Battery Maintenance	
6	Mode Power	$\leq 10 + 0.0012E_b$ W
7	(E_b = battery	
8	capacity of	
9	tested battery)	
10		
11	No Battery	
12	Mode Power	≤ 10 W

(b)(A) As described in subparagraph (B) of this paragraph, inductive charger systems and small battery charger systems must meet the minimum energy efficiency standards in the following table:

Standards for Inductive and Small Battery Charger Systems

20	Performance	Standard
21	Parameter	
23	Maximum 24-hour	For E_b of 2.5 Wh or less: $16 \times N$
24	charge and	
25	maintenance	For $E_b > 2.5$ Wh and
26	energy (Wh)	≤ 100 Wh: $12 \times N + 1.6E_b$
27	(E_b = capacity	
28	of all batteries in	For $E_b > 100$ Wh and
29	ports and N =	≤ 1000 Wh: $22 \times N + 1.5E_b$
30	number of charger	
31	ports)	For $E_b > 1000$ Wh:
32		$36.4 \times N + 1.486E_b$
33		
34	Battery Maintenance	The sum of battery maintenance mode power and no
35	Mode Power and No	battery mode power must be less than or equal to:
36	Battery Mode	$1 \times N + 0.0021 \times E_b$
37	Power (W)	
38	Power Factor	
39	(E_b = capacity	
40	of all batteries in	
41	ports and N =	
42	number of charger	
43	ports)	

1 (B) The requirements in subparagraph (A) of this paragraph must be met by:

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

4 (ii) Small battery charger systems for sale at retail that are USB charger systems with a battery
5 capacity of 20 watt-hours or more and that are manufactured on or after January 1, 2014.

6 (iii) Small battery charger systems that are not sold at retail that are manufactured on or after
7 January 1, 2017.

8 (iv) Inductive charger systems manufactured on or after January 1, 2014, unless the inductive
9 charger system uses less than one watt in battery maintenance mode, less than one watt in no bat-
10 tery mode and an average of one watt or less over the duration of the charge and battery mainte-
11 nance mode test.

12 (v) Battery backups and uninterruptible power supplies, manufactured on or after January 1,
13 2014, for small battery charger systems for sale at retail, which may not consume more than 0.8
14 $(0.0021 \times E_b)$ watts in battery maintenance mode, where (E_b) is the battery capacity in watt-hours.

15 (vi) Small battery charger systems not sold at retail, manufactured after January 1, 2017, which
16 may not consume more than 0.8 $(0.0021 \times E_b)$ watts in battery maintenance mode, where (E_b) is the
17 battery capacity in watt-hours.

18 (C) The requirements in subparagraph (A) of this paragraph do not need to be met by an à la
19 carte charger that is:

20 (i) Provided separately from and subsequent to the sale of a small battery charger system de-
21 scribed in this paragraph;

22 (ii) Necessary as a replacement for, or as a replacement component of, a small battery charger
23 system; and

24 (iii) Provided by a manufacturer directly to a consumer or to a service or repair facility.

25 **(20)(a) Lavatory faucets must have a maximum water use of 1.5 gallons per minute when**
26 **tested at a flowing water pressure of 60 pounds per square inch in accordance with the flow**
27 **rate test procedure contained in section 5.4 of ASME A112.18.1-2011, "Plumbing Supply Fit-**
28 **tings," published by the American Society of Mechanical Engineers, as in effect on January**
29 **1, 2013.**

30 **(b) Water closets, except for dual flush tank-type water closets, must have a maximum**
31 **water use of 1.3 gallons per flush when tested in accordance with the water consumption test**
32 **contained in section 7.4 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by**
33 **the American Society of Mechanical Engineers, as in effect on January 1, 2013.**

34 **(c) Dual flush tank-type water closets must have a maximum effective water use of 1.3**
35 **gallons per flush when tested in accordance with the water consumption test contained in**
36 **section 7.4 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American**
37 **Society of Mechanical Engineers, as in effect on January 1, 2013. The effective flush volume**
38 **is the composite average flush volume of two reduced flushes and one full flush.**

39 **(d) Urinals, except for floor mounted urinals, must have a maximum water use of 0.125**
40 **gallons per flush when tested in accordance with the water consumption test contained in**
41 **section 8.6 of ASME A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American**
42 **Society of Mechanical Engineers, as in effect on January 1, 2013.**

43 **(e) Floor mounted urinals must have a maximum water use of 0.5 gallons per flush when**
44 **tested in accordance with the water consumption test contained in section 8.6 of ASME**
45 **A112.19.2-2008, "Ceramic Plumbing Fixtures," published by the American Society of Mechan-**

1 ical Engineers, as in effect on January 1, 2013.

2 (f) Any exemptions established by the Director of the Department of Consumer and
3 Business Services pursuant to ORS 447.145 apply to the minimum energy efficiency standards
4 established under this subsection for lavatory faucets, water closets, dual flush tank-type
5 water closets, urinals and floor mounted urinals.

6 (21) A high light output double-ended quartz halogen lamp must have a minimum effi-
7 ciency of:

8 (a) 27 lumens per watt for lamps with a minimum rated initial lumen value of greater
9 than 6,000 lumens and a maximum initial lumen value of 15,000 lumens; or

10 (b) 34 lumens per watt for lamps with a rated initial lumen value of greater than 15,000
11 and less than 40,000 lumens.

12
13 **SALE**
14

15 **SECTION 5.** ORS 469.238 is amended to read:

16 469.238. (1) Except as provided in subsection (2) of this section, a person may not sell or offer
17 for sale a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator
18 or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated in-
19 candescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine,
20 metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding
21 cabinet, compact audio product, digital versatile disc player, digital versatile disc recorder, portable
22 electric spa, walk-in refrigerator, [or] walk-in freezer, **television, inductive charger system, large**
23 **battery charger system or small battery charger system** unless the energy efficiency of the new
24 product meets or exceeds the minimum energy efficiency standards specified in ORS 469.233.

25 (2) A person may sell or offer for sale a new product not meeting efficiency standards specified
26 in subsection (1) of this section if the product is:

27 (a) Manufactured in this state and sold outside this state;

28 (b) Manufactured outside this state and sold at wholesale inside this state for final retail sale
29 and installation outside this state;

30 (c) Installed in a mobile or manufactured home at the time of construction; or

31 (d) Designed expressly for installation and use in recreational vehicles.

32 **SECTION 6.** ORS 469.238, as amended by section 5 of this 2013 Act, is amended to read:

33 469.238. (1) Except as provided in subsection (2) of this section, a person may not sell or offer
34 for sale a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator
35 or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated in-
36 candescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine,
37 metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding
38 cabinet, compact audio product, digital versatile disc player, digital versatile disc recorder, portable
39 electric spa, walk-in refrigerator, walk-in freezer, television, inductive charger system, large battery
40 charger system, [or] small battery charger system, **dual flush tank-type water closet, lavatory**
41 **faucet, urinal, floor mounted urinal, water closet or high light output double-ended quartz**
42 **halogen lamp** unless the energy efficiency of the new product meets or exceeds the minimum energy
43 efficiency standards specified in ORS 469.233.

44 (2) A person may sell or offer for sale a new product not meeting efficiency standards specified
45 in subsection (1) of this section if the product is:

- 1 (a) Manufactured in this state and sold outside this state;
- 2 (b) Manufactured outside this state and sold at wholesale inside this state for final retail sale
- 3 and installation outside this state;
- 4 (c) Installed in a mobile or manufactured home at the time of construction; or
- 5 (d) Designed expressly for installation and use in recreational vehicles.

6
7 **INSTALLATION**

8
9 **SECTION 7.** ORS 469.239 is amended to read:

10 469.239. (1) Except as provided in subsection (2) of this section, a person may not install a new
11 commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, il-
12 luminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent
13 reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide
14 lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact
15 audio product, digital versatile disc player, digital versatile disc recorder, portable electric spa,
16 walk-in refrigerator, [or] walk-in freezer, **television, inductive charger system, large battery**
17 **charger system or small battery charger system** for compensation unless the energy efficiency
18 of the new product meets or exceeds the minimum energy efficiency standards specified in ORS
19 469.233.

20 (2) A person may install a new product not meeting efficiency standards specified in subsection
21 (1) of this section if the product is:

- 22 (a) Installed in a mobile or manufactured home at the time of construction; or
- 23 (b) Designed expressly for installation and use in recreational vehicles.

24 **SECTION 8.** ORS 469.239, as amended by section 7 of this 2013 Act, is amended to read:

25 469.239. (1) Except as provided in subsection (2) of this section, a person may not install a new
26 commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, il-
27 luminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent
28 reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide
29 lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact
30 audio product, digital versatile disc player, digital versatile disc recorder, portable electric spa,
31 walk-in refrigerator, walk-in freezer, television, inductive charger system, large battery charger
32 system, [or] small battery charger system, **dual flush tank-type water closet, lavatory faucet,**
33 **urinal, floor mounted urinal, water closet or high light output double-ended quartz halogen**
34 **lamp** for compensation unless the energy efficiency of the new product meets or exceeds the mini-
35 mum energy efficiency standards specified in ORS 469.233.

36 (2) A person may install a new product not meeting efficiency standards specified in subsection
37 (1) of this section if the product is:

- 38 (a) Installed in a mobile or manufactured home at the time of construction; or
- 39 (b) Designed expressly for installation and use in recreational vehicles.

40
41 **MISCELLANEOUS**

42
43 **SECTION 9.** The unit captions used in this 2013 Act are provided only for the convenience
44 of the reader and do not become part of the statutory law of this state or express any leg-
45 islative intent in the enactment of this 2013 Act.

1 **SECTION 10.** (1) The amendments to ORS 469.229 by section 2 of this 2013 Act become
2 operative on January 1, 2016.

3 (2) The amendments to ORS 469.233 by section 4 of this 2013 Act become operative on
4 January 1, 2016.

5 (3) The amendments to ORS 469.238 by section 6 of this 2013 Act become operative on
6 January 1, 2016.

7 (4) The amendments to ORS 469.239 by section 8 of this 2013 Act become operative on
8 January 1, 2016.

9 (5) The minimum energy efficiency standards specified in ORS 469.233 (19)(b) do not apply
10 to a small battery charger system that is made available by a manufacturer directly to a
11 consumer or to a service or repair facility, as a service part or spare part, after and separate
12 from the original sale of the product that requires the small battery charger system as a
13 service part or spare part, or for a battery charger that is not sold at retail, before July 1,
14 2017.

15 _____