

**PROPOSED AMENDMENTS TO
A-ENGROSSED SENATE BILL 692**

1 On page 1 of the printed A-engrossed bill, delete lines 5 through 28 and
2 delete pages 2 through 30 and insert:

3
4 **“DEFINITIONS**

5
6 **“SECTION 1.** ORS 469.229 is amended to read:

7 “469.229. As used in ORS 469.229 to 469.261, unless the context clearly
8 requires otherwise:

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

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

17 “[2] **(3) ‘Ballast’** means a device used with an electric discharge lamp
18 to obtain necessary circuit conditions for starting and operating the lamp.

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

22 **“(a) A detachable battery that is contained in an enclosure separate**

1 from the product and that is intended to be removed or disconnected
2 from the product for charging; or

3 “(b) An integral battery that is contained within the product and
4 is not removed from the product for charging.

5 “(5) ‘Battery analyzer’ means a device:

6 “(a) Used to analyze and report a battery’s performance and overall
7 condition;

8 “(b) Capable of being programmed and performing service functions
9 to restore capability in deficient batteries; and

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

12 “(6) ‘Battery backup’ or ‘uninterruptible power supply charger
13 (UPS)’ means a small battery charger system that is voltage and fre-
14 quency dependent (VFD) and designed to provide power to an end-use
15 product in the event of a power outage, including a UPS as defined in
16 International Electrotechnical Commission (IEC) publication 62040-3
17 (March 2011 edition), where the output of the VFD UPS is dependent
18 on changes in AC input voltage and frequency and is not intended to
19 provide additional corrective functions, such as those relating to the
20 use of tapped transformers.

21 “(7)(a) ‘Battery charger system’ means a battery charger coupled
22 with its batteries, including:

23 “(A) Electronic devices with a battery that are normally charged
24 from AC line voltage or DC input voltage through an internal or ex-
25 ternal power supply and a dedicated battery charger;

26 “(B) The battery and battery charger components of devices that
27 are designed to run on battery power during part or all of their oper-
28 ations;

29 “(C) Dedicated battery systems primarily designed for electrical or
30 emergency backup; and

1 **“(D) Devices whose primary function is to charge batteries, along**
2 **with the batteries the devices are designed to charge, including**
3 **chargers for power tool batteries and chargers for automotive, AA,**
4 **AAA, C, D, or nine-volt rechargeable batteries and chargers for bat-**
5 **teries used in larger industrial motive equipment and à la carte**
6 **chargers.**

7 **“(b) ‘Battery charger system’ does not mean a battery charger:**

8 **“(A) Used to charge a motor vehicle that is powered by an electric**
9 **motor drawing current from rechargeable storage batteries, fuel cells**
10 **or other portable sources of electrical current, including a nonelec-**
11 **trical source of power designed to charge batteries and components**
12 **thereof, except for battery chargers for forklifts, electric personal**
13 **assistive mobility devices or low-speed vehicles;**

14 **“(B) That is classified as a Class II or Class III device for human**
15 **use under the Federal Food, Drug, and Cosmetic Act, as in effect on**
16 **the effective date of this 2013 Act, and that requires listing and ap-**
17 **proval as a medical device;**

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

21 **“(D) With input that is three phases of line-to-line 300 volts root**
22 **mean square or more and is designed for a stationary power applica-**
23 **tion;**

24 **“(E) That is a battery analyzer; or**

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

29 **“(c) The charging circuitry of battery charger systems may or may**
30 **not be located within the housing of the end-use device. In many**

1 **cases, the battery may be charged with a dedicated external charger**
2 **and power supply combination that is separate from the device that**
3 **runs on power from the battery.**

4 **“(8) ‘Battery maintenance mode’ means the mode of operation when**
5 **the battery charger system is connected to the main electricity supply**
6 **and the battery is fully charged and connected to the charger.**

7 **“[(3)] (9) ‘Bottle-type water dispenser’ means a water dispenser that uses**
8 **a bottle or reservoir as the source of potable water.**

9 **“(10) ‘Charge return factor’ means the number of ampere-hours**
10 **returned to the battery during the charge cycle divided by the number**
11 **of ampere-hours delivered by the battery during discharge.**

12 **“(11) ‘Combination television’ means a system in which a television**
13 **or television monitor and an additional device or devices, including a**
14 **video cassette recorder, are combined into a single unit in which the**
15 **additional device or devices are included in the television casing.**

16 **“[(4)] (12) ‘Commercial clothes washer’ means a soft mount horizontal-axis**
17 **or vertical-axis clothes washer that:**

18 **“(a) Has a clothes compartment no greater than 3.5 cubic feet in the case**
19 **of a horizontal-axis product or no greater than 4 cubic feet in the case of a**
20 **vertical-axis product; and**

21 **“(b) Is designed for use by more than one household.**

22 **“[(5)(a)] (13)(a) ‘Commercial hot food holding cabinet’ means an appliance**
23 **that is a heated, fully-enclosed compartment with one or more solid doors**
24 **and is designed to maintain the temperature of hot food that has been cooked**
25 **in a separate appliance.**

26 **“(b) ‘Commercial hot food holding cabinet’ does not include heated glass**
27 **merchandising cabinets, drawer warmers or cook-and-hold appliances.**

28 **“[(6)] (14) ‘Commercial prerinse spray valve’ means a handheld device**
29 **designed and marketed for use with commercial dishwashing equipment and**
30 **that sprays water on dishes, flatware and other food service items for the**

1 purpose of removing food residue prior to their cleaning.

2 “[7] (15) ‘Commercial refrigerators or freezers’ means refrigerators,
3 freezers or refrigerator-freezers, smaller than 85 cubic feet of internal volume
4 and designed for use by commercial or institutional facilities for the purpose
5 of storing or merchandising food products, beverages or ice at specified
6 temperatures, other than products without doors, walk-in refrigerators or
7 freezers, consumer products that are federally regulated pursuant to 42
8 U.S.C. 6291 et seq. or freezers specifically designed for ice cream. ‘Commer-
9 cial refrigerators or freezers’:

10 “(a) Must incorporate most components involved in the vapor-compression
11 cycle and the refrigerated compartment in a single cabinet; and

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

14 “[8)(a)] (16)(a) ‘Compact audio product,’ also known as a mini, mid, micro
15 or shelf audio system, means an integrated audio system encased in a single
16 housing that includes an amplifier and radio tuner and attached or separable
17 speakers that can reproduce audio from one or more of the following media:

18 “(A) Magnetic tape;

19 “(B) Compact disc;

20 “(C) DVD; or

21 “(D) Flash memory.

22 “(b) ‘Compact audio product’ does not include products that can be inde-
23 pendently powered by internal batteries, have a powered external satellite
24 antenna or can provide a video output signal.

25 “[9] (17) ‘Compensation’ means money or any other valuable thing, re-
26 gardless of form, received or to be received by a person for services rendered.

27 “(18) ‘Component television’ means a television composed of two or
28 more separate components, including separate display device and
29 tuner, marketed as a television under one model or system designation
30 and having one or more power cords.

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

4 “[(10)] (20) ‘Digital versatile disc’ or ‘DVD’ means a laser-encoded plastic
5 medium capable of storing a large amount of digital audio, video and com-
6 puter data.

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

12 “(b) ‘Digital versatile disc recorder’ does not include models that have an
13 electronic programming guide function that provides an interactive, on-
14 screen menu of television listings and downloads program information from
15 the vertical blanking interval of a regular television signal.

16 **“(22) ‘Electronic programming guide’ means an application that**
17 **provides an interactive, on-screen menu of television listings that**
18 **downloads program information from the vertical blanking interval**
19 **of a regular television signal.**

20 “[(12)] (23) ‘High-intensity discharge lamp’ means a lamp in which light
21 is produced by the passage of an electric current through a vapor or gas, and
22 in which the light-producing arc is stabilized by bulb wall temperature and
23 the arc tube has a bulb wall loading in excess of three watts per square
24 centimeter.

25 “[(13)] (24) ‘Illuminated exit sign’ means an internally illuminated sign
26 that is designed to be permanently fixed in place to identify a building exit,
27 that consists of an electrically powered integral light source that illuminates
28 the legend ‘EXIT’ and any directional indicators and that provides contrast
29 between the legend, any directional indicators and the background.

30 **“(25) ‘Inductive charger system’ means a small battery charger**

1 **system that transfers power to the charger through magnetic or elec-**
2 **tric induction.**

3 **“(26)(a) ‘Large battery charger system’ means a battery charger**
4 **system with a rated input power of more than two kilowatts.**

5 **“(b) ‘Large battery charger system’ does not mean a battery**
6 **charger system for golf carts.**

7 **“[(14)] (27) ‘Metal halide lamp’ means a high-intensity discharge lamp in**
8 **which the major portion of the light is produced by radiation of metal**
9 **halides and their products of dissociation, possibly in combination with me-**
10 **tallic vapors.**

11 **“[(15)] (28) ‘Metal halide lamp fixture’ means a light fixture designed to**
12 **be operated with a metal halide lamp and a ballast for a metal halide lamp.**

13 **“(29) ‘Multiport charger’ means a battery charger that is capable**
14 **of simultaneously charging two or more batteries and that may have**
15 **multivoltage capability, allowing two or more batteries of different**
16 **voltages to charge simultaneously.**

17 **“(30) ‘No battery mode’ means the mode of operation in which a**
18 **battery charger is connected to the main electricity supply and the**
19 **battery is not connected to the charger.**

20 **“[(16)] (31) ‘Pass-through cabinet’ means a commercial refrigerator or**
21 **freezer with hinged or sliding doors on both the front and rear of the unit.**

22 **“[(17)] (32) ‘Portable electric spa’ means a factory-built electric spa or hot**
23 **tub supplied with equipment for heating and circulating water.**

24 **“(33) ‘Power conversion efficiency’ means the instantaneous DC**
25 **output power of the battery charger system divided by the simultane-**
26 **ous utility AC input power.**

27 **“[(18)] (34) ‘Probe-start metal halide lamp ballast’ means a ballast used**
28 **to operate metal halide lamps that does not contain an igniter and that in-**
29 **stead starts metal halide lamps by using a third starting electrode probe in**
30 **the arc tube.**

1 “[(19)] (35) ‘Reach-in cabinet’ means a commercial refrigerator or freezer
2 with hinged or sliding doors or lids, other than roll-in or roll-through cabi-
3 nets or pass-through cabinets.

4 “[(20)] (36) ‘Roll-in cabinet’ means a commercial refrigerator or freezer
5 with hinged or sliding doors that allow wheeled racks to be rolled into the
6 unit.

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

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

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

19 “(A) Is designed to convert line voltage alternating current input into
20 lower voltage direct current output;

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

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

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

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

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

29 “(b) ‘Single-voltage external AC to DC power supply’ does not include
30 power supplies that are classified as devices for human use under the Federal

1 Food, Drug and Cosmetic Act, 21 U.S.C. 360c.

2 **“(40) ‘Small battery charger system’ means:**

3 **“(a) A battery charger system with a rated input power of two**
4 **kilowatts or less.**

5 **“(b) A golf cart battery charger system, regardless of input power**
6 **or battery capacity.**

7 “[23] **(41) ‘State-regulated incandescent reflector lamp’ means a lamp**
8 **that is not colored or designed for rough or vibrating service applications,**
9 **that has an inner reflective coating on the outer bulb to direct the light, that**
10 **has an E26 medium screw base, that has a rated voltage or voltage range**
11 **that lies at least partially within 115 to 130 volts and that falls into one of**
12 **the following categories:**

13 **“(a) A bulged reflector or elliptical reflector bulb shape that has a diam-**
14 **eter that equals or exceeds 2.25 inches; or**

15 **“(b) A reflector, parabolic aluminized reflector or similar bulb shape that**
16 **has a diameter of 2.25 to 2.75 inches.**

17 **“(42)(a) ‘Television’ means an analog or digital device, including a**
18 **combination television, a television monitor, a component television**
19 **and any unit marketed as a television, designed for the display and**
20 **reception of a terrestrial, satellite, cable or Internet protocol or other**
21 **broadcast or recorded transmission of analog or digital video or audio**
22 **signals.**

23 **“(b) ‘Television’ does not mean a computer monitor.**

24 **“(43) ‘Television monitor’ means a television that does not have an**
25 **internal tuner, receiver or playback device.**

26 **“(44) ‘Television standby-passive mode’ means the mode of opera-**
27 **tion in which the television is connected to a power source, produces**
28 **neither sound nor picture but can be switched into another mode with**
29 **the remote control unit or via an internal signal.**

30 “[24] **(45) ‘Torchiere’ means a portable electric lighting fixture with a**

1 reflective bowl that directs light upward so as to produce indirect illumi-
2 nation.

3 “[25] (46) ‘Traffic signal module’ means a standard traffic signal indica-
4 tor, consisting of a light source, a lens and all other parts necessary for
5 operation, that is:

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

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

8 “[26] (47) ‘Unit heater’ means a self-contained, vented fan-type commer-
9 cial space heater, other than a consumer product covered by federal stan-
10 dards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent,
11 forced flue heater with a sealed combustion burner, that uses natural gas or
12 propane and that is designed to be installed without ducts within a heated
13 space.

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

19 “[27] (49) ‘Walk-in refrigerator’ and ‘walk-in freezer’ mean a space re-
20 frigerated to temperatures, respectively, at or above and below 32° F that can
21 be walked into.

22 “[28] (50) ‘Water dispenser’ means a factory-made assembly that me-
23 chanically cools and heats potable water and dispenses the cooled or heated
24 water by integral or remote means.

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

27 “469.229. As used in ORS 469.229 to 469.261, unless the context clearly
28 requires otherwise:

29 “(1) ‘À la carte charger’ means a battery charger that is individually
30 packaged without batteries, including a multiport charger or a charger with

1 multi-voltage capability.

2 “(2) ‘Automatic commercial ice cube machine’ means a factory-made as-
3 sembly, not necessarily shipped in one package, consisting of a condensing
4 unit and ice-making section operating as an integrated unit with means for
5 making and harvesting ice cubes, and any integrated components for storing
6 or dispensing ice.

7 “(3) ‘Ballast’ means a device used with an electric discharge lamp to ob-
8 tain necessary circuit conditions for starting and operating the lamp.

9 “(4) ‘Battery’ or ‘battery pack’ means an assembly of one or more re-
10 chargeable cells intended to provide electrical energy to a product, in one
11 of the following forms:

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

15 “(b) An integral battery that is contained within the product and is not
16 removed from the product for charging.

17 “(5) ‘Battery analyzer’ means a device:

18 “(a) Used to analyze and report a battery’s performance and overall con-
19 dition;

20 “(b) Capable of being programmed and performing service functions to
21 restore capability in deficient batteries; and

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

24 “(6) ‘Battery backup’ or ‘uninterruptible power supply charger (UPS)’
25 means a small battery charger system that is voltage and frequency depend-
26 ent (VFD) and designed to provide power to an end-use product in the event
27 of a power outage, including a UPS as defined in International
28 Electrotechnical Commission (IEC) publication 62040-3 (March 2011 edition),
29 where the output of the VFD UPS is dependent on changes in AC input
30 voltage and frequency and is not intended to provide additional corrective

1 functions, such as those relating to the use of tapped transformers.

2 “(7)(a) ‘Battery charger system’ means a battery charger coupled with its
3 batteries, including:

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

7 “(B) The battery and battery charger components of devices that are de-
8 signed to run on battery power during part or all of their operations;

9 “(C) Dedicated battery systems primarily designed for electrical or emer-
10 gency backup; and

11 “(D) Devices whose primary function is to charge batteries, along with
12 the batteries the devices are designed to charge, including chargers for power
13 tool batteries and chargers for automotive, AA, AAA, C, D, or nine-volt re-
14 chargeable batteries and chargers for batteries used in larger industrial mo-
15 tive equipment and à la carte chargers.

16 “(b) ‘Battery charger system’ does not mean a battery charger:

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

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

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

30 “(D) With input that is three phases of line-to-line 300 volts root mean

1 square or more and is designed for a stationary power application;

2 “(E) That is a battery analyzer; or

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

6 “(c) The charging circuitry of battery charger systems may or may not
7 be located within the housing of the end-use device. In many cases, the bat-
8 tery may be charged with a dedicated external charger and power supply
9 combination that is separate from the device that runs on power from the
10 battery.

11 “(8) ‘Battery maintenance mode’ means the mode of operation when the
12 battery charger system is connected to the main electricity supply and the
13 battery is fully charged and connected to the charger.

14 “(9) ‘Bottle-type water dispenser’ means a water dispenser that uses a
15 bottle or reservoir as the source of potable water.

16 “(10) ‘Charge return factor’ means the number of ampere-hours returned
17 to the battery during the charge cycle divided by the number of ampere-hours
18 delivered by the battery during discharge.

19 “(11) ‘Combination television’ means a system in which a television or
20 television monitor and an additional device or devices, including a video
21 cassette recorder, are combined into a single unit in which the additional
22 device or devices are included in the television casing.

23 “(12) ‘Commercial clothes washer’ means a soft mount horizontal-axis or
24 vertical-axis clothes washer that:

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

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

29 “(13)(a) ‘Commercial hot food holding cabinet’ means an appliance that
30 is a heated, fully-enclosed compartment with one or more solid doors and is

1 designed to maintain the temperature of hot food that has been cooked in a
2 separate appliance.

3 “(b) ‘Commercial hot food holding cabinet’ does not include heated glass
4 merchandising cabinets, drawer warmers or cook-and-hold appliances.

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

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

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

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

21 “(16)(a) ‘Compact audio product,’ also known as a mini, mid, micro or
22 shelf audio system, means an integrated audio system encased in a single
23 housing that includes an amplifier and radio tuner and attached or separable
24 speakers that can reproduce audio from one or more of the following 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 inde-
30 pendently powered by internal batteries, have a powered external satellite

1 antenna or can provide a video output signal.

2 “(17) ‘Compensation’ means money or any other valuable thing, regardless
3 of form, received or to be received by a person for services rendered.

4 “(18) ‘Component television’ means a television composed of two or more
5 separate components, including separate display device and tuner, marketed
6 as a television under one model or system designation and having one or
7 more power cords.

8 “(19) ‘Computer monitor’ means an analog or digital device that is de-
9 signed primarily for the display of computer-generated signals and that is
10 not marketed for use as a television.

11 “(20) ‘Digital versatile disc’ or ‘DVD’ means a laser-encoded plastic me-
12 dium capable of storing a large amount of digital audio, video and computer
13 data.

14 “(21)(a) ‘Digital versatile disc player’ or ‘digital versatile disc recorder’
15 means a commercially available electronic product encased in a single
16 housing that includes an integral power supply and for which the sole pur-
17 pose is, respectively, the decoding and the production or recording of
18 digitized video signal on a DVD.

19 “(b) ‘Digital versatile disc recorder’ does not include models that have an
20 electronic programming guide function that provides an interactive, on-
21 screen menu of television listings and downloads program information from
22 the vertical blanking interval of a regular television signal.

23 “(22) ‘Electronic programming guide’ means an application that provides
24 an interactive, on-screen menu of television listings that downloads program
25 information from the vertical blanking interval of a regular television signal.

26 “(23) ‘High-intensity discharge lamp’ means a lamp in which light is
27 produced by the passage of an electric current through a vapor or gas, and
28 in which the light-producing arc is stabilized by bulb wall temperature and
29 the arc tube has a bulb wall loading in excess of three watts per square
30 centimeter.

1 “(24)(a) ‘High light output double-ended quartz halogen lamp’
2 means a lamp that:

3 “(A) Is designed for general outdoor lighting purposes;

4 “(B) Contains a tungsten filament;

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

7 “(D) Has at each end a recessed single contact, R7s base;

8 “(E) Has a maximum overall length between four and 11 inches;

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

10 “(G) Is designed to be operated at a voltage between 110 volts and
11 200 volts or is designed to be operated at a voltage between 235 volts
12 and 300 volts.

13 “(b) ‘High light output double-ended quartz halogen lamp’ does not
14 mean a lamp that is:

15 “(A) A tubular quartz infrared heat lamp; or

16 “(B) Marked and marketed as a stage and studio lamp with a rated
17 life of 500 hours or less.

18 “[(24)] (25) ‘Illuminated exit sign’ means an internally illuminated sign
19 that is designed to be permanently fixed in place to identify a building exit,
20 that consists of an electrically powered integral light source that illuminates
21 the legend ‘EXIT’ and any directional indicators and that provides contrast
22 between the legend, any directional indicators and the background.

23 “[(25)] (26) ‘Inductive charger system’ means a small battery charger sys-
24 tem that transfers power to the charger through magnetic or electric in-
25 duction.

26 “[(26)(a)] (27)(a) ‘Large battery charger system’ means a battery charger
27 system with a rated input power of more than two kilowatts.

28 “(b) ‘Large battery charger system’ does not mean a battery charger sys-
29 tem for golf carts.

30 “[(27)] (28) ‘Metal halide lamp’ means a high-intensity discharge lamp in

1 which the major portion of the light is produced by radiation of metal
2 halides and their products of dissociation, possibly in combination with me-
3 tallic vapors.

4 “[28] (29) ‘Metal halide lamp fixture’ means a light fixture designed to
5 be operated with a metal halide lamp and a ballast for a metal halide lamp.

6 “[29] (30) ‘Multiport charger’ means a battery charger that is capable
7 of simultaneously charging two or more batteries and that may have multi-
8 voltage capability, allowing two or more batteries of different voltages to
9 charge simultaneously.

10 “[30] (31) ‘No battery mode’ means the mode of operation in which a
11 battery charger is connected to the main electricity supply and the battery
12 is not connected to the charger.

13 “[31] (32) ‘Pass-through cabinet’ means a commercial refrigerator or
14 freezer with hinged or sliding doors on both the front and rear of the unit.

15 “[32] (33) ‘Portable electric spa’ means a factory-built electric spa or hot
16 tub supplied with equipment for heating and circulating water.

17 “[33] (34) ‘Power conversion efficiency’ means the instantaneous DC
18 output power of the battery charger system divided by the simultaneous
19 utility AC input power.

20 “[34] (35) ‘Probe-start metal halide lamp ballast’ means a ballast used
21 to operate metal halide lamps that does not contain an igniter and that in-
22 stead starts metal halide lamps by using a third starting electrode probe in
23 the arc tube.

24 “[35] (36) ‘Reach-in cabinet’ means a commercial refrigerator or freezer
25 with hinged or sliding doors or lids, other than roll-in or roll-through cabi-
26 nets or pass-through cabinets.

27 “[36] (37) ‘Roll-in cabinet’ means a commercial refrigerator or freezer
28 with hinged or sliding doors that allow wheeled racks to be rolled into the
29 unit.

30 “[37] (38) ‘Roll-through cabinet’ means a commercial refrigerator or

1 freezer with hinged or sliding doors on two sides of the cabinet that allow
2 wheeled racks to be rolled through the unit.

3 “[38] (39) ‘Selected input mode’ means the input port selected that the
4 television uses as a source to produce a visible or audible output and that
5 is required for televisions with multiple possible inputs, including coaxial,
6 composite, S-Video, HDMI and component connectors.

7 “[39)(a)] (40)(a) ‘Single-voltage external AC to DC power supply’ means
8 a device, other than a product with batteries or battery packs that physically
9 attach directly to the power supply unit, a product with a battery chemistry
10 or type selector switch and indicator light or a product with a battery
11 chemistry or type selector switch and a state of charge meter, that:

12 “(A) Is designed to convert line voltage alternating current input into
13 lower voltage direct current output;

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

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

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

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

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

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

25 “[40] (41) ‘Small battery charger system’ means:

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

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

30 “[41] (42) ‘State-regulated incandescent reflector lamp’ means a lamp

1 that is not colored or designed for rough or vibrating service applications,
2 that has an inner reflective coating on the outer bulb to direct the light, that
3 has an E26 medium screw base, that has a rated voltage or voltage range
4 that lies at least partially within 115 to 130 volts and that falls into one of
5 the following categories:

6 “(a) A bulged reflector or elliptical reflector bulb shape that has a diam-
7 eter that equals or exceeds 2.25 inches; or

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

10 “[~~(42)(a)~~] **(43)(a)** ‘Television’ means an analog or digital device, including
11 a combination television, a television monitor, a component television and
12 any unit marketed as a television, designed for the display and reception of
13 a terrestrial, satellite, cable or Internet protocol or other broadcast or re-
14 corded transmission of analog or digital video or audio signals.

15 “(b) ‘Television’ does not mean a computer monitor.

16 “[~~(43)~~] **(44)** ‘Television monitor’ means a television that does not have an
17 internal tuner, receiver or playback device.

18 “[~~(44)~~] **(45)** ‘Television standby-passive mode’ means the mode of operation
19 in which the television is connected to a power source, produces neither
20 sound nor picture but can be switched into another mode with the remote
21 control unit or via an internal signal.

22 “[~~(45)~~] **(46)** ‘Torchiere’ means a portable electric lighting fixture with a
23 reflective bowl that directs light upward so as to produce indirect illumi-
24 nation.

25 “[~~(46)~~] **(47)** ‘Traffic signal module’ means a standard traffic signal indica-
26 tor, consisting of a light source, a lens and all other parts necessary for
27 operation, that is:

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

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

30 “[~~(47)~~] **(48)** ‘Unit heater’ means a self-contained, vented fan-type commer-

1 cial space heater, other than a consumer product covered by federal stan-
2 dards established pursuant to 42 U.S.C. 6291 et seq. or that is a direct vent,
3 forced flue heater with a sealed combustion burner, that uses natural gas or
4 propane and that is designed to be installed without ducts within a heated
5 space.

6 “[48] (49) ‘USB charger system’ means a small battery charger system
7 that uses a universal serial bus (USB) connector as the only power source
8 to charge the battery, and is packaged with an external power supply rated
9 with a voltage output of five volts and a power output of 15 watts or less.

10 “[49] (50) ‘Walk-in refrigerator’ and ‘walk-in freezer’ mean a space re-
11 frigerated to temperatures, respectively, at or above and below 32° F that can
12 be walked into.

13 “[50] (51) ‘Water dispenser’ means a factory-made assembly that me-
14 chanically cools and heats potable water and dispenses the cooled or heated
15 water by integral or remote means.

16

17 **“MINIMUM ENERGY EFFICIENCY STANDARDS**

18

19 **“SECTION 3.** ORS 469.233 is amended to read:

20 “469.233. The following minimum energy efficiency standards for new
21 products are established:

22 “(1)(a) Automatic commercial ice cube machines must have daily energy
23 use and daily water use no greater than the applicable values in the follow-
24 ing table:

25 “

26	Equipment type	Type of	Harvest rate	Maximum	Maximum
27		cooling	(lbs. ice/24 hrs.)	energy use	condenser
28				(kWh/100 lbs.)	water use
29					(gallons/100 lbs. ice)

30

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

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

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

29 “(2) Commercial clothes washers must have a minimum modified energy
30 factor of 1.26 and a maximum water consumption factor of 9.5. For purposes

1 of this subsection, capacity, modified energy factor and water consumption
 2 factor are defined and shall be measured in accordance with the federal test
 3 method for commercial clothes washers under 10 C.F.R. 430.23.

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

8 “(4)(a) Commercial refrigerators or freezers must meet the applicable re-
 9 quirements listed in the following table:

10 “

11 Equipment Type	12 Doors	13 Maximum Daily 14 Energy Consumption (kWh)
15 Reach-in cabinets, pass-through 16 cabinets and roll-in or roll-through 17 cabinets that are refrigerators	18 Solid 19 Transparent	20 0.10V + 2.04 21 0.12V + 3.34
22 Reach-in cabinets, pass-through 23 cabinets and roll-in or roll-through 24 cabinets that are “pulldown” 25 refrigerators	26 Transparent	27 0.126V + 3.51
28 Reach-in cabinets, pass-through 29 cabinets and roll-in or roll-through 30 cabinets that are freezers	31 Solid 32 Transparent	33 0.40V + 1.38 34 0.75V + 4.10
35 Reach-in cabinets that are 36 refrigerator-freezers with an 37 AV of 5.19 or higher	38 Solid	39 0.27AV - 0.71

1 kWh = kilowatt hours

2

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

4

5 $AV = \text{adjusted volume} = 1.63 \times \text{freezer volume (ft}^3\text{)} + \text{refrigerator volume (ft}^3\text{)}$

6 “

7 “(b) For purposes of this subsection:

8 “(A) ‘Pull-down’ designates products designed to take a fully stocked
9 refrigerator with beverages at 90 degrees Fahrenheit and cool those
10 beverages to a stable temperature of 38 degrees Fahrenheit within 12 hours
11 or less.

12 “(B) Daily energy consumption shall be measured in accordance with the
13 American National Standards Institute/American Society of Heating, Refrigerating
14 and Air-Conditioning Engineers test method 117-2002, except that:

15 “(i) The back-loading doors of pass-through and roll-through refrigerators
16 and freezers must remain closed throughout the test; and

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

21 “

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

27 “

28 “(5) Illuminated exit signs must have an input power demand of five watts
29 or less per illuminated face. For purposes of this subsection, input power
30 demand shall be measured in accordance with the conditions for testing es-

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

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

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

9 “ _____

Nameplate output	Minimum Efficiency in Active Mode
<1 Watt	0.5 * Nameplate Output
≥ 1 Watt	
and ≤ 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
> 51 Watts	0.85
	Maximum Energy Consumption in No-Load Mode
Any Output	0.5 Watts

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

24 “ _____

25 “(b) For the purposes of this subsection, efficiency of single-voltage ex-
26 ternal AC to DC power supplies shall be measured in accordance with the
27 United States Environmental Protection Agency’s ‘Test Method for Calcu-
28 lating 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
30 and no-load modes of power supplies shall be tested only at 115 volts at 60

1 Hz.

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

5 “

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

15 “

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

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

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

24 “

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

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

4 “

5 “(b) For purposes of this subsection, maximum wattage and nominal
6 wattage shall be measured in accordance with and under the testing condi-
7 tions specified by the Institute for Transportation Engineers ‘Interim LED
8 Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light
9 Emitting Diode Vehicle Traffic Signal Modules.’

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

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

19 “(13) Commercial hot food holding cabinets shall have a maximum idle
20 energy rate of 40 watts per cubic foot of interior volume, as determined by
21 the ‘Idle Energy Rate-dry Test’ in ASTM F2140-01, ‘Standard Test Method for
22 Performance of Hot Food Holding Cabinets’ published by ASTM Interna-
23 tional. Interior volume shall be measured in accordance with the method
24 shown in the United States Environmental Protection Agency’s ‘Energy Star
25 Program Requirements for Commercial Hot Food Holding Cabinets,’ as in
26 effect on August 15, 2003.

27 “(14) Compact audio products may not use more than two watts in
28 standby passive mode for those without a permanently illuminated clock
29 display and four watts in standby passive mode for those with a permanently
30 illuminated clock display, as measured in accordance with International

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

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

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

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

16 “ _____

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

1 All Wall, ceiling and door insulation at least R-28 for
2 refrigerators and at least R-34 for freezers

3

4 All Floor insulation at least R-28 for freezers (no
5 requirement for refrigerators)

6

7 Condenser fan motors of (i) Electronically commutated motors,
8 under one horsepower (ii) Permanent split capacitor-type motors, or
9 (iii) Polyphase motors of ½ horsepower or more

10

11 Single-phase evaporator Electronically commutated motors
12 fan motors of under one
13 horsepower and less
14 than 460 volts

15 “

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

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

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

25 “(C) If the appliance has an anti-sweat heater with anti-sweat heat con-
26 trols, and the total door rail, glass, and frame heater power draw is 40 watts
27 or greater per foot of door frame width if it is a freezer or 17 watts or
28 greater per foot of door frame width if it is a refrigerator, the anti-sweat
29 heat controls shall reduce the energy use of the anti-sweat heater in an
30 amount corresponding to the relative humidity in the air outside the door

1 or to the condensation on the inner glass pane.

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

11 “

12	Television	Maximum On	
13	Standby-	Mode Power	Minimum
14	passive Mode	Usage (P in	Power
15	Power Usage	Watts, A is	Factor for
16	(Watts)	Viewable	(P ≥ 100W)
17		Screen area)	
18			
19	1 W	$P \leq 0.12 \times A + 25$	0.9

20 “

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

23 “

24	Standards for Large Battery Charger Systems		
25	Performance		Standard
26	Parameter		
27			
28	Charge Return		
29	Factor	100 percent	$Crf \leq 1.10$
30		Depth of	

1	Discharge	
2		
3	80 percent	Crf ≤ 1.10
4	Depth of	
5	Discharge	
6		
7	40 percent	Crf ≤ 1.15
8	Depth of	
9	Discharge	

11	Power Conversion	
12	Efficiency	≥ 89 percent
13		
14	Power Factor	≥ 0.90

16	Battery	
17	Maintenance	
18	Mode Power	≤ 10 +0.0012E_b W
19	(E_b = battery	
20	capacity of	
21	tested battery)	

23	No Battery	
24	Mode Power	≤ 10 W

25 “ _____

26 **“(b)(A) As described in subparagraph (B) of this paragraph, induc-**

27 **tive charger systems and small battery charger systems must meet the**

28 **minimum energy efficiency standards in the following table:**

29 “ _____

30 **Standards for Inductive and Small Battery Charger Systems**

1	Performance	Standard
2	Parameter	
3		
4	Maximum 24-hour	For E_b of 2.5 Wh or less: $16 \times N$
5	charge and	
6	maintenance	For $E_b > 2.5$ Wh and
7	energy (Wh)	≤ 100 Wh: $12 \times N + 1.6E_b$
8	(E_b = capacity	
9	of all batteries in	For $E_b > 100$ Wh and
10	ports and N =	≤ 1000 Wh: $22 \times N + 1.5E_b$
11	number of charger	
12	ports)	For $E_b > 1000$ Wh:
13		$36.4 \times N + 1.486E_b$
14		
15	Battery Maintenance	The sum of battery maintenance mode power and no
16	Mode Power and No	battery mode power must be less than or equal to:
17	Battery Mode	$1 \times N + 0.0021 \times E_b$
18	Power (W)	
19	Power Factor	
20	(E_b = capacity	
21	of all batteries in	
22	ports and N =	
23	number of charger	
24	ports)	
25	“	<hr/>
26	“(B) The requirements in subparagraph (A) of this paragraph must	
27	be met by:	
28	“(i) Small battery charger systems for sale at retail that are not	
29	USB charger systems with a battery capacity of 20 watt-hours or more	
30	and that are manufactured on or after January 1, 2014.	

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

4 “(iii) Small battery charger systems that are not sold at retail and
5 that are manufactured on or after January 1, 2017.

6 “(iv) Inductive charger systems manufactured on or after January
7 1, 2014, unless the inductive charger system uses less than one watt
8 in battery maintenance mode, less than one watt in no battery mode
9 and an average of one watt or less over the duration of the charge and
10 battery maintenance mode test.

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

16 “(vi) Small battery charger systems not sold at retail, manufactured
17 after January 1, 2017, which may not consume more than 0.8
18 ($0.0021 \times E_b$) watts in battery maintenance mode, where (E_b) is the bat-
19 tery capacity in watt-hours.

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

22 “(i) Provided separately from and subsequent to the sale of a small
23 battery charger system described in this paragraph;

24 “(ii) Necessary as a replacement for, or as a replacement compo-
25 nent of, a small battery charger system; and

26 “(iii) Provided by a manufacturer directly to a consumer or to a
27 service or repair facility.

28 “SECTION 4. ORS 469.233, as amended by section 3 of this 2013 Act, is
29 amended to read:

30 “469.233. The following minimum energy efficiency standards for new

1 products are established:

2 “(1)(a) Automatic commercial ice cube machines must have daily energy
3 use and daily water use no greater than the applicable values in the follow-
4 ing table:

5 “

6 Equipment type	Type of	Harvest rate	Maximum	Maximum
	cooling	(lbs. ice/24 hrs.)	energy use	condenser
			(kWh/100 lbs.)	water use
				(gallons/100 lbs. ice)
11 Ice-making head	water	<500	7.80 -.0055H	200 -.022H
12		≥ 500<1436	5.58 -.0011H	200 -.022H
13		≥ 1436	4.0	200 -.022H
14 Ice-making head	air	<450	10.26 -.0086H	Not applicable
15		≥ 450	6.89 -.0011H	Not applicable
16 Remote condensing				
17 but not remote				
18 compressor	air	<1000	8.85 -.0038	Not applicable
19		≥ 1000	5.10	Not applicable
20 Remote condensing				
21 and remote				
22 compressor	air	<934	8.85 -.0038H	Not applicable
23		≥ 934	5.30	Not applicable
24 Self-contained				
25 models	water	<200	11.40 -.0190H	191 -.0315H
26		≥ 200	7.60	191 -.0315H
27 Self-contained				
28 models	air	<175	18.0 -.0469H	Not applicable
29		≥ 175	9.80	Not applicable

30 Where H = harvest rate in pounds per 24 hours, which must be reported

1 within 5 percent of the tested value. Maximum water use applies only to
2 water used for the condenser.

3 “
4 “(b) For purposes of this subsection, automatic commercial ice cube ma-
5 chines shall be tested in accordance with the ARI 810-2003 test method as
6 published by the Air-Conditioning and Refrigeration Institute. Ice-making
7 heads include all automatic commercial ice cube machines that are not split
8 system ice makers or self-contained models as defined in ARI 810-2003.

9 “(2) Commercial clothes washers must have a minimum modified energy
10 factor of 1.26 and a maximum water consumption factor of 9.5. For purposes
11 of this subsection, capacity, modified energy factor and water consumption
12 factor are defined and shall be measured in accordance with the federal test
13 method for commercial clothes washers under 10 C.F.R. 430.23.

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

18 “(4)(a) Commercial refrigerators or freezers must meet the applicable re-
19 quirements listed in the following table:

20 “

21 Equipment Type	22 Doors	23 Maximum Daily 24 Energy Consumption (kWh)
25 Reach-in cabinets, pass-through 26 cabinets and roll-in or roll-through 27 cabinets that are refrigerators	28 Solid 29 Transparent	30 0.10V + 2.04 0.12V + 3.34
28 Reach-in cabinets, pass-through 29 cabinets and roll-in or roll-through 30 cabinets that are “pulldown”		

1	refrigerators	Transparent	$0.126V + 3.51$
2			
3	Reach-in cabinets, pass-through		
4	cabinets and roll-in or roll-through	Solid	$0.40V + 1.38$
5	cabinets that are freezers	Transparent	$0.75V + 4.10$
6			
7	Reach-in cabinets that are		
8	refrigerator-freezers with an		
9	AV of 5.19 or higher	Solid	$0.27AV - 0.71$

10
11 kWh = kilowatt hours

12
13 $V = \text{total volume (ft}^3\text{)}$

14
15 $AV = \text{adjusted volume} = 1.63 \times \text{freezer volume (ft}^3\text{)} + \text{refrigerator volume (ft}^3\text{)}$

16 “ _____

17 “(b) For purposes of this subsection:

18 “(A) ‘Pulldown’ designates products designed to take a fully stocked
19 refrigerator with beverages at 90 degrees Fahrenheit and cool those
20 beverages to a stable temperature of 38 degrees Fahrenheit within 12 hours
21 or less.

22 “(B) Daily energy consumption shall be measured in accordance with the
23 American National Standards Institute/American Society of Heating, Refrig-
24 erating and Air-Conditioning Engineers test method 117-2002, except that:

25 “(i) The back-loading doors of pass-through and roll-through refrigerators
26 and freezers must remain closed throughout the test; and

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

1 “

2 Product or compartment type	Integrated average product temperature
3	in degrees Fahrenheit
4	
5 Refrigerator	38 ± 2
6 Freezer	0 ± 2

7 “

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

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

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

19 “

20 Nameplate output	Minimum Efficiency in Active Mode
21	
22 <1 Watt	0.5 * Nameplate Output
23 ≥ 1 Watt	
24 and ≤ 51 Watts	0.09 * Ln (Nameplate Output) + 0.5
25 > 51 Watts	0.85
26	
27	Maximum Energy Consumption in No-Load Mode
28	
29 Any Output	0.5 Watts

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

3 “
4 “(b) For the purposes of this subsection, efficiency of single-voltage ex-
5 ternal AC to DC power supplies shall be measured in accordance with the
6 United States Environmental Protection Agency’s ‘Test Method for Calcu-
7 lating the Energy Efficiency of Single-Voltage External AC to DC and AC
8 to AC Power Supplies,’ dated August 11, 2004. The efficiency in the active
9 and no-load modes of power supplies shall be tested only at 115 volts at 60
10 Hz.

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

14 “

15 Wattage	16 Minimum average lamp efficiency (lumens per watt)
18 40 - 50	10.5
19 51 - 66	11.0
20 67 - 85	12.5
21 86 - 115	14.0
22 116 - 155	14.5
23 156 - 205	15.0

24 “
25 “(b) Lamp efficiency shall be measured in accordance with the applicable
26 test method found in 10 C.F.R. 430.23.

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

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

3 “

4 Module Type	Maximum Wattage	Nominal Wattage
	5 (at 74°C)	(at 25°C)
6		
7 12” red ball (or 300 mm circular)	17	11
8 8” red ball (or 200 mm circular)	13	8
9 12” red arrow (or 300 mm arrow)	12	9
10		
11 12” green ball (or 300 mm circular)	15	15
12 8” green ball (or 200 mm circular)	12	12
13 12” green arrow (or 300 mm arrow)	11	11
14 “		

15 “(b) For purposes of this subsection, maximum wattage and nominal
16 wattage shall be measured in accordance with and under the testing condi-
17 tions specified by the Institute for Transportation Engineers ‘Interim LED
18 Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light
19 Emitting Diode Vehicle Traffic Signal Modules.’

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

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

29 “(13) Commercial hot food holding cabinets shall have a maximum idle
30 energy rate of 40 watts per cubic foot of interior volume, as determined by

1 the 'Idle Energy Rate-dry Test' in ASTM F2140-01, 'Standard Test Method for
2 Performance of Hot Food Holding Cabinets' published by ASTM Interna-
3 tional. Interior volume shall be measured in accordance with the method
4 shown in the United States Environmental Protection Agency's 'Energy Star
5 Program Requirements for Commercial Hot Food Holding Cabinets,' as in
6 effect on August 15, 2003.

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

14 "(15) Digital versatile disc players and digital versatile disc recorders may
15 not use more than three watts in standby passive mode, as measured in ac-
16 cordance with International Electrotechnical Commission (IEC) test method
17 62087:2002(E), 'Methods of Measurement for the Power Consumption of Au-
18 dio, Video, and Related Equipment.'

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

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

26 " _____

27 Motor Type	Required Components
28	
29 All	Interior lights: light sources with an efficacy of 45 30 lumens per watt or more, including ballast losses

1 (if any)

2

3 All Automatic door closers that firmly close all

4 reach-in doors

5

6 All Automatic door closers that firmly close all walk-in

7 doors no wider than 3.9 feet and no higher than

8 6.9 feet that have been closed to within one

9 inch of full closure

10

11 All Wall, ceiling and door insulation at least R-28 for

12 refrigerators and at least R-34 for freezers

13

14 All Floor insulation at least R-28 for freezers (no

15 requirement for refrigerators)

16

17 Condenser fan motors of (i) Electronically commutated motors,

18 under one horsepower (ii) Permanent split capacitor-type motors, or

19 (iii) Polyphase motors of ½ horsepower or more

20

21 Single-phase evaporator Electronically commutated motors

22 fan motors of under one

23 horsepower and less

24 than 460 volts

25 “

26 “(b) In addition to the requirements in paragraph (a) of this subsection,

27 walk-in refrigerators and walk-in freezers with transparent reach-in doors

28 shall meet the following requirements:

29 “(A) Transparent reach-in doors shall be of triple pane glass with either

30 heat-reflective treated glass or gas fill;

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

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

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

20 “

21		Maximum On	
22	Television	Mode Power	
23	Standby-	Usage (P in	Minimum
24	passive Mode	Watts, A is	Power
25	Power Usage	Viewable	Factor for
26	(Watts)	Screen area)	(P ≥ 100W)
27			
28	1 W	$P \leq 0.12 \times A + 25$	0.9

29 “

30 “(19)(a) Large battery charger systems must meet the minimum efficien-

1 cies in the following table:

2 “

3 Standards for Large Battery Charger Systems

4 Performance		Standard
5 Parameter		
7 Charge Return		
8 Factor	100 percent	$C_{rf} \leq 1.10$
	Depth of	
	Discharge	
	80 percent	$C_{rf} \leq 1.10$
	Depth of	
	Discharge	
	40 percent	$C_{rf} \leq 1.15$
	Depth of	
	Discharge	
20 Power Conversion		
21 Efficiency		≥ 89 percent
23 Power Factor		≥ 0.90
25 Battery Maintenance		
26 Mode Power		$\leq 10 + 0.0012E_b$ W
27 (E_b = battery		
28 capacity of		
29 tested battery)		

30

1 No Battery

2 Mode Power $\leq 10 \text{ W}$

3 “ _____

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

7 “ _____

8 Standards for Inductive and Small Battery Charger Systems

9 Performance Standard

10 Parameter

11

12 Maximum 24-hour For E_b of 2.5 Wh or less: $16 \times N$

13 charge and

14 maintenance For $E_b > 2.5 \text{ Wh}$ and

15 energy (Wh) $\leq 100 \text{ Wh}$: $12 \times N + 1.6E_b$

16 ($E_b =$ capacity

17 of all batteries in For $E_b > 100 \text{ Wh}$ and

18 ports and $N = \leq 1000 \text{ Wh}$: $22 \times N + 1.5E_b$

19 number of charger

20 ports) For $E_b > 1000 \text{ Wh}$:

21 $36.4 \times N + 1.486E_b$

22

23 Battery Maintenance The sum of battery maintenance mode power and no

24 Mode Power and No battery mode power must be less than or equal to:

25 Battery Mode $1 \times N + 0.0021 \times E_b$

26 Power (W)

27 Power Factor

28 ($E_b =$ capacity

29 of all batteries in

30 ports and $N =$

1 number of charger

2 ports)

3 “

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

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

9 “(ii) Small battery charger systems for sale at retail that are USB charger
10 systems with a battery capacity of 20 watt-hours or more and that are man-
11 ufactured on or after January 1, 2014.

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

14 “(iv) Inductive charger systems manufactured on or after January 1, 2014,
15 unless the inductive charger system uses less than one watt in battery
16 maintenance mode, less than one watt in no battery mode and an average
17 of one watt or less over the duration of the charge and battery maintenance
18 mode test.

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

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

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

28 “(i) Provided separately from and subsequent to the sale of a small bat-
29 tery charger system described in this paragraph;

30 “(ii) Necessary as a replacement for, or as a replacement component of,

1 a small battery charger system; and

2 “(iii) Provided by a manufacturer directly to a consumer or to a service
3 or repair facility.

4 “(20) **A high light output double-ended quartz halogen lamp must**
5 **have a minimum efficiency of:**

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

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

11

12

“SALE

13

14 “**SECTION 5.** ORS 469.238 is amended to read:

15 “469.238. (1) Except as provided in subsection (2) of this section, a person
16 may not sell or offer for sale a new commercial clothes washer, commercial
17 prerinse spray valve, commercial refrigerator or freezer, illuminated exit
18 sign, single-voltage external AC to DC power supply, state-regulated incan-
19 descent reflector lamp, torchiere, traffic signal module, automatic commer-
20 cial ice cube machine, metal halide lamp fixture, unit heater, bottle-type
21 water dispenser, commercial hot food holding cabinet, compact audio prod-
22 uct, digital versatile disc player, digital versatile disc recorder, portable
23 electric spa, walk-in refrigerator, [*or*] walk-in freezer, **television, inductive**
24 **charger system, large battery charger system or small battery charger**
25 **system** unless the energy efficiency of the new product meets or exceeds the
26 minimum energy efficiency standards specified in ORS 469.233.

27 “(2) A person may sell or offer for sale a new product not meeting effi-
28 ciency standards specified in subsection (1) of this section if the product is:

29 “(a) Manufactured in this state and sold outside this state;

30 “(b) Manufactured outside this state and sold at wholesale inside this

1 state for final retail sale and installation outside this state;

2 “(c) Installed in a mobile or manufactured home at the time of con-
3 struction; or

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

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

7 “469.238. (1) Except as provided in subsection (2) of this section, a person
8 may not sell or offer for sale a new commercial clothes washer, commercial
9 prerinse spray valve, commercial refrigerator or freezer, illuminated exit
10 sign, single-voltage external AC to DC power supply, state-regulated incan-
11 descent reflector lamp, torchiere, traffic signal module, automatic commer-
12 cial ice cube machine, metal halide lamp fixture, unit heater, bottle-type
13 water dispenser, commercial hot food holding cabinet, compact audio prod-
14 uct, digital versatile disc player, digital versatile disc recorder, portable
15 electric spa, walk-in refrigerator, walk-in freezer, television, inductive
16 charger system, large battery charger system, [or] small battery charger
17 system **or high light output double-ended quartz halogen lamp** unless
18 the energy efficiency of the new product meets or exceeds the minimum en-
19 ergy efficiency standards specified in ORS 469.233.

20 “(2) A person may sell or offer for sale a new product not meeting effi-
21 ciency standards specified in subsection (1) of this section if the product is:

22 “(a) Manufactured in this state and sold outside this state;

23 “(b) Manufactured outside this state and sold at wholesale inside this
24 state for final retail sale and installation outside this state;

25 “(c) Installed in a mobile or manufactured home at the time of con-
26 struction; or

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

28

29

“INSTALLATION

30

1 **“SECTION 7.** ORS 469.239 is amended to read:

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

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

16 “(a) Installed in a mobile or manufactured home at the time of con-
17 struction; or

18 “(b) Designed expressly for installation and use in recreational vehicles.

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

21 “469.239. (1) Except as provided in subsection (2) of this section, a person
22 may not install a new commercial clothes washer, commercial prerinse spray
23 valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage
24 external AC to DC power supply, state-regulated incandescent reflector lamp,
25 torchiere, traffic signal module, automatic commercial ice cube machine,
26 metal halide lamp fixture, unit heater, bottle-type water dispenser, commer-
27 cial hot food holding cabinet, compact audio product, digital versatile disc
28 player, digital versatile disc recorder, portable electric spa, walk-in
29 refrigerator, walk-in freezer, television, inductive charger system, large bat-
30 tery charger system, [or] small battery charger system **or high light output**

1 **double-ended quartz halogen lamp** for compensation unless the energy ef-
2 ficiency of the new product meets or exceeds the minimum energy efficiency
3 standards specified in ORS 469.233.

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

6 “(a) Installed in a mobile or manufactured home at the time of con-
7 struction; or

8 “(b) Designed expressly for installation and use in recreational vehicles.
9

10 **“MISCELLANEOUS**

11

12 **“SECTION 9. The unit captions used in this 2013 Act are provided**
13 **only for the convenience of the reader and do not become part of the**
14 **statutory law of this state or express any legislative intent in the**
15 **enactment of this 2013 Act.**

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

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

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

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

24 **“(5) The minimum energy efficiency standards specified in ORS**
25 **469.233 (19)(b) do not apply to a small battery charger system that is**
26 **made available by a manufacturer directly to a consumer or to a ser-**
27 **vice or repair facility, as a service part or spare part, after and sepa-**
28 **rate from the original sale of the product that requires the small**
29 **battery charger system as a service part or spare part, or for a battery**
30 **charger that is not sold at retail, before July 1, 2017.”.**

