A-Engrossed

House Bill 2062

Ordered by the House March 15
Including House Amendments dated March 15

Introduced and printed pursuant to House Rule 12.00. Presession filed (at the request of Governor Kate Brown for State Department of Energy)

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 energy efficiency standards for certain appliances sold or offered for sale in this state. Removes requirement that certain appliances sold or offered for sale in this state meet state energy efficiency standards.

Authorizes Director of State Department of Energy to update energy efficiency standards by rule.

Takes effect on 91st day following adjournment sine die.

A BILL FOR AN ACT

Relating to energy efficiency standards; creating new provisions; amending ORS 469.229, 469.233, 469.238, 469.239, 469.255 and 469.261; repealing ORS 469.235; and prescribing an effective date.

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

SECTION 1. ORS 469.229 is amended to read:

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

(1) “À la carte charger” means a battery charger that is individually packaged without batteries, including a multiport charger or a charger with multivoltage capability.

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

(3) “Ballast” means a device:

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

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

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

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

LC 584
Battery backup” or “uninterruptible power supply charger (UPS)” means a small battery charger system that is voltage and frequency dependent (VFD) and designed to provide power to an end-use product in the event of a power outage, including a UPS as defined in International Electrotechnical Commission (IEC) publication 62040-3 (March 2011 edition), where the output of the VFD UPS is dependent on changes in AC input voltage and frequency and is not intended to provide additional corrective functions, such as those relating to the use of tapped transformers.

“Battery charger system” means a battery charger coupled with its batteries, including:

(A) Electronic devices with a battery that are normally charged from AC line voltage or DC input voltage through an internal or external power supply and a dedicated battery charger;
(B) The battery and battery charger components of devices that are designed to run on battery power during part or all of their operations;
(C) Dedicated battery systems primarily designed for electrical or emergency backup; and
(D) Devices whose primary function is to charge batteries, along with the batteries the devices are designed to charge, including chargers for power tool batteries and chargers for automotive, AA, AAA, C, D, or nine-volt rechargeable batteries and chargers for batteries used in larger industrial motive equipment and à la carte chargers.

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

(A) Used to charge a motor vehicle that is powered by an electric motor drawing current from rechargeable storage batteries, fuel cells or other portable sources of electrical current, including a nonelectrical source of power designed to charge batteries and components thereof, except for battery chargers for forklifts, electric personal assistive mobility devices or low-speed vehicles;
(B) That is classified as a Class II or Class III device for human use under the Federal Food, Drug, and Cosmetic Act, as in effect on January 1, 2014, and that requires listing and approval as a medical device;
(C) Used to charge a battery or batteries in an illuminated exit sign, including those products that are a combination illuminated exit sign and emergency egress lighting;
(D) With input that is three phases of line-to-line 300 volts root mean square or more and is designed for a stationary power application;
(E) That is a battery analyzer;
(F) That is a voltage independent or voltage and frequency independent uninterruptible power supply as defined in International Electrotechnical Commission (IEC) publication 62040-3 (March 2011 edition); or
(G) That is contained completely within a larger product and that provides power for data storage or for continuity within volatile cache or memory systems, that maintains information for system use and that is not capable of powering full operation of the larger product when external AC line voltage is removed.

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

“Battery maintenance mode” means the mode of operation when the battery charger system is connected to the main electricity supply and the battery is fully charged and connected to the charger.

“Bottle-type water dispenser” and “water cooler” have the meanings given those
terms by the Director of the State Department of Energy by rule. [means a water dispenser that
uses a bottle or reservoir as the source of potable water.]

[(10)] (9) “Charge return factor” means the number of ampere-hours returned to the battery
during the charge cycle divided by the number of ampere-hours delivered by the battery during
discharge.

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

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

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

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

(11) “Commercial dishwasher” has the meaning given that term by the director by rule.

(12) “Commercial fryer” has the meaning given that term by the director by rule.

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

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

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

[(15)] “Commercial refrigerators or freezers” means refrigerators, freezers or refrigerator-freezers,
smaller than 85 cubic feet of internal volume and designed for use by commercial or institutional fa-
cilities for the purpose of storing or merchandising food products, beverages or ice at specified tem-
peratures, other than products without doors, walk-in refrigerators or freezers, consumer products that
are federally regulated pursuant to 42 U.S.C. 6291 et seq. or freezers specifically designed for ice
cream. “Commercial refrigerators or freezers”:

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

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

(14) “Commercial steam cooker” has the meaning given that term by the director by rule.

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

(A) Magnetic tape;

(B) Compact disc;

(C) DVD; or

(D) Flash memory.

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

[(17)] (16) “Compensation” means money or any other valuable thing, regardless of form, re-
ceived or to be received by a person for services rendered.

[(18)] (17) “Component television” means a television composed of two or more separate components, including separate display device and tuner, marketed as a television under one model or system designation and having one or more power cords.

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

(18) “Computer” has the meaning given that term by the director by rule.

(19) “Computer monitor” has the meaning given that term by the director by rule.

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

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

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

(22) “Electric storage water heater” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

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

(24) “Faucet” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

(25) “High color-rendering index fluorescent lamp” and “high CRI fluorescent lamp” have the meanings given those terms by the director by rule.

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

[(24)(a)] (27)(a) “High light output double-ended quartz halogen lamp” means a lamp that:

(A) Is designed for general outdoor lighting purposes;
(B) Contains a tungsten filament;
(C) Has a rated initial lumen value of greater than 6,000 and less than 40,000 lumens;
(D) Has at each end a recessed single contact, R7s base;
(E) Has a maximum overall length between four and 11 inches;
(F) Has a nominal diameter less than three-fourths inch (T6); and
(G) Is designed to be operated at a voltage between 110 volts and 200 volts or is designed to be operated at a voltage between 235 volts and 300 volts.

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

(A) A tubular quartz infrared heat lamp; or
(B) Marked and marketed as a stage and studio lamp with a rated life of 500 hours or less.

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

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

(29) “Kitchen faucet” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

(30) “Kitchen replacement aerator” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

(27)(a) (31)(a) “Large battery charger system” means a battery charger system with a rated input power of more than two kilowatts.

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

(32) “Lavatory faucet” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

(33) “Lavatory replacement aerator” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

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

(29) “Metal halide lamp fixture” means a light fixture designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.

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

(31) (35) “No battery mode” means the mode of operation in which a battery charger is connected to the main electricity supply and the battery is not connected to the charger.

(32) “Pass-through cabinet” means a commercial refrigerator or freezer with hinged or sliding doors on both the front and rear of the unit.

(36) “Plumbing fitting” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

(33) (37) “Portable electric spa” [means a factory-built electric spa or hot tub supplied with equipment for heating and circulating water] has the meaning given that term by the director by rule.

(38) “Public lavatory faucet” has the meaning given that term by the director by rule, after consultation with the State Plumbing Board.

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

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

(36) “Reach-in cabinet” means a commercial refrigerator or freezer with hinged or sliding doors or lids, other than roll-in or roll-through cabinets or pass-through cabinets.

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

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

(40) “Residential ventilating fan” has the meaning given that term by the director by
rule.

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

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

[(A) Is designed to convert line voltage alternating current input into lower voltage direct current
output;]
[(B) Is able to convert to only one direct current output voltage at a time;]
[(C) Is sold with, or intended to be used with, a separate end-use product that constitutes the pri-
mary power load;]
[(D) Is contained within a separate physical enclosure from the end-use product;]
[(E) Is connected to the end-use product via a removable or hard-wired male or female electrical
connection, cable, cord or other wiring; and]
[(F) Has a nameplate output power less than or equal to 250 watts.]
[(b) “Single-voltage external AC to DC power supply” does not include power supplies that are
classified as devices for human use under the Federal Food, Drug and Cosmetic Act, 21 U.S.C.
360c.]

(42) “Showerhead” has the meaning given that term by the director by rule, after con-
sultation with the State Plumbing Board.

[(41)] (43) “Small battery charger system” means:
(a) A battery charger system with a rated input power of two kilowatts or less.
(b) A golf cart battery charger system, regardless of input power or battery capacity.

[(42) “State-regulated incandescent reflector lamp” means a lamp that is not colored or designed for
rough or vibrating service applications, that has an inner reflective coating on the outer bulb to direct
the light, that has an E26 medium screw base, that has a rated voltage or voltage range that lies at
least partially within 115 to 130 volts and that falls into one of the following categories:]
[(a) A bulged reflector or elliptical reflector bulb shape that has a diameter that equals or exceeds
2.25 inches; or]
[(b) A reflector, parabolic aluminized reflector or similar bulb shape that has a diameter of 2.25
to 2.75 inches.]

[(43)(a)] (44)(a) “Television” means an analog or digital device, including a combination tele-
vision, a television monitor, a component television and any unit marketed as a television, designed
for the display and reception of a terrestrial, satellite, cable or Internet protocol or other broadcast
or recorded transmission of analog or digital video or audio signals.
(b) “Television” does not mean a computer monitor.

[(44)] (45) “Television monitor” means a television that does not have an internal tuner, receiver
or playback device.

[(45)] (46) “Television standby-passive mode” means the mode of operation in which the tele-
vision is connected to a power source, produces neither sound nor picture but can be switched into
another mode with the remote control unit or via an internal signal.
[(46) “Torchiere” means a portable electric lighting fixture with a reflective bowl that directs light
upward so as to produce indirect illumination.]
“Traffic signal module” means a standard traffic signal indicator, consisting of a light source, a lens and all other parts necessary for operation, that is:

(a) Eight inches, or approximately 200 millimeters, in diameter; or
(b) Twelve inches, or approximately 300 millimeters, in diameter.

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

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

“Walk-in refrigerator” and “walk-in freezer” mean a space refrigerated to temperatures, respectively, at or above and below 32°F that can be walked into.

“Water dispenser” means a factory-made assembly that mechanically cools and heats potable water and dispenses the cooled or heated water by integral or remote means.

SECTION 2. ORS 469.233 is amended to read:

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

1. Automatic commercial ice cube machines must have daily energy use and daily water use no greater than the applicable values in the following table:

<table>
<thead>
<tr>
<th>Equipment type</th>
<th>Type of cooling</th>
<th>Harvest rate</th>
<th>Maximum energy use (kWh/100 lbs.)</th>
<th>Maximum water use (gallons/100 lbs. ice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice-making head</td>
<td>water &lt;500</td>
<td>7.80 -.0055H</td>
<td>200 -.022H</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥ 500&lt;1436</td>
<td>5.58 -.0011H</td>
<td>200 -.022H</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥ 1436</td>
<td>4.0</td>
<td>200 -.022H</td>
<td></td>
</tr>
<tr>
<td>air &lt;450</td>
<td>10.26 -.0086H</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥ 450</td>
<td>6.89 -.0011H</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

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 |
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 Pre-rinse Spray Valves,” ASTM F2324-03.]

[(4)(a) Commercial refrigerators or freezers must meet the applicable requirements listed in the following table:]
AV = \textit{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:]

<table>
<thead>
<tr>
<th>Product or compartment type</th>
<th>Integrated average product temperature in degrees Fahrenheit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator</td>
<td>38 ± 2</td>
</tr>
<tr>
<td>Freezer</td>
<td>0 ± 2</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Nameplate Output</th>
<th>Minimum Efficiency in Active Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 Watt</td>
<td>0.5 * Nameplate Output</td>
</tr>
<tr>
<td>≥ 1 Watt and ≤ 51 Watts</td>
<td>0.09 * Ln (Nameplate Output) + 0.5</td>
</tr>
<tr>
<td>&gt; 51 Watts</td>
<td>0.85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nameplate Output</th>
<th>Maximum Energy Consumption in No-Load Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Output</td>
<td>0.5 Watts</td>
</tr>
</tbody>
</table>
Where $L_n$ (Nameplate Output) - Natural Logarithm of the nameplate output expressed in Watts

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

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

<table>
<thead>
<tr>
<th>Wattage (lumens per watt)</th>
<th>Minimum average lamp efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 - 50</td>
<td>10.5</td>
</tr>
<tr>
<td>51 - 66</td>
<td>11.0</td>
</tr>
<tr>
<td>67 - 85</td>
<td>12.5</td>
</tr>
<tr>
<td>86 - 115</td>
<td>14.0</td>
</tr>
<tr>
<td>116 - 155</td>
<td>14.5</td>
</tr>
<tr>
<td>156 - 205</td>
<td>15.0</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Maximum Wattage (at 74°C)</th>
<th>Nominal Wattage (at 25°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12” red ball (or 300 mm circular)</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>8” red ball (or 200 mm circular)</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>12” red arrow (or 300 mm arrow)</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>12” green ball (or 300 mm circular)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>8” green ball (or 200 mm circular)</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>12” green arrow (or 300 mm arrow)</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>
[(b) For purposes of this subsection, maximum wattage and nominal wattage shall be measured in accordance with and under the testing conditions specified by the Institute for Transportation Engineers “Interim LED Purchase Specification, Vehicle Traffic Control Signal Heads, Part 2: Light Emitting Diode Vehicle Traffic Signal Modules.” ]

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

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

(1) Bottle-type water dispensers or water coolers manufactured on or after January 1, 2022, and included in the scope of the United States Environmental Protection Agency’s “Energy Star Program Requirements Product Specification for Water Coolers, Version 2.0,” must have an “on mode with no water draw” energy consumption less than or equal to the following values as measured in accordance with the test requirements of that specification:

(a) 0.16 kilowatt-hours per day for cold-only units and cook and cold units;

(b) 0.87 kilowatt-hours per day for storage type hot and cold units; and

(c) 0.18 kilowatt-hours per day for on demand hot and cold units.

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

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

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

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

(5) Portable electric spas manufactured on or after January 1, 2022, must meet the requirements of the American National Standards Institute's “American National Standard for Portable Electric Spa Energy Efficiency (ANSI/APSP/ICC-14 2019).”

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

[ ___________________________________________________________________________________ ]
Motor Type | Required Components
---|---
All | Interior lights: light sources with an efficacy of 45 lumens per watt or more, including ballast losses (if any)
All | Automatic door closers that firmly close all reach-in doors
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
All | Wall, ceiling and door insulation at least R-28 for refrigerators and at least R-34 for freezers
All | Floor insulation at least R-28 for freezers (no requirement for refrigerators)
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
Single-phase evaporator fan motors of under one horsepower and less than 460 volts | Electronically commutated motors

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

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

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

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

[(18)] (6) A television manufactured on or after January 1, 2014, must automatically enter television standby-passive mode after a maximum of 15 minutes without video or audio input on the selected input mode. A television must enter television standby-passive mode when turned off with the remote control unit or via an internal signal. The peak luminance of a television in home mode, or in the default mode as shipped, may not be less than 65 percent of the peak luminance of the
retail mode or the brightest selectable preset mode of the television. A television must meet the standards in the following table:

<table>
<thead>
<tr>
<th>Viewable Screen Area</th>
<th>Television Standby-passive Mode Power Usage (P in Watts)</th>
<th>Maximum On Mode Watts, A is Viewable Screen area)</th>
<th>Minimum Factor for (P ≥ 100W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1400 sq. in</td>
<td>1 W</td>
<td>$P \leq 0.12 \times A + 25$</td>
<td>0.9</td>
</tr>
<tr>
<td>≥ 1400 sq. in</td>
<td>3 W</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

[(19)(a)] [(7)(a)] Large battery charger systems manufactured on or after January 1, 2014, must meet the minimum efficiencies in the following table:

**Standards for Large Battery Charger Systems**

<table>
<thead>
<tr>
<th>Performance Parameter</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charge Return</td>
<td></td>
</tr>
<tr>
<td>Factor</td>
<td>100 percent</td>
</tr>
<tr>
<td>Depth of Discharge</td>
<td></td>
</tr>
<tr>
<td>80 percent</td>
<td>Crf ≤ 1.10</td>
</tr>
<tr>
<td>Depth of Discharge</td>
<td></td>
</tr>
<tr>
<td>40 percent</td>
<td>Crf ≤ 1.15</td>
</tr>
<tr>
<td>Depth of Discharge</td>
<td></td>
</tr>
<tr>
<td>Power Conversion</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>≥ 89 percent</td>
</tr>
<tr>
<td>Power Factor</td>
<td>≥ 0.90</td>
</tr>
<tr>
<td>Battery Maintenance</td>
<td></td>
</tr>
<tr>
<td>Mode Power</td>
<td>≤ 10</td>
</tr>
<tr>
<td>+0.0012E_b W</td>
<td></td>
</tr>
<tr>
<td>(E_b = battery capacity of tested battery)</td>
<td></td>
</tr>
<tr>
<td>No Battery</td>
<td></td>
</tr>
</tbody>
</table>
(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:

<table>
<thead>
<tr>
<th>Performance Parameter</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum 24-hour charge and maintenance</td>
<td>For $E_b$ of 2.5 Wh or less: $16 \times N$</td>
</tr>
<tr>
<td>energy (Wh)</td>
<td>For $E_b &gt; 2.5$ Wh and</td>
</tr>
<tr>
<td>($E_b$ = capacity of all batteries in ports and $N =$ number of charger ports)</td>
<td>$\leq 100$ Wh: $12 \times N + 1.6E_b$</td>
</tr>
<tr>
<td>Battery Maintenance</td>
<td>The sum of battery maintenance mode power and no battery mode power must be less than or equal to:</td>
</tr>
<tr>
<td>Battery Mode Power (W)</td>
<td>$1 \times N + 0.0021xE_b$</td>
</tr>
<tr>
<td>Power Factor ($E_b$ = capacity of all batteries in ports and $N =$ number of charger ports)</td>
<td>$36.4 \times N + 1.486E_b$</td>
</tr>
</tbody>
</table>

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

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

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

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

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

(v) Battery backups and uninterruptible power supplies, manufactured on or after January 1, 2014, for small battery charger systems for sale at retail, which may not consume more than $0.8 + (0.0021xE_b)$ watts in battery maintenance mode, where ($E_b$) is the battery capacity in watt-hours.
(vi) Battery backups and uninterruptible power supplies, manufactured on or after January 1, 2017, for small battery charger systems not sold at retail, which may not consume more than 0.8+ (0.0021xE_b) watts in battery maintenance mode, where (E_b) is the battery capacity in watt-hours.

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

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

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

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

[(20) (8)] A high light output double-ended quartz halogen lamp manufactured on or after January 1, 2016, must have a minimum efficiency of:

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

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

(9) High CRI fluorescent lamps manufactured on or after January 1, 2023, must meet or exceed the lamp efficacy standards contained in 10 C.F.R. 430.32(n)(4), as in effect on January 1, 2020.

(10) Computers and computer monitors manufactured on or after January 1, 2022, must meet the requirements contained in the California Code of Regulations, Title 20, section 1605.3(v), as adopted on May 10, 2017, and amended on November 8, 2017.

(11) The following plumbing fittings manufactured on or after January 1, 2022, must meet the requirements in the California Code of Regulations, Title 20, section 1605.3(h), as in effect on January 1, 2020:

(a) Lavatory faucets and lavatory replacement aerators;

(b) Kitchen faucets and kitchen replacement aerators;

(c) Public lavatory faucets; and

(d) Showerheads.

(12) Commercial fryers manufactured on or after January 1, 2022, and included in the scope of the United States Environmental Protection Agency’s “Energy Star Program Requirements Product Specification for Commercial Fryers, Version 2.0,” must meet the qualification criteria, testing requirements and other requirements of that specification.

(13) Commercial dishwashers manufactured on or after January 1, 2022, and included in the scope of the United States Environmental Protection Agency’s “Energy Star Program Requirements Product Specification for Commercial Dishwashers, Version 2.0,” must meet the qualification criteria, testing requirements and other requirements of that specification.

(14) Commercial steam cookers manufactured on or after January 1, 2022, and included in the scope of the United States Environmental Protection Agency’s “Energy Star Program Requirements Product Specification for Commercial Steam Cookers, Version 1.2,” must meet the qualification criteria, testing requirements and other requirements of that specification.

(15) Residential ventilating fans manufactured on or after January 1, 2022, and included in the scope of the United States Environmental Protection Agency’s “Energy Star Program Requirements Product Specification for Residential Ventilating Fans, Version 3.2,” must meet the qualification criteria, testing requirements and other requirements of that specification.

[15]
(16)(a) Electric storage water heaters manufactured on or after January 1, 2022, must have a modular demand response communications port compliant with:

(A) The March 2018 version of the ANSI/CTA-2045-A communication interface standard or a standard determined by the Director of the State Department of Energy to be equivalent; and

(B) The March 2018 version of the ANSI/CTA-2045-A application layer requirements.

(b) A request that the director determine that a communication interface standard is equivalent to the March 2018 version of the ANSI/CTA-2045-A communication interface standard under paragraph (a)(A) of this subsection must be made in the manner prescribed by the director by rule.

SECTION 3. ORS 469.238 is amended to read:

469.238. (1) Except as provided in subsection (2) of this section, a person may not sell or offer for sale a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact audio product, digital versatile disc player, digital versatile disc recorder, portable electric spa, [walk-in refrigerator, walk-in freezer,] television, inductive charger system, large battery charger system, small battery charger system, [or] high light output double-ended quartz halogen lamp, high color-rendering index fluorescent lamp, computer, computer monitor, lavatory faucet, kitchen faucet, public lavatory faucet, lavatory replacement aerator, kitchen replacement aerator, showerhead, commercial fryer, commercial steam cooker, commercial dishwasher, residential ventilation fan or electric storage water heater unless the energy efficiency of the new product meets or exceeds the minimum energy efficiency standards specified in ORS 469.233.

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

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

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

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

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

SECTION 4. ORS 469.239 is amended to read:

469.239. (1) Except as provided in subsection (2) of this section, a person may not install a new commercial clothes washer, commercial prerinse spray valve, commercial refrigerator or freezer, illuminated exit sign, single-voltage external AC to DC power supply, state-regulated incandescent reflector lamp, torchiere, traffic signal module, automatic commercial ice cube machine, metal halide lamp fixture, unit heater, bottle-type water dispenser, commercial hot food holding cabinet, compact audio product, digital versatile disc player, digital versatile disc recorder, portable electric spa, [walk-in refrigerator, walk-in freezer,] television, inductive charger system, large battery charger system, small battery charger system, [or] high light output double-ended quartz halogen lamp, high color-rendering index fluorescent lamp, computer, computer monitor, commercial fryer, commercial steam cooker, commercial dishwasher or residential ventilation fan for compensation unless the energy efficiency of the new product meets or exceeds the minimum energy efficiency
standards specified in ORS 469.233.

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

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

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

SECTION 5. ORS 469.255 is amended to read:

469.255. (1) A manufacturer of a product specified in ORS 469.238 that is sold or offered for sale, or installed or offered for installation, in this state shall test samples of the manufacturer’s products in accordance with the test methods specified in ORS 469.233 or, if more stringent, those specified in the state building code.

(2) If the test methods for products required to be tested under this section are not provided for in ORS 469.233 or in the state building code, the State Department of Energy shall adopt test methods for these products. The department shall use test methods approved by the United States Department of Energy or, in the absence of federal test methods, other appropriate nationally recognized test methods for guidance in adopting test methods. The State Department of Energy may periodically review and revise its test methods.

(3) A manufacturer of a product regulated pursuant to ORS 469.229 to 469.261, except for manufacturers of single-voltage external AC to DC power supplies, walk-in refrigerators and walk-in freezers, shall certify to the State Department of Energy that the products are in compliance with the minimum energy efficiency standards specified in ORS 469.233. The department shall establish rules governing the certification of these products and may coordinate with the certification and testing programs of other states and federal agencies with similar standards.

(4)(a) The department shall establish rules governing the identification of the products that comply with the minimum energy efficiency standards specified in ORS 469.233. The rules shall be coordinated to the greatest extent practicable with the labeling programs of other states and federal agencies with equivalent efficiency standards.

(b) Identification required under paragraph (a) of this subsection shall be by means of a mark, label or tag on the product and packaging at the time of sale or installation.

(c) The department shall waive marking, labeling or tagging requirements for products marked, labeled or tagged in compliance with federal requirements or for products certified pursuant to subsection (3) of this section, unless the department determines that state marking, labeling or tagging is required to provide adequate energy efficiency information to the consumer.

SECTION 6. ORS 469.261 is amended to read:

469.261. (1) [(a) Notwithstanding ORS 469.233,] the State Department of Energy shall periodically review the minimum energy efficiency standards specified in ORS 469.233.

[(b) (2)(a) After the review pursuant to [paragraph (a) subsection (1) of this [subsection,] section and notwithstanding ORS 469.233, the Director of the State Department of Energy may adopt rules to update the minimum energy efficiency standards specified in ORS 469.233 if the director determines that the standards need to be updated:

(A) To promote energy conservation in the state;

(B) To achieve cost-effectiveness for consumers; or

(C) Due to federal action or to the outcome of collaborative consultations with manufacturers and the energy departments of other states.

[(c)(A) (b)(A) In addition to the rules adopted under paragraph [(b)] (a) of this subsection, the director may postpone by rule the operative date of any of the minimum energy efficiency standards]
specified in ORS 469.233 if the director determines that:

(i) Adjoining states with similar minimum energy efficiency standards have postponed the operative date of their corresponding minimum energy efficiency standards; or

(ii) Failure to modify the operative date of any of the minimum energy efficiency standards would impose a substantial hardship on manufacturers, retailers or the public.

(B)(i) The director may not postpone the operative date of a minimum energy efficiency standard under subparagraph (A) of this paragraph for more than one year.

(ii) If at the end of the first postponement period the director determines that adjoining states have further postponed the operative date of minimum energy efficiency standards and the requirements of subparagraph (A) of this paragraph continue to be met, the director may postpone the operative date for not more than one additional year.

[(d)] (c) After the review pursuant to [paragraph (a) of this subsection] subsection (1) of this section, the director may adopt rules to establish new minimum energy efficiency standards if the director determines that new standards are needed:

(A) To promote energy conservation in the state;

(B) To achieve cost-effectiveness for consumers; or

(C) Due to federal action or to the outcome of collaborative consultations with manufacturers and the energy departments of other states.

[(e)] (d) If the director adopts rules under paragraph [(b)] (a) of this subsection to update the minimum energy efficiency standards specified in ORS 469.233 or under paragraph [(d)] (c) of this subsection to establish new minimum energy efficiency standards:

(A) The rules may not take effect until one year following their adoption by the director; and

(B) The Governor shall cause to be introduced at the next Legislative Assembly a bill to conform the statutory minimum energy efficiency standards to the minimum energy efficiency standards adopted by the director by rule.

(3) Notwithstanding ORS 469.229 and 469.233 and the requirements of subsection (2) of this section, and after consultation with the appropriate advisory boards to the Department of Consumer and Business Services, the director may adopt rules to update the minimum energy efficiency standards or test methods specified in ORS 469.233 to a more recent version, including any product definitions associated with the standard or test method, if the director determines that the standard or test method needs to be updated to maintain or improve consistency with other comparable standards in other states. Rules adopted under this subsection shall take effect on or after the effective date of a similar standard or test method adopted by another state.

[(2)] (4) If the director determines that implementation of a state minimum energy efficiency standard requires a waiver of federal preemption, the director shall apply for a waiver of federal preemption pursuant to 42 U.S.C. 6297(d).

SECTION 7. ORS 469.235 is repealed.

 SECTION 8. (1) The repeal of ORS 469.235 by section 7 of this 2021 Act and the amendments to ORS 469.229, 469.233, 469.238, 469.239 and 469.255 by sections 1 to 5 of this 2021 Act become operative on January 1, 2022.

(2) The State Department of Energy may take any action before the operative date specified in subsection (1) of this section that is necessary for the department to exercise, on and after the operative date specified in subsection (1) of this section, all of the duties, functions and powers conferred on the department by the repeal of ORS 469.235 by section
7 of this 2021 Act and the amendments to ORS 469.229, 469.233, 469.238, 469.239 and 469.255 by sections 1 to 5 of this 2021 Act.

SECTION 9. This 2021 Act takes effect on the 91st day after the date on which the 2021 regular session of the Eighty-first Legislative Assembly adjourns sine die.