

SENATE No. 2478

The Commonwealth of Massachusetts

—
In the One Hundred and Ninety-First General Court
(2019-2020)
—

SENATE, January 23, 2020.

The committee on Senate Ways and Means to whom was referred the Senate Bill relative to Energy Savings Efficiency (Energy SAVE) (Senate, No. 1986), - reports, recommending that the same ought to pass with an amendment substituting a new draft with the same title (Senate, No. 2478).

For the committee,
Michael J. Rodrigues

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**In the One Hundred and Ninety-First General Court
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An Act relative to Energy Savings Efficiency (Energy SAVE).

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Section 2 of chapter 25B of the General Laws, as appearing in the 2018
2 Official Edition, is hereby amended by inserting after the definition of “Central furnace” the
3 following 7 definitions:-

4 “Cold temperature fluorescent lamp”, a fluorescent lamp that is not a compact fluorescent
5 lamp and is: (1) specifically designed to start at -20°F when used with a ballast conforming to the
6 requirements of ANSI C78.81 and ANSI C78.901; and (2) expressly designated as a cold
7 temperature lamp both in markings on the lamp and in marketing materials, including catalogs,
8 sales literature and promotional material.

9 “Color rendering index” or “CRI”, the measure of the degree of color-shift objects
10 undergo when illuminated by a light source as compared to the color of those same objects when
11 illuminated by a reference source of comparable color temperature.

12 “Commercial hot-food holding cabinet”, a heated, fully-enclosed compartment with at
13 least 1 solid or transparent door designed to maintain the temperature of hot food that has been

14 cooked using a separate appliance; provided, however, that “commercial hot-food holding
15 cabinet” shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-
16 hold appliances.

17 “Commercial dishwasher”, a machine designed to clean and sanitize plates, pots, pans,
18 glasses, cups, bowls, utensils and trays by applying sprays of detergent solution with or without
19 blasting media granules and a sanitizing rinse.

20 “Commercial fryer”, an appliance, including a cooking vessel, in which: (1) oil is placed
21 to such a depth that the cooking food is essentially supported by displacement of the cooking
22 fluid rather than by the bottom of the vessel; and (2) heat is delivered to the cooking fluid by
23 means of an immersed electric element of band-wrapped vessel, electric fryers, or by heat
24 transfer from gas burners through the walls of the fryer or through tubes passing through the
25 cooking fluid, gas fryers.

26 “Commercial oven”, a chamber designed for heating, roasting or baking food by
27 conduction, convection, radiation or electromagnetic energy.

28 “Commercial steam cooker” or “compartment steamer”, a device with at least 1 food-
29 steaming compartment in which the energy in the steam is transferred to the food by direct
30 contact; provided, however, that models may include countertop models, wall-mounted models
31 and floor models mounted on a stand, pedestal or cabinet-style base.

32 SECTION 2. Said section 2 of said chapter 25B, as so appearing, is hereby further
33 amended by inserting after the definition of “Compensation” the following 3 definitions:-

34 “Dual-flush effective flush volume”, the average flush volume of 2 reduced flushes and 1
35 full flush.

36 “Dual-flush water closet”, a tank-type water closet incorporating a feature that allows the
37 user to flush the water closet with a reduced or a full volume of water.

38 “Electric vehicle supply equipment”, the conductors, including the ungrounded, grounded
39 and equipment grounding conductors, the electric vehicle connectors, attachment plugs and all
40 other fittings, devices, power outlets or apparatuses installed specifically for the purpose of
41 delivering energy from the premises wiring to the electric vehicle; provided, however, that
42 charging cords with NEMA 5-15P and NEMA 5-20P attachment plugs shall be considered
43 electric vehicle supply equipment; provided further, that “electric vehicle supply equipment”
44 shall not include conductors, connectors and fittings that are part of a vehicle.

45 SECTION 3. Said section 2 of said chapter 25B, as so appearing, is hereby further
46 amended by striking out the definition of “High-intensity discharge lamp” and inserting in place
47 thereof the following 2 definitions:-

48 “Faucet”, a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet or
49 replacement aerator for a lavatory or kitchen faucet.

50 “Flow rate”, the rate of water flow of a plumbing fitting.

51 SECTION 4. Said section 2 of said chapter 25B, as so appearing, is hereby further
52 amended by inserting after the definition of “F96T12 Lamp” the following 4 definitions:-

53 “General service lamp”, a lamp as set forth in the action published at 82 Fed. Reg. 7276,
54 7321-22 (January 19, 2017) and modified by the action published at 82 Fed. Reg. 7322, 7333
55 (January 19, 2017).

56 “Hand-held showerhead”, a showerhead that can be held or fixed in place for the purpose
57 of spraying water onto a bather and that is connected to a flexible hose.

58 “High color rendering index fluorescent lamp”, a fluorescent lamp with a color rendering
59 index of 87 or greater that is not a compact fluorescent lamp.

60 “Impact-resistant fluorescent lamp”, a fluorescent lamp that is not a compact fluorescent
61 lamp that: (1) has a coating or equivalent technology that is compliant with NSF/ANSI 51 and is
62 designed to contain the glass if the glass envelope of the lamp is broken; and (2) is designated
63 and marketed for the intended application with: (a) the designation on the lamp packaging; and
64 (b) marketing materials that identify the lamp as being impact-resistant, shatter-resistant, shatter-
65 proof or shatter-protected.

66 SECTION 5. Said section 2 of said chapter 25B, as so appearing, is hereby further
67 amended by inserting after the definition of “Metal halide lamp fixture” the following
68 definition:-

69 “Metering faucet”, a fitting that, when turned on, will gradually shut itself off over a
70 period of several seconds.

71 SECTION 6. Said section 2 of said chapter 25B, as so appearing, is hereby further
72 amended by inserting after the definition of “New appliance” the following 4 definitions:-

73 “On demand”, when the water cooler heats water as it is requested.

74 “Plumbing fitting”, a device that controls and guides the flow of water in a supply
75 system.

76 “Plumbing fixture”, an exchangeable device that connects to a plumbing system to
77 deliver and drain away water and waste.

78 “Portable electric spa”, a factory-built electric spa or hot tub that may include any
79 combination of integral controls, water heating or water circulating equipment.

80 SECTION 7. Said section 2 of said chapter 25B, as so appearing, is hereby further
81 amended by inserting after the definition of “Probe-start metal halide ballast” the following
82 definition:-

83 “Public lavatory faucet”, a fitting intended to be installed in nonresidential bathrooms
84 that are accessible to walk-in traffic.

85 SECTION 8. Said section 2 of said chapter 25B, as so appearing, is hereby further
86 amended by inserting after the definition of “Refrigerator-freezer” the following definition:-

87 “Replacement aerator”, an aerator sold as a replacement, separate from the faucet to
88 which it is intended to be attached.

89 SECTION 9. Said section 2 of said chapter 25B, as so appearing, is hereby further
90 amended by inserting after the definition of “Residential furnace or boiler” the following 2
91 definitions:-

92 “Residential ventilating fan”, a ceiling, wall-mounted or remotely mounted in-line fan
93 designed to be used in a bathroom or utility room, whose purpose is to move air from inside the
94 building to the outdoors.

95 “Showerhead”, a device through which water is discharged for a shower bath and
96 includes a handheld showerhead, but does not include a safety showerhead.

97 SECTION 10. Said section 2 of said chapter 25B, as so appearing, is hereby further
98 amended by inserting after the definition of “Single-voltage external AC to DC power supply”
99 the following 3 definitions:-

100 “Spray sprinkler body”, the exterior case or shell of a sprinkler incorporating a means of
101 connection to the piping system designed to convey water to a nozzle or orifice.

102 “Standby power”, the average power in standby mode, measured in watts.

103 “State-regulated general service lamp”, includes: (1) shatter-resistant incandescent lamps,
104 3-way incandescent lamps and high lumen output incandescent lamps rated at more than 2600
105 lumens or, in the case of a modified spectrum lamp, more than 1950 lumens and less than or
106 equal to 3,300 lumens; (2) incandescent reflector lamps that are: (a) ER30, BR30, BR40 or ER40
107 lamps rated at 50 Watts or less; (b) BR30, BR40 or ER40 lamps rated at 65 watts; and (c) R20
108 lamps rated at 45 watts or less; and (3) incandescent lamps that are: (a) T shape lamps rated at \leq
109 40 Watts or \geq 10 inches in length; (b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps; and
110 (c) M-14 lamps rated at \leq 40 Watts.

111 SECTION 11. Said section 2 of said chapter 25B, as so appearing, is hereby further
112 amended by inserting after the definition of “State plumbing code” the following definition:-

113 “Storage-type”, thermally conditioned water that is stored in a tank in the water cooler
114 and is available instantaneously, including, but not limited to, point of use, dry storage
115 compartment and bottled water coolers.

116 SECTION 12. Said section 2 of said chapter 25B, as so appearing, is hereby further
117 amended by inserting after the definition of “Transformer” the following 4 definitions:-

118 “Trough-type urinal”, a urinal designed for simultaneous use by 2 or more persons.

119 “Urinal”, a plumbing fixture that receives only liquid body waste and conveys the waste
120 through a trap into a drainage system.

121 “Water closet”, a plumbing fixture with a water-containing receptor that receives liquid
122 and solid body waste through an exposed integral trap into a drainage system.

123 “Water cooler”, a freestanding device that consumes energy to cool or heat potable water;
124 provided, however, that the device is not wall-mounted, under-sink or otherwise building
125 integrated.

126 SECTION 13. Said section 2 of said chapter 25B, as so appearing, is hereby further
127 amended by adding the following definition:-

128 “Water use”, the quantity of water flowing through a showerhead, faucet, water closet or
129 urinal at point of use.

130 SECTION 14. The first paragraph of section 3 of said chapter 25B, as so appearing, is
131 hereby amended by adding the following 15 clauses:-

132 (k) commercial hot-food holding cabinets.

133 (l) computers and computer monitors.

134 (m) state-regulated general service lamps.

135 (n) high CRI, cold temperature and impact-resistant fluorescent lamps.

136 (o) plumbing fittings.

137 (p) plumbing fixtures.

138 (q) portable electric spas.

139 (r) water coolers.

140 (s) residential ventilating fans.

141 (t) commercial ovens.

142 (u) commercial dishwashers.

143 (v) commercial fryers.

144 (w) commercial steam cookers.

145 (x) spray sprinkler bodies.

146 (w) electric vehicle supply equipment.

147 SECTION 15. Section 5 of said chapter 25B, as so appearing, is hereby amended by
148 striking out, in line 24, the figure “(s)” and inserting in place thereof the following figure:- (w).

149 SECTION 16. The third paragraph of said section 5 of said chapter 25B, as so appearing,
150 is hereby amended by adding the following 15 clauses:-

151 (6) Commercial hot-food holding cabinets shall meet the qualification criteria in Version
152 2.0 of the United States Environmental Protection Agency’s ENERGY STAR program product
153 specifications for commercial hot-food holding cabinets.

154 (7) Computers and computer monitors shall meet the requirements of section 1605.3 of
155 Title 20 of the California Code of Regulations, as in effect on the date of enactment of this
156 clause, as measured in accordance with test methods prescribed in section 1604 of said Title 20
157 of the California Code of Regulations; provided, however, that the regulations shall define
158 “computer” and “computer monitor” to have the same meaning as set forth in section 1602(v) of
159 said Title 20 of the California Code of Regulations; provided further, that the referenced portions
160 of the California Code of Regulations shall be those adopted on or before the effective date of
161 this clause; provided further, that the commissioner shall have authority to amend the rules so
162 that the definitions of “computer” and “computer monitor” and the minimum efficiency
163 standards for computers and computer monitors conform to subsequently adopted modifications
164 to the referenced sections of the California Code of Regulations.

165 (8) State-regulated general service lamps shall meet or exceed a lamp efficacy of 45
166 lumens per watt, when tested in accordance with the applicable federal test procedures for
167 general service lamps, prescribed in Section 430.23 (gg) of Title 10 of the Code of Federal
168 Regulations.

169 (9) High CRI, cold temperature and impact-resistant fluorescent lamps shall meet the
170 minimum efficiency requirements contained in Section 430.32(n)(4) of Title 10 of the Code of
171 Federal Regulations as in effect on January 3, 2019, when tested in accordance with the test

172 procedure prescribed in Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal
173 Regulations as in effect on January 3, 2019.

174 (10) Plumbing fittings shall meet the following requirements:

175 (a) when tested in accordance with the flow rate test procedure prescribed in Appendix S
176 to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations: the flow rate of lavatory
177 faucets and replacement aerators shall not be greater than 1.5 gallons per minute, hereafter
178 referred to as “gpm”, at 60 pounds per square inch (hereafter referred to as “psi”); for sprayheads
179 with independently controlled orifices and manual controls, the maximum flow rate of each
180 orifice that manually turns on or off shall not exceed the maximum flow rate for a lavatory
181 faucet; and for sprayheads with collectively controlled orifices and manual controls, the
182 maximum flow rate of a sprayhead that manually turns on or off shall be the product of: (i) the
183 maximum flow rate for a lavatory faucet; and (ii) the number of component lavatories (rim space
184 of the lavatory in inches [millimeters] divided by 20 inches [508 millimeters]);

185 (b) the flow rate of residential kitchen faucets and replacement aerators shall not be
186 greater than 1.8 gpm with optional temporary flow of 2.2 gpm at 60 psi when tested in
187 accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part 430
188 of Title 10 of the Code of Federal Regulations;

189 (c) the flow rate of public lavatory faucets and replacement aerators shall not be greater
190 than 0.5 gpm at 60 psi when tested in accordance with the flow rate test procedure prescribed in
191 Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations; and

192 (d) the flow rate of showerheads shall not be greater than 2.0 gpm at 80 psi when tested
193 in accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part
194 430 of Title 10 of the Code of Federal Regulations, effective on January 3, 2019.

195 (11) Plumbing fixtures shall meet the following requirements:

196 (a) the water consumption of urinals and water closets, other than those designed and
197 marketed exclusively for use at prisons or mental health care facilities, shall be not greater than
198 the values shown in items (a)(i) to (a)(iv), inclusive, when tested in accordance with the water
199 consumption test prescribed in Appendix T to Subpart B of Part 430 of Title 10 of the Code of
200 Federal Regulations and waste extraction test for water closets (Section 7.9) of ASME
201 A112.19.2/CSA B45.1-2018.

202 (i) Wall-mounted urinals, except for trough-type urinals, shall have a maximum flush
203 volume of 0.5 gallons per flush.

204 (ii) Floor-mounted urinals, except for trough-type urinals, shall have a maximum flush
205 volume of 0.5 gallons per flush.

206 (iii) water closets, except for dual-flush tank-type water closets, shall have a maximum
207 flush volume of 1.28 gallons per flush.

208 (iv) dual-flush tank-type water closets shall have a maximum effective flush volume of
209 1.28 gallons per flush.

210 (12) Portable electric spas shall meet the requirements of the American National
211 Standard for Portable Electric Spa Energy Efficiency, ANSI/APSP/ICC-14-2019.

212 (13) Water coolers shall have on mode with no water draw energy consumption, a test
213 that records the 24-hour energy consumption of a water cooler with no water drawn during the
214 test period, less than or equal to the following, as measured in accordance with the test criteria
215 prescribed in Version 2.0 of the ENERGY STAR program product specifications for water
216 coolers:

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

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

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

220 (14) Residential ventilating fans shall meet the qualification criteria in Version 4.1 of the
221 ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans.

222 (15) Commercial ovens included in the scope of Version 2.2 of the ENERGY STAR
223 Program Requirements Product Specification for Commercial Ovens shall meet the qualification
224 criteria of that specification.

225 (16) Commercial dishwashers included in the scope of Version 2.0 of the ENERGY
226 STAR Program Requirements Product Specification for Commercial Dishwashers shall meet the
227 qualification criteria of that specification.

228 (17) Commercial fryers included in the scope of Version 2.0 of the ENERGY STAR
229 Program Requirements Product Specification for Commercial Fryers shall meet the qualification
230 criteria of that specification.

231 (18) Commercial steam cookers shall meet the requirements of Version 1.2 of the
232 ENERGY STAR Program Requirements for Commercial Steam Cookers.

233 (19) Spray sprinkler bodies that are not specifically excluded from the scope of Version
234 1.0 of the WaterSense Specification for Spray Sprinkler Bodies shall include an integral pressure
235 regulator and shall meet the water efficiency and performance criteria and other requirements of
236 that specification.

237 (20) Electric vehicle supply equipment included in the scope of Version 1.0 (Rev. Apr-
238 2017) of the ENERGY STAR Program Requirements Product Specification for Electric Vehicle
239 Supply Equipment shall meet the qualification criteria of that specification.

240 SECTION 17. Said section 5 of said chapter 25B, as so appearing, is hereby further
241 amended by inserting after the fourth paragraph the following paragraph:-

242 On or after January 1, 2022, no new cold temperature fluorescent lamp, commercial
243 dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven,
244 commercial steam cooker, computer or computer monitor, electric vehicle supply equipment,
245 faucet, high CRI fluorescent lamp, impact-resistant fluorescent lamp, portable electric spa,
246 residential ventilating fan, showerhead, spray sprinkler body, urinal, water closet or water cooler
247 may be sold or offered for sale, lease or rent in the commonwealth unless the efficiency of the
248 new product meets or exceeds the efficiency standards set forth in the regulations adopted
249 pursuant to this section.

250 SECTION 18. Section 9 of said chapter 25B, as so appearing, is hereby amended by
251 adding the following paragraph:-

252 If any of the energy or water conservation standards issued or approved for publication
253 by the Office of the United States Secretary of Energy as of January 1, 2018 pursuant to the
254 Energy Policy and Conservation Act, 10 C.F.R. §§ 430-431, are withdrawn, repealed or

255 otherwise voided, the minimum energy or water efficiency level permitted for products
256 previously subject to federal energy or water conservation standards shall be the previously
257 applicable federal standards and no such product may be sold or offered for sale in the
258 commonwealth unless it meets or exceeds such standards.

259 SECTION 19. No state-regulated general service lamp may be sold or offered for sale in
260 the commonwealth unless the efficiency of the new product meets or exceeds the efficiency
261 standards provided in section 5 of chapter 25B of the General Laws.

262 SECTION 20. Section 19 shall take effect 6 months after the effective date of this act.