HOUSE . . . . . No. 4551

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, March 12, 2020.

The committee on Telecommunications, Utilities and Energy, to whom was referred the petition (accompanied by bill, House, No. 2832) of Josh S. Cutler and others relative to energy savings efficiency, so called Energy SAVE, reports recommending that the accompanying bill (House, No. 4551) ought to pass.

For the committee,

THOMAS A. GOLDEN, JR..

FILED ON: 2/19/2020

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The Commonwealth of Massachusetts

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

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:

SECTION 1. Section 2 of chapter 25B of the General Laws, as appearing in the 2016 Official Edition, is hereby amended by inserting before the definition of "'Ballast'" the following definition:-

SECTION 2. Section 2 of chapter 25B of the General Laws, as appearing in the 2016 Official Edition, is hereby amended by inserting after the definition of "Central furnace" the following 7 definitions:-

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

"Commercial hot-food holding cabinet", a heated, fully-enclosed compartment with 1 or more solid or transparent doors designed to maintain the temperature of hot food that has been cooked using a separate appliance. A commercial hot-food holding cabinet shall not include heated glass merchandizing cabinets, drawer warmers or cook-and-hold appliances.

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

"Commercial fryer" an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is essentially supported by displacement of the cooking fluid rather than by the bottom of the vessel. Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).

"Commercial oven" means a chamber designed for heating, roasting, or baking food by conduction, convection, radiation, and/or electromagnetic energy

"Commercial steam cooker," also known as "compartment steamer," a device with one or more food-steaming compartments in which the energy in the steam is transferred to the food by direct contact. Models may include countertop models, wall-mounted models, and floor models mounted on a stand, pedestal, or cabinet-style base. SECTION 3. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Compensation" the following 37 definitions:-

"Dual-flush effective flush volume", the average flush volume of 2 reduced flushes and 1 full flush.

"Dual-flush water closet", a tank-type water closet incorporating a feature that allows the user to flush the water closet with either a reduced or a full volume of water.

"Electric vehicle supply equipment" means the conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatuses installed specifically for the purpose of delivering energy from the premises wiring to the electric vehicle. Charging cords with NEMA 5-15P and NEMA 5-20P attachment plugs are considered electric vehicle supply equipment. Excludes conductors, connectors, and fittings that are part of a vehicle.

SECTION 4. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by striking out the definition of "High-intensity discharge lamp".

SECTION 5. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Electricity Ratio (ER)" the following 32 definitions:-

"Faucet", a lavatory faucet, kitchen faucet, metering faucet, public lavatory faucet, or replacement aerator for a lavatory or kitchen faucet.

"Flow rate", the rate of water flow of a plumbing fitting.

SECTION 6. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "F96T12 Lamp" the following 53 definitions:-

"General service lamp" has the same meaning as set forth in 10 CFR 430.2.

"State-regulated general service lamp" includes the following:

(1) Shatter-resistant incandescent lamps, 3-way incandescent lamps and high lumen output incandescent lamps rated at more than 2600 lumens or, in the case of a modified spectrum lamp, more than 1950 lumens, and less than or equal to 3,300 lumens.

(2) Incandescent reflector lamps that are:

(a) ER30, BR30, BR40, or ER40 lamps rated at 50 Watts or less;

(b) BR30, BR40, or ER40 lamps rated at 65 watts;

(c) R20 lamps rated at 45 watts or less.

(3) Incandescent lamps that are:”

(a) T shape lamps rated at ≤ 40 Watts or ≥ 10 inches in length;

(b) B, BA, CA, F, G-16½, G-25, G-30 and S shape lamps;

(c) M-14 lamps rated at ≤ 40 Watts.

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

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

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

SECTION 7. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “New appliance” the following 46 definitions:-

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

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

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

“Portable electric spa”, a factory-built electric spa or hot tub which may or may not include any combination of integral controls, water heating or water circulating equipment.

SECTION 8. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “Probe-start metal halide ballast” the following definition:-

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

SECTION 9. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “Refrigerator-freezer” the following definition:-

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

SECTION 10. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “Residential furnace or boiler” the following two definitions:-

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

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

SECTION 11. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “Single-voltage external AC to DC power supply” the following 2 definitions:-

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

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

SECTION 12. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “State plumbing code” the following definition:-

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

SECTION 13. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of “Transformer” the following 45 definitions:-

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

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

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

"Water cooler", a freestanding device that consumes energy to cool or heat potable water; provided however, that such device is not wall-mounted, under-sink or otherwise building integrated.

SECTION 14. Said section 2 of said chapter 25B, as so appearing, is hereby further amended by inserting after the definition of "Water heater" the following definition:-

"Water use", the quantity of water flowing through a showerhead, faucet, water closet or urinal at point of use.

SECTION 15. Section 3 of said chapter 25B, as so appearing, is hereby amended by inserting after clause (j) the following clauses:-

(k) commercial hot-food holding cabinets.

(l) computers and computer monitors.

(m) state-regulated general service lamps.

(n) high CRI fluorescent lamps.

(o) plumbing fittings.

(p) plumbing fixtures.

(q) portable electric spas.

(r) water coolers.

(s) residential ventilating fans

(t) commercial ovens

(u) commercial dishwashers

(v) commercial fryers

(w) commercial steam cookers

(x) spray sprinkler bodies

(w) electric vehicle supply equipment

SECTION 16. Section 5 of said chapter 25B, as so appearing, is hereby amended by striking out the words, in line 24, “clauses (f) to (s)” and inserting in place thereof the following words:- clauses (f) to (w).

SECTION 17. The third paragraph of said section 5 of said chapter 25B, as so appearing, is hereby amended by adding after clause (5) the following clauses:-

(6) Commercial hot-food holding cabinets shall meet the qualification criteria of the ENERGY STAR program product specifications for commercial hot-food holding cabinets, Version 2.0.

(7) Computers and computer monitors shall meet the requirements of section 1605.3 of Title 20 of the California Code of Regulations, as in effect on the date of enactment of this Act, as measured in accordance with test methods prescribed in section 1604 of those regulations.

1) The rules shall define “computer” and “computer monitor” to have the same meaning as set forth in 20 C.C.R. § 1602(v).

2) The referenced portions of the C.C.R. shall be those adopted on or before the effective date of this act. However, the commissioner shall have authority to amend the rules so

that the definitions of “computer” and “computer monitor” and the minimum efficiency standards for computers and computer monitors conform to subsequently adopted modifications to the referenced sections of the C.C.R.

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

(9) High CRI, fluorescent lamps shall meet the minimum efficiency requirements contained in Section 430.32(n)(4) of Title 10 of the Code of Federal Regulations as in effect on January 3, 2019, when tested in accordance with the test procedure prescribed in Appendix R to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations as in effect on January 3, 2019:

(10) Plumbing fittings shall meet the following requirements:

(a) When tested in accordance with the flow rate test procedure prescribed in Appendix S to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations: the flow rate of lavatory faucets and replacement aerators shall not be greater than 1.5 gallons per minute (hereafter referred to as gpm) at 60 pounds per square inch (hereafter referred to as psi); for sprayheads with independently controlled orifices and manual controls, the maximum flow rate of each orifice that manually turns on or off shall not exceed the maximum flow rate for a lavatory faucet; and for sprayheads with collectively controlled orifices and manual controls, the maximum flow rate of a sprayhead that manually turns on or off shall be the product of (i) the

maximum flow rate for a lavatory faucet, and (ii) the number of component lavatories (rim space of the lavatory in inches (millimeters) divided by 20 inches [508 millimeters]);

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

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

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

(11) Plumbing fixtures shall meet the following requirements:

(a) The water consumption of urinals and water closets, other than those designed and marketed exclusively for use at prisons or mental health care facilities, shall be no greater than the values shown in items (a)(ii)(A) through (a)(ii)(D) when tested in accordance with the:

(i) Water consumption test prescribed in Appendix T to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations.

(ii) Waste extraction test for water closets (Section 7.9) of ASME A112.19.2/CSA B45.1-2018.

(b) Urinals shall have a maximum flush volume of 0.5 gallons per flush.

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

(d) Dual-flush tank-type water closets shall have a maximum effective flush volume of 1.28 gallons per flush.

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

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

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

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

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

(15) Residential ventilating fans shall meet the qualification criteria of the ENERGY STAR Program Requirements Product Specification for Residential Ventilating Fans, Version 4.1.

Commercial ovens included in the scope of the ENERGY STAR Program Requirements Product Specification for Commercial Ovens, Version 2.2, shall meet the qualification criteria of that specification.

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

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

(19) Commercial steam cookers shall meet the requirements of the ENERGY STAR Program Requirements Product Specification for Commercial Steam Cookers, Version 1.2.

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

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

SECTION 18. Said section 5 of said chapter 25B, as so appearing, is hereby further amended by inserting after the fourth paragraph the following paragraph:-

On or after January 1, 2022, no new, commercial dishwasher, commercial fryer, commercial hot-food holding cabinet, commercial oven, commercial steam cooker, computer or computer monitor, electric vehicle supply equipment, faucet, high CRI fluorescent lamp, , portable electric spa, residential ventilating fan, showerhead, spray sprinkler body, urinal, water

closet, or water cooler may be sold or offered for sale, lease, or rent in the state unless the efficiency of the new product meets or exceeds the efficiency standards set forth in the regulations adopted pursuant to Section 17.

a) On or after the date 12 months after enactment of this ACT, no state-regulated general service lamp may be sold or offered for sale in the state unless the efficiency of the new product meets or exceeds the efficiency standards provided in Section 17.

SECTION 19. Section 9 of said chapter 25B, as so appearing, is hereby amended by inserting after the first paragraph the following paragraph:-

If any of the energy or water conservation standards issued or approved for publication by the Office of the United States Secretary of Energy as of January 1, 2018 pursuant to the Energy Policy and Conservation Act, 10 C.F.R. §§ 430-431, are withdrawn, repealed or otherwise voided, the minimum energy or water efficiency level permitted for products previously subject to federal energy or water conservation standards shall be the previously applicable federal standards and no such product may be sold or offered for sale in the state unless it meets or exceeds such standards.