## SENATE . . . . . . . . . . . . No.

The Con	nmonwealth of Alassachusetts
	PRESENTED BY:
	Robert A. O'Leary
Court assembled:	depresentatives of the Commonwealth of Massachusetts in General
	or citizens respectfully petition for the passage of the accompanying bill:  apanding energy efficiency in the Commonwealth.
	PETITION OF:
NAME:	DISTRICT/ADDRESS:
Robert A. O'Leary	Cape and Islands

## The Commonwealth of Massachusetts

In the Year Two Thousand and Nine

## AN ACT RELATIVE TO EXPANDING ENERGY EFFICIENCY IN THE COMMONWEALTH.

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.** (A) Section 2 of chapter 25B of the general laws as appearing in the 2006 official edition, is
- 2 hereby amended by inserting, after line 8, the following: -
- 3 "Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of 4 potable water."
- 5 (B) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- 6 inserting, after line 10, the following: -
- 7 "Combination television" means a system in which a television or television monitor and an
- 8 additional device or devices including, but not limited to, a DVD player, an HDD player or a
- 9 VCR, are combined into a single unit and which meets all of the following criteria: the
- additional devices are included in the television casing;
- 11 "Commercial hot food holding cabinet" means a heated, fully-enclosed compartment with one or
- more solid or glass doors that is designed to maintain the temperature of hot food that has been
- cooked in a separate appliance. It shall not include heated glass merchandizing cabinets, drawer
- warmers, or cook-and-hold appliances.
- 15 (C) Said Section 2 of said chapter 25B of the general laws, as so appearing, is further amended by
- inserting, after line 11, the following: -
- 17 "Compact audio product," also known as a mini, mid, micro, or shelf audio system, means an
- integrated audio system encased in a single housing that includes an amplifier and radio tuner,
- 19 attached or separable speakers, and can reproduce audio from one or more of the following media:
- 20 magnetic tape, CD, DVD, or flash memory. "Compact audio product" does not include products that
- can be independently powered by internal batteries or that have a powered external satellite antenna,
- or that can provide a video output signal."

23 24 25	"Component television" means a television composed of two or more separate components (e.g., separate display device and tuner) marketed and sold as a television under one model or system designation. The system may have more than one power cord."
26 27 28 29	"Computer monitor" means an analog or digital device designed primarily for the display of computer generated signals, is "plug and play," and is not marketed for use as a television."  (D) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting the following language after line 13:
30 31	"Digital versatile disc" and "DVD" mean a laser-encoded plastic medium capable of storing a large amount of digital audio, video, and computer data."
32 33 34 35 36 37	"Digital versatile disc player" and "digital versatile disc recorder" mean commercially-available electronic products encased in a single housing that includes an integral power supply and for which the sole purpose is, respectively, (1) the decoding and (2) production or recording of digitized video signal on a DVD. "DVD recorder" does not include models that have an electronic programming guide function that provides an interactive, onscreen menu of television listings, and that downloads program information from the vertical blanking interval of a regular television signal."
38 39	(E) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 54, the following: -
40	"On mode" means the television is connected to a power source and produces sound and a picture."
41 42	"Portable electric spa" means a factory-built electric spa or hot tub, supplied with equipment for heating and circulating water."
43 44	"Portable luminaire" means a luminaire which connects to a power supply by means of a power cord and plug."
45 46	(F) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 102, the following: -
47 48 49 50 51	"Standby-passive mode" means the television is connected to a power source, produces neither sound nor images but can be switched into another mode with a remote control unit or an internal signal."  (G) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 115, the following: -
52 53 54 55 56	"Television" means an analog or digital device designed primarily for the display and reception of a terrestrial, satellite, cable internet protocol tv (IPTV) or other broadcast or recorded transmission of analog or digital signals. Televisions include combination televisions, television monitors, component televisions, and any product that is marketed as a television. Televisions do not include computer monitors."

"Television monitor" means a television that does not have an internal tuner or receiver or 57 playback device." 58 59

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(H) Said section 2 of said chapter 25B of the general laws, as so appearing, is hereby further amended by inserting, after line 127, the following: -

- 61 "Water dispenser" means a factory –made assembly that mechanically cools and heats potable water and
- that dispenses the cooler or heated water by integral or remote means."
- 63 **Section 2**. (A) section 3 of chapter 25B of the general laws, as so appearing, is hereby amended by
- 64 inserting, after subsection (j) the following subsections: -
- (k) bottle-type water dispensers;
- (1) commercial hot food holding cabinets;
- (m) compact audio products;
- (n) digital versatile disc players (DVD) and digital versatile disc recorders;
- 69 (o) portable electric spas;
- 70 (p) portable luminaires
- 71 (q) televisions (TVs); and
- 72 (r) any other products as may be designated by the Commissioner in accordance with
- Section 7 of Chapter 25 of the general laws.
- 74 (B) Said section 3 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- 75 inserting, after line 29, the following: -
- 76 "; or new products manufactured in the state and sold outside the state; new products manufactured
- outside the state and sold at wholesale inside the state for final retail sale and installation outside the state;
- 78 products installed in mobile manufactured homes at the time of construction; or products designed
- 79 expressly for installation and use in recreational vehicles"
- 80 Section 3. (A)Section 4 of chapter 25B of the general laws, as so appearing, is hereby amended by
- 81 striking out the words "clauses (a) to (e) in line 1, and inserting in place thereof the words "clauses (a) to
- 82 (r)
- 83 (B) Said section 4 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- striking out the words "clauses (a) to (e) in line 6 and inserting in place thereof the words "clauses (a) to
- 85 (r)
- 86 Section 4. (A) Section 5 of chapter 25B of the general laws, as so appearing, is hereby amended by
- 87 inserting, after the word "ninety" in line 12 the following language: -
- 88 "Said commissioner may also by regulation increase the level of energy efficiency standards for bottle –
- 89 type water dispensers, commercial hot food holding cabinets, compact audio products, digital versatile
- 90 disc players (DVDs) and recorders, portable luminaries, portable electric spas, and televisions (TVs).
- 91 (B) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- 92 inserting, after the word "users" in line 14, the following: -

- "and promote energy conservation in the commonwealth,"
- 94 Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- 95 striking out the words "clauses (f) to (s) in line 23 and inserting in place thereof the words "clauses (a) to
- 96 (r)".

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- 97 (C) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
- 98 inserting, after subsection (5) the following subsections: -
- 99 (6) Bottle-type water dispensers designed for dispensing both hot and cold water shall not have 100 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 U.S. environmental protection agency's "Energy Star
- Program Requirements for Bottled Water Coolers," except units with an integral, automatic timer
- shall not be tested using Section D, "timer usage," of the test criteria.
- 104 (7) 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 U.S.
- environmental protection agency's "Energy Star Program Requirements for Commercial Hot Food
- Holding Cabinets" as in effect on August 15, 2003.
  - (8) Compact audio products shall not use more than 2 watts in standby-passive mode for those without a permanently illuminated clock display and 4 watts in standby-passive mode for those with a permanently illuminated clock display, as measured in accordance with the international electrotechnical commission (IEC) test method 62087:2002(E), "Methods of measurement for the power consumption of audio, video, and related equipment."
  - (9) Digital versatile disc players and digital versatile disc recorders shall not use more than 3 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."
  - (10) Portable luminaires shall meet one or more of the following requirements:
  - (i) Be equipped with a dedicated fluorescent lamp socket connected to a high frequency electronic ballast contained within the luminaire. Dedicated fluorescent luminaires must meet the requirements of the U.S. environmental protection agency's "Energy Star Program for Residential Light Fixtures Version 4.2".
  - (ii) Be equipped with only GU-24 line voltage sockets and not be rated for use with incandescent lamps of any type, including line voltage or low voltage;
    - (iii) Be an LED luminaire or a luminaire with an LED light engine with integral heat sink and comply with the following minimum requirements:
- a. Minimum light output: 200 lumens (initial)
  - b. Minimum LED luminaire efficacy: 29 lumens/watt
- c. Minimum LED light engine efficacy: 40 lumens/watt
  - d. Color Correlated Temperature (CCT): 2700K through 5000K
    - e. Minimum Color Rendering Index (CRI): 75

133 134	(iv) Be equipped with an E12, E17, or E26 screw-based socket and be prepackaged and sold together with one screw-based compact fluorescent lamp or screw-based LED lamp for each
135	screw-based socket on the luminaire. The compact fluorescent or LED lamps prepackaged with
136	the luminaire shall be fully compatible with any luminaire controls incorporated into the
137	luminaire (e.g., luminaires with dimmers shall be packed with dimmable lamps). Compact
138	fluorescent lamps prepackaged with luminaires shall meet the requirements of the U.S.
139	Environmental Protection Agency's Energy Star Program for CFLs Version 4.0.
140	(v) Be equipped with one or more single-ended, non-screw based halogen lamp sockets (line or
141	low voltage), a dimmer control or high-low control, and be rated for a maximum of 100W.
142	Artwork luminaires that meet all of the following requirements are not required to be
143	prepackaged and sold together with compact fluorescent or LED lamps: -
144	(a) designed only to be mounted directly to art work only for the purpose of illuminating
145	that art work;
146	(b) fitted only with E-12 screw-based line-voltage sockets;
147	(c) having no more than three sockets per luminaire; and
148	(d) controlled with an integral high/low switch.
149	Art work luminaires with a single socket shall have a maximum relamping rated wattage of 25
150	watts, luminaires with two or three sockets shall have a maximum relamping rated wattage of 15
151	watts per socket, as listed on a permanent label in accordance with Underwriters Laboratories
152	(UL) 153.
153	(11) Portable electric spas shall not have a standby power greater than $5(V^{2/3})$ Watts where V=the total
154 155	volume in gallons, as measured in accordance with the test method for portable electric spas contained in section 1604, title 20, California code of regulations.
156	(12) Televisions shall use no more than $(0.20*screen area (in^2) + 32)$ watts in on mode and no more than
157	one (1) watt in standby-passive mode. On and after January 1, 2013, televisions shall use no more than
158	$(0.12*screen area (in^2) + 25)$ watts in on mode and no more than one (1) watt in standby passive mode.
159	Television on mode energy use shall be measured according to International
160	Electrotechnical Commission (IEC) 62087, Edition 2.0 "Methods of Measurement for Power
161	Consumption of Audio, Video, and Related Equipment," as applied by the U.S. Environmental Protection
162	Agency in the "Energy Star Program Requirements for Televisions, Version 3.0" Television standby-
163	passive mode energy use shall be measured according to international electrotechnical commission (IEC)
164	62301, Edition 1.0: household electrical appliances -measurement of standby power," as applied by the
165 166	U.S. environmental protection agency in the "Energy Star Program Requirements for Televisions, Version 3.0"
167	(D) Said section 5 of said chapter 25B of the general laws, as so appearing, is hereby further amended by
168	inserting, in line 75, after the figure "2008" the following: -

"On or after January 1, 2011, no new bottle-type water dispenser, commercial hot food holding cabinet,
 compact audio product, digital versatile disc player or digital versatile disc recorder, portable electric spa,
 portable luminaire or television may be sold or offered for sale 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 5."