

General Assembly

January Session, 2025

Raised Bill No. 1352

LCO No. **4862**

Referred to Committee on ENERGY AND TECHNOLOGY

Introduced by: (ET)

AN ACT PROMOTING ENERGY EFFICIENCY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- Section 1. Section 16a-48 of the general statutes is repealed and the
 following is substituted in lieu thereof (*Effective October 1, 2025*):
- 3 (a) As used in this section:
- 4 (1) "Department" means the Department of Energy and 5 Environmental Protection;
- 6 (2) "Commissioner" means the Commissioner of Energy and
 7 Environmental Protection;
- 8 (3) "State Building Code" means the building code adopted pursuant
 9 to section 29-252;

10 [(2)] (4) "Fluorescent lamp ballast" or "ballast" means a device 11 designed to operate fluorescent lamps by providing a starting voltage 12 and current and limiting the current during normal operation, but does 13 not include such devices that have a dimming capability or are intended 14 for use in ambient temperatures of zero degrees Fahrenheit or less or

have a power factor of less than sixty-one hundredths for a singleF40T12 lamp;

[(3)] (5) "F40T12 lamp" means a tubular fluorescent lamp that is a
nominal forty-watt lamp, with a forty-eight-inch tube length and one
and one-half inches in diameter;

[(4) "F96T12 lamp" means a tubular fluorescent lamp that is a nominal
seventy-five-watt lamp with a ninety-six-inch tube length and one and
one-half inches in diameter;

(5) "Luminaire" means a complete lighting unit consisting of a
fluorescent lamp, or lamps, together with parts designed to distribute
the light, to position and protect such lamps, and to connect such lamps
to the power supply;

(6) "New product" means a product that is sold, offered for sale, or
installed for the first time and specifically includes floor models and
demonstration units;

30 (7) "Commissioner" means the Commissioner of Energy and31 Environmental Protection;

32 (8) "State Building Code" means the building code adopted pursuant
33 to section 29-252;]

[(9)] (6) "Torchiere lighting fixture" means a portable electric lighting
fixture with a reflector bowl giving light directed upward [so as] to give
indirect illumination;

37 [(10) "Unit heater" means a self-contained, vented fan-type 38 commercial space heater that uses natural gas or propane and that is 39 designed to be installed without ducts within the heated space. "Unit 40 heater" does not include a product regulated by federal standards 41 pursuant to 42 USC 6291, as amended from time to time, a product that 42 is a direct vent, forced flue heater with a sealed combustion burner, or 43 any oil fired heating system;

(11) "Transformer" means a device consisting of two or more coils of
insulated wire that transfers alternating current by electromagnetic
induction from one coil to another in order to change the original
voltage or current value;

48 (12) "Low-voltage dry-type transformer" means a transformer that: 49 (A) Has an input voltage of six hundred volts or less; (B) is between 50 fourteen kilovolt-amperes and two thousand five hundred one kilovolt-51 amperes in size; (C) is air-cooled; and (D) does not use oil as a coolant. 52 "Low-voltage dry-type transformer" does not include such transformers 53 excluded from the low-voltage dry-type distribution transformer 54 definition contained in the California Code of Regulations, Title 20: 55 Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations;

(13) "Pass-through cabinet" means a refrigerator or freezer with
hinged or sliding doors on both the front and rear of the refrigerator or
freezer;

(14) "Reach-in cabinet" means a refrigerator, freezer, or combinationthereof, with hinged or sliding doors or lids;

(15) "Roll-in" or "roll-through cabinet" means a refrigerator or freezer
with hinged or sliding doors that allows wheeled racks of product to be
rolled into or through the refrigerator or freezer;

(16) "Commercial refrigerators and freezers" means reach-in cabinets,
pass-through cabinets, roll-in cabinets and roll-through cabinets that
have less than eighty-five feet of capacity, which are designed for the
refrigerated or frozen storage of food and food products;

(17) "Traffic signal module" means a standard eight-inch or twelveinch round traffic signal indicator consisting of a light source, lens and
all parts necessary for operation and communication of movement
messages to drivers through red, amber and green colors;

(18) "Illuminated exit sign" means an internally illuminated sign that
is designed to be permanently fixed in place and used to identify an exit
by means of a light source that illuminates the sign or letters from within
where the background of the exit sign is not transparent;

- (19) "Packaged air-conditioning equipment" means air-conditioning
 equipment that is built as a package and shipped as a whole to end-user
 sites;
- (20) "Large packaged air-conditioning equipment" means air-cooled
 packaged air-conditioning equipment having not less than two hundred
 forty thousand BTUs per hour of capacity;

82 (21) "Commercial clothes washer" means a soft mount front-loading 83 or soft mount top-loading clothes washer that is designed for use in (A) 84 applications where the occupants of more than one household will be 85 using it, such as in multifamily housing common areas and coin 86 laundries; or (B) other commercial applications, if the clothes container 87 compartment is no greater than three and one-half cubic feet for 88 horizontal-axis clothes washers or no greater than four cubic feet for 89 vertical-axis clothes washers;

90 (22) "Energy efficiency ratio" means a measure of the relative 91 efficiency of a heating or cooling appliance that is equal to the unit's 92 output in BTUs per hour divided by its consumption of energy, 93 measured in watts;

94 (23) "Electricity ratio" means the ratio of furnace electricity use to total95 furnace energy use;

96 (24) "Boiler" means a space heater that is a self-contained appliance
97 for supplying steam or hot water primarily intended for space-heating.
98 "Boiler" does not include hot water supply boilers;

99 (25) "Central furnace" means a self-contained space heater designed100 to supply heated air through ducts of more than ten inches in length;

101 (26) "Residential furnace or boiler" means a product that utilizes only 102 single-phase electric current or single-phase electric current or DC 103 current in conjunction with natural gas, propane or home heating oil 104 and that (A) is designed to be the principal heating source for the living 105 space of a residence; (B) is not contained within the same cabinet as a 106 central air conditioner with a rated cooling capacity of not less than 107 sixty-five thousand BTUs per hour; (C) is an electric central furnace, 108 electric boiler, forced-air central furnace, gravity central furnace or low 109 pressure steam or hot water boiler; and (D) has a heat input rate of less 110 than three hundred thousand BTUs per hour for an electric boiler and 111 low pressure steam or hot water boiler and less than two hundred 112 twenty-five thousand BTUs per hour for a forced-air central furnace, 113 gravity central furnace and electric central furnace;

(27) "Furnace air handler" means the section of the furnace that
includes the fan, blower and housing, generally upstream of the burners
and heat exchanger. The furnace air handler may include a filter and a
cooling coil;]

[(28)] (7) "High-intensity discharge lamp" means a lamp in which light is produced by the passage of an electric current through a vapor or gas, 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;

[(29)] (8) "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;

[(30)] (9) "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;

130 [(31)] (<u>10)</u> "Probe start metal halide ballast" means a ballast used to 131 operate metal halide lamps that does not contain an ignitor and that 132 instead starts lamps by using a third starting electrode probe in the arc133 tube;

134 [(32) "Single voltage external AC to DC power supply" means a 135 device that (A) is designed to convert line voltage AC input into lower 136 voltage DC output; (B) is able to convert to only one DC output voltage 137 at a time; (C) is sold with, or intended to be used with, a separate end 138 use product that constitutes the primary power load; (D) is contained 139 within a separate physical enclosure from the end use product; (E) is 140 connected to the end use product in a removable or hard-wired male 141 and female electrical connection, cable, cord or other wiring; (F) does 142 not have batteries or battery packs, including those that are removable 143 or that physically attach directly to the power supply unit; (G) does not 144 have a battery chemistry or type selector switch and indicator light or a 145 battery chemistry or type selector switch and a state of charge meter; 146 and (H) has a nameplate output power less than or equal to two hundred fifty watts;] 147

148 [(33)] (11) "State regulated incandescent reflector lamp" means a lamp 149 that is not colored or designed for rough or vibration service 150 applications, has an inner reflective coating on the outer bulb to direct 151 the light, has an E26 medium screw base, a rated voltage or voltage 152 range that lies at least partially within one hundred fifteen to one 153 hundred thirty volts, and that falls into one of the following categories: 154 (A) A bulged reflector, [or] elliptical reflector or a blown PAR bulb shape 155 [and] that has a diameter that equals or exceeds two and one-quarter 156 inches, or (B) a reflector, parabolic aluminized reflector, bulged reflector 157 or similar bulb shape [and] that has a diameter of two and one-quarter 158 to two and three-quarters inches. "State regulated incandescent reflector 159 lamp" does not include ER30, BR30, BR40 and ER40 lamps of not more 160 than fifty watts, BR30, BR40 and ER40 lamps of sixty-five watts and R20 161 lamps of not more than forty-five watts;

162 [(34) "Bottle-type water dispenser" means a water dispenser that uses163 a bottle or reservoir as the source of potable water;]

164 [(35)] (12) "Commercial hot food holding cabinet" means a heated, 165 fully-enclosed compartment with one or more solid or [partial glass] 166 <u>transparent</u> doors [that is] designed to maintain the temperature of hot 167 food that has been cooked [in] <u>using</u> a separate appliance. "Commercial 168 hot food holding cabinet" does not include heated glass merchandizing 169 cabinets, drawer warmers or cook-and-hold appliances;

[(36) "Pool heater" means an appliance designed for heating
nonpotable water contained at atmospheric pressure for swimming
pools, spas, hot tubs and similar applications, including natural gas,
heat pump, oil and electric resistance pool heaters;]

[(37)] (13) "Portable electric spa" means a factory-built electric spa or
hot tub supplied with equipment for heating and circulating water;

176 [(38) "Residential pool pump" means a pump used to circulate and177 filter pool water to maintain clarity and sanitation;

178 (39) "Walk-in refrigerator" means a space refrigerated to 179 temperatures at or above thirty-two degrees Fahrenheit that has a total 180 chilled storage area of less than three thousand square feet, can be 181 walked into and is designed for the refrigerated storage of food and food 182 "Walk-in refrigerator" does not include refrigerated products. 183 warehouses and products designed and marketed exclusively for 184 medical, scientific or research purposes;

(40) "Walk-in freezer" means a space refrigerated to temperatures
below thirty-two degrees Fahrenheit that has a total chilled storage area
of less than three thousand square feet, can be walked into and is
designed for the frozen storage of food and food products. "Walk-in
freezer" does not include refrigerated warehouses and products
designed and marketed exclusively for medical, scientific or research
purposes;

(41) "Central air conditioner" means a central air conditioning modelthat consists of one or more factory-made assemblies, which normally

include an evaporator or cooling coil, compressor and condenser.
Central air conditioning models may provide the function of air cooling,
air cleaning, dehumidifying or humidifying;]

[(42)] (14) "Combination television" means a system in which a
television or television monitor and an additional device or devices,
including, but not limited to, a digital versatile disc player or video
cassette recorder, are combined into a single unit in which the additional
devices are included in the television casing;

202 [(43) "Compact audio player" means an integrated audio system 203 encased in a single housing that includes an amplifier and radio tuner 204 with attached or separable speakers and can reproduce audio from one 205 or more of the following media: Magnetic tape, compact disc, digital 206 versatile disc or flash memory. "Compact audio player" does not mean 207a product that can be independently powered by internal batteries, has 208 a powered external satellite antenna or can provide a video output 209 signal;]

[(44)] (<u>15</u>) "Component television" means a television composed of two or more separate components, such as a separate display device and tuner, marketed and sold as a television under one model or system designation, which may have more than one power cord;

[(45)] (<u>16</u>) "Computer monitor" [means an analog or digital device
designed primarily for the display of computer generated signals and
that is not marketed for use as a television] <u>has the same meaning as</u>
provided in section 1602 of the California Code of Regulations, Title 20,
<u>Division 2, Chapter 4, Article 4;</u>

[(46)] (<u>17</u>) "Digital versatile disc" means a laser-encoded plastic
medium capable of storing a large amount of digital audio, video and
computer data;

222 [(47)] (18) "Digital versatile disc player" means a commercially 223 available electronic product encased in a single housing that includes an integral power supply and for which the sole purpose is the decodingof digitized video signals;

[(48) "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 the production or recording of digitized audio, video and computer signals on a digital versatile disc. "Digital versatile disc recorder" does not include a model that has an electronic programming guide function;]

[(49)] (19) "Television" means an analog or digital device designed primarily for the display and reception of a terrestrial, satellite, cable, internet protocol television or other broadcast or recorded transmission of analog or digital video and audio signals. "Television" includes combination televisions, television monitors, component televisions and any unit that is marketed to consumers as a television but does not include a computer monitor;

[(50)] (20) "Television monitor" means a television that does not have
an internal tuner/receiver or playback device;

(21) "Cold temperature fluorescent lamp" means a fluorescent lamp
that is not a compact fluorescent lamp that: (A) Is specifically designed
to start at negative twenty degrees Fahrenheit when used with a ballast
that conforms to the requirements of ANSI C78.81 and ANSI C78.901;
and (B) is expressly designated as a cold temperature lamp both in
markings on the lamp and in marketing materials, including, but not
limited to, catalogs, sales literature and promotional material;

(22) "Computer" has the same meaning as provided in section 1602 of
the California Code of Regulations, Title 20, Division 2, Chapter 4,
Article 4;

251 (23) "Commercial dishwasher" means a machine designed to clean 252 and sanitize plates, pots, pans, glasses, cups, bowls, utensils and trays 253 <u>by applying sprays of detergent solution, with or without blasting</u>
 254 <u>media granules, and a sanitizing rinse;</u>

(24) "Commercial fryer" means an appliance, including a cooking 255 256 vessel, in which oil is placed to such a depth that the cooking food is 257 essentially supported by displacement of the cooking fluid rather than 258 by the bottom of the vessel. Heat is delivered to the cooking fluid by 259 means of an immersed electric element or band-wrapped vessel, for an 260 electric fryer, or by heat transfer from gas burners through either the 261 walls of the fryer or through tubes passing through the cooking fluid, 262 for a gas fryer;

263 (25) "Commercial oven" means a chamber designed for heating,
 264 roasting or baking food by conduction, convection, radiation or
 265 electromagnetic energy;

- 266 (26) "Commercial steam cooker" or "compartment steamer" means a
 267 device with one or more food-steaming compartments in which the
 268 energy in the steam is transferred to the food by direct contact,
 269 including, but not limited to, the following models: Countertop models,
 270 wall-mounted models and floor models mounted on a stand, pedestal
 271 or cabinet-style base:
- 271 <u>or cabinet-style base;</u>

272 (27) "High color rendering index fluorescent lamp" means a
 273 fluorescent lamp with a color rendering index of eighty-seven or greater
 274 the time to be a filleness of the seven of

274 <u>that is not a compact fluorescent lamp;</u>

(28) "Impact-resistant fluorescent lamp" means a fluorescent lamp 275 that is not a compact fluorescent lamp that: (A) Has a coating or 276 277 equivalent technology that is in compliance with NSF/ANSI 51 and is 278 designed to contain the glass if the glass envelope of the lamp is broken; 279 and (B) is designated and marketed for the intended application, with the designation on the lamp packaging and marketing materials that 280 identify the lamp as being impact-resistant, shatter-resistant, shatter-281 proof or shatter-protected; 282

283	(29) "Faucet" means a lavatory faucet, kitchen faucet, metering faucet,			
284	public lavatory faucet or replacement aerator for a lavatory, public			
285	lavatory or kitchen faucet;			
286	(30) "Lavatory faucet" means a plumbing fitting designed for			
287	<u>discharge into a lavatory;</u>			
288	(31) "Public lavatory faucet" means a fitting intended to be installed			
289	in nonresidential bathrooms that are exposed to walk-in traffic;			
290	(32) "Metering faucet" means a fitting that, when turned on, will			
291	gradually shut itself off over a period of several seconds;			
292	(33) "Residential ventilating fan" means a ceiling, wall-mounted or			
293	remotely mounted in-line fan designed to be used in a bathroom or			
294	utility room, whose purpose is to move air from inside the building to			
295	the outdoors;			
296	<u>(34)</u> "Showerhead" means a device through which water is			
297	discharged for a shower bath and includes a hand-held showerhead but			
297 298	<u>discharged for a shower bath and includes a hand-held showerhead but</u> <u>does not include a safety shower showerhead;</u>			
298	does not include a safety shower showerhead;			
298 299	does not include a safety shower showerhead; (35) "Hand-held showerhead" means a showerhead that can be held			
298 299 300	does not include a safety shower showerhead; (35) "Hand-held showerhead" means a showerhead that can be held or fixed in place for the purpose of spraying water onto a bather and			
298 299	does not include a safety shower showerhead; (35) "Hand-held showerhead" means a showerhead that can be held			
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298 299 300 301	does not include a safety shower showerhead; (35) "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;			
 298 299 300 301 302 303 	does not include a safety shower showerhead; (35) "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; (36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water;			
298 299 300 301 302 303 304	 does not include a safety shower showerhead; (35) "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; (36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water; (37) "Hot and cold unit water cooler" means a water cooler that 			
 298 299 300 301 302 303 	does not include a safety shower showerhead; (35) "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; (36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water;			
298 299 300 301 302 303 304	 does not include a safety shower showerhead; (35) "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; (36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water; (37) "Hot and cold unit water cooler" means a water cooler that 			
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298 299 300 301 302 303 304 305 306 307	does not include a safety shower showerhead;(35) "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;(36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water;(37) "Hot and cold unit water cooler" means a water cooler that dispenses both hot and cold water and may dispense room-temperature water;(38) "Cook and cold unit water cooler" means a water cooler that			
 298 299 300 301 302 303 304 305 306 	does not include a safety shower showerhead;(35) "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;(36) "Water cooler" means a freestanding device that consumes energy to cool or heat potable water;(37) "Hot and cold unit water cooler" means a water cooler that dispenses both hot and cold water and may dispense room-temperature water;			

309	(39) "Storage-type hot and cold unit water cooler" means a water			
310	cooler where thermally conditioned water is stored in a tank in the water			
311	cooler and is available instantaneously, including, but not limited to,			
312	point-of-use, dry storage compartment and bottled water coolers;			
313	(40) "On-demand hot and cold water cooler" means a water cooler			
314	that heats water as it is requested and typically takes a few minutes to			
315	<u>deliver;</u>			
316	(41) "Gas fireplace" means a decorative gas fireplace or a heating gas			
317	<u>fireplace;</u>			
517	<u>meprace</u>			
318	(42) "Decorative gas fireplace" means a vented fireplace, including			
319	appliances that are freestanding, recessed or zero clearance, or a gas			
320	fireplace insert, that is fueled by natural gas or propane, is marked for			
321	decorative use only and is not equipped with a thermostat or intended			
322	for use as a heater;			
323	(43) "Heating gas fireplace" means a vented fireplace, including			
324	appliances that are freestanding, recessed or zero clearance, or a gas			
325	fireplace insert, that is fueled by natural gas or propane and is not a			
326	decorative fireplace; and			
327	(44) "Replacement aerator" means an aerator sold as a replacement,			
328	separate from the faucet to which is intended to be attached.			
329	[(b) The provisions of this section apply to the testing, certification			
330	and enforcement of efficiency standards for the following types of new			
331	products sold, offered for sale or installed in the state: (1) Commercial			
332	clothes washers; (2) commercial refrigerators and freezers; (3)			
333	illuminated exit signs; (4) large packaged air-conditioning equipment;			
334	(5) low voltage dry-type distribution transformers; (6) torchiere lighting			
335	fixtures; (7) traffic signal modules; (8) unit heaters; (9) residential			
336	furnaces and boilers; (10) residential pool pumps; (11) metal halide lamp			
337	fixtures; (12) single voltage external AC to DC power supplies; (13) state			
338	regulated incandescent reflector lamps; (14) bottle-type water			

dispensers; (15) commercial hot food holding cabinets; (16) portable
electric spas; (17) walk-in refrigerators and walk-in freezers; (18) pool
heaters; (19) compact audio players; (20) televisions; (21) digital versatile
disc players; (22) digital versatile disc recorders; and (23) any other
products as may be designated by the commissioner in accordance with
subdivision (3) of subsection (d) of this section.]

[(c)] (b) The provisions of this section do not apply to (1) new products manufactured in the state and sold outside the state, (2) new products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state, (3) products installed in mobile manufactured homes at the time of construction, or (4) products designed expressly for installation and use in recreational vehicles.

352 [(d) (1) The Commissioner of Energy and Environmental Protection 353 shall adopt regulations, in accordance with the provisions of chapter 54, 354 to implement the provisions of this section and to establish minimum 355 energy efficiency standards for the types of new products set forth in 356 subsection (b) of this section. The regulations shall provide for the 357 following minimum energy efficiency standards:

(A) Commercial clothes washers shall meet the requirements shown
in Table P-3 of section 1605.3 of the California Code of Regulations, Title
20: Division 2, Chapter 4, Article 4;

361 (B) Commercial refrigerators and freezers shall meet the August 1,
2004, requirements shown in Table A-6 of said California regulation;

363 (C) Illuminated exit signs shall meet the version 2.0 product
364 specification of the "Energy Star Program Requirements for Exit Signs"
365 developed by the United States Environmental Protection Agency;

(D) Large packaged air-conditioning equipment having not more
than seven hundred sixty thousand BTUs per hour of capacity shall
meet a minimum energy efficiency ratio of 10.0 for units using both

369 electric heat and air conditioning or units solely using electric air
370 conditioning, and 9.8 for units using both natural gas heat and electric
371 air conditioning;

(E) Large packaged air-conditioning equipment having not less than seven hundred sixty-one thousand BTUs per hour of capacity shall meet a minimum energy efficiency ratio of 9.7 for units using both electric heat and air conditioning or units solely using electric air conditioning, and 9.5 for units using both natural gas heat and electric air conditioning;

378 (F) Low voltage dry-type distribution transformers shall meet or
379 exceed the energy efficiency values shown in Table 4-2 of the National
380 Electrical Manufacturers Association Standard TP-1-2002;]

(c) (1) Except as provided in subdivision (2) of this subsection or
 subdivision (1) of subsection (d) of this section, on and after October 1,
 2025, the following minimum energy-efficiency standards and any test
 methods associated with such standards shall apply to new products:

[(G)] (A) Torchiere lighting fixtures shall not consume more than one
hundred ninety watts and shall not be capable of operating with lamps
that total more than one hundred ninety watts;

388 [(H) Traffic signal modules shall meet the product specification of the 389 "Energy Star Program Requirements for Traffic Signals" developed by 390 the United States Environmental Protection Agency that took effect in 391 February, 2001, except where the department, in consultation with the 392 Commissioner of Transportation, determines that such specification 393 would compromise safe signal operation;

(I) Unit heaters shall not have pilot lights and shall have either powerventing or an automatic flue damper;

(J) On or after January 1, 2009, residential furnaces and boilerspurchased by the state shall meet or exceed the following annual fuel

398 utilization efficiency: (i) For gas and propane furnaces, ninety per cent 399 annual fuel utilization efficiency, (ii) for oil furnaces, eighty-three per 400 cent annual fuel utilization efficiency, (iii) for gas and propane hot water 401 boilers, eighty-four per cent annual fuel utilization efficiency, (iv) for oilfired hot water boilers, eighty-four per cent annual fuel utilization 402 403 efficiency, (v) for gas and propane steam boilers, eighty-two per cent 404 annual fuel utilization efficiency, (vi) for oil-fired steam boilers, eighty-405 two per cent annual fuel utilization efficiency, and (vii) for furnaces with 406 furnace air handlers, an electricity ratio of not more than 2.0, except air 407 handlers for oil furnaces with a capacity of less than ninety-four 408 thousand BTUs per hour shall have an electricity ratio of 2.3 or less;]

[(K)] (B) [On or after January 1, 2010, metal] Metal halide lamp
fixtures designed to be operated with lamps rated greater than or equal
to one hundred fifty watts but less than or equal to five hundred watts
shall not contain a probe-start metal halide lamp ballast;

413 [(L) Single-voltage external AC to DC power supplies manufactured 414 on or after January 1, 2008, shall meet the energy efficiency standards of table U-1 of section 1605.3 of the January 2006 California Code of 415 416 Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance 417 Efficiency Regulations. This standard applies to single voltage AC to DC 418 power supplies that are sold individually and to those that are sold as a 419 component of or in conjunction with another product. This standard 420 shall not apply to single-voltage external AC to DC power supplies sold 421 with products subject to certification by the United States Food and 422 Drug Administration. A single-voltage external AC to DC power supply 423 that is made available by a manufacturer directly to a consumer or to a 424 service or repair facility after and separate from the original sale of the 425 product requiring the power supply as a service part or spare part shall 426 not be required to meet the standards in said table U-1 until five years 427 after the effective dates indicated in the table;]

428 [(M)] (C) [On or after January 1, 2009, state] <u>State</u> regulated 429 incandescent reflector lamps shall be manufactured to meet the 430 minimum average lamp efficacy requirements for federally regulated

- 431 incandescent reflector lamps contained in [42 USC 6295(i)(1)(A)] <u>42 USC</u>
- 432 <u>6295(i)(1)(B)</u>. Each lamp shall indicate the date of manufacture;

[(N) On or after January 1, 2009, bottle-type water dispensers, commercial hot food holding cabinets, portable electric spas, walk-in refrigerators and walk-in freezers shall meet the efficiency requirements of section 1605.3 of the January 2006 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations. On or after January 1, 2010, residential pool pumps shall meet said efficiency requirements;

(O) On or after January 1, 2009, pool heaters shall meet the efficiency
requirements of sections 1605.1 and 1605.3 of the January 2006
California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4:
Appliance Efficiency Regulations;

444 (P) By January 1, 2014, compact audio players, digital versatile disc 445 players and digital versatile disc recorders shall meet the requirements 446 shown in Table V-1 of Section 1605.3 of the November 2009 amendments 447 to the California Code of Regulations, Title 20, Division 2, Chapter 4, 448 Article 4, unless the commissioner, in accordance with subparagraph (B) 449 of subdivision (3) of this subsection, determines that such standards are 450 unwarranted and may accept, reject or modify according to 451 subparagraph (A) of subdivision (3) of this subsection;]

452 [(Q)] (D) [On or after January 1, 2014, televisions] Televisions 453 manufactured on or after July 1, 2011, shall meet the requirements 454 shown in Table V-2 of Section 1605.3 of the November 2009 amendments 455 to the California Code of Regulations, Title 20, Division 2, Chapter 4, 456 Article 4; [, unless the commissioner, in accordance with subparagraph 457 (B) of subdivision (3) of this subsection, determines that such standards 458 are unwarranted and may accept, reject or modify according to 459 subparagraph (A) of subdivision (3) of this subsection;] and

460 [(R)] (E) In addition to the requirements of subparagraph [(Q)] (D) of

461 this subdivision, televisions manufactured on or after January 1, 2014, 462 shall meet the efficiency requirements of Sections 1605.3(v)(3)(A), 1605.3(v)(3)(B) and 1605.3(v)(3)(C) of the November 2009 amendments 463 464 to the California Code of Regulations, Title 20, Division 2, Chapter 4, 465 Article 4. [, unless the commissioner, in accordance with subparagraph 466 (B) of subdivision (3) of this subsection, determines that such standards 467 are unwarranted and may accept, reject or modify according to 468 subparagraph (A) of subdivision (3) of this subsection.] 469 (2) On or after January 1, 2026, except as provided in subdivision (1) 470 of subsection (d) of this section, the following minimum energy-471 efficiency standards and test methods associated with such standards 472 shall apply to new products sold or leased, offered for sale or lease or 473 installed in the state: 474 (A) Commercial dishwashers included in the scope of the version 2.0 475 product specification of the "Energy Star Program Requirements for 476 Commercial Dishwashers" developed by the United States

476 <u>Commercial Distivalities</u> developed by the United States
 477 <u>Environmental Protection Agency shall meet the qualification criteria of</u>
 478 such specification;

(B) Commercial fryers included in the scope of the version 2.0
product specification of the "Energy Star Program Requirements for
<u>Commercial Fryers</u>" developed by the United States Environmental
Protection Agency shall meet the qualification criteria of such
specification;

484 (C) Commercial hot food holding cabinets shall meet the version 2.0
 485 product specification of the "Energy Star Program Requirements for
 486 Commercial Hot Food Holding Cabinets" developed by the United
 487 States Environmental Protection Agency;

(D) Commercial ovens included in the scope of the version 2.2
 product specification of the "Energy Star Program Requirements for
 Commercial Ovens" developed by the United States Environmental

491 <u>Protection Agency shall meet the qualification criteria of such</u>
492 <u>specification;</u>

493 (E) Commercial steam cookers shall meet the version 1.2 product

494 <u>specification of the "Energy Star Program Requirements for Commercial</u>

495 Steam Cookers" developed by the United States Environmental

496 <u>Protection Agency;</u>

497 (F) Computers and computer monitors shall meet the requirements of subsection (v) of section 1605.3 of the California Code of Regulations, 498 Title 20, Division 2, Chapter 4, Article 4, and compliance with such 499 requirements shall be measured in accordance with the test methods 500 501 prescribed in subsection (v) of section 1604 of said California regulation. 502 Any regulations adopted by the commissioner pursuant to this section 503 shall define the terms "computer" and "computer monitor" to have the 504 same meanings provided in subsection (v) of section 1602 of the 505 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, 506 and subsection (a) of this section, provided the commissioner may amend such regulations to provide that the definitions of the terms 507 "computer" and "computer monitor" and the minimum efficiency 508 509 standards for computers and computer monitors conform to subsequently adopted versions of subsection (v) of section 1605.3 of the 510 511 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, 512 and subsection (v) of section 1602 of the California Code of Regulations, 513 Title 20, Division 2, Chapter 4, Article 4, as applicable;

514 (G) Faucets, except metering faucets, shall meet the standards in this subparagraph when tested in accordance with the "Uniform Test 515 516 Method for Measuring the Water Consumption of Faucets and Showerheads" set forth in 10 CFR 430, Subpart B, Appendix S. Lavatory 517 518 faucets and their replacement aerators shall not exceed a maximum flow 519 rate of 1.5 gallons per minute at sixty pounds per square inch. Kitchen 520 faucets and their replacement aerators shall not exceed a maximum flow 521 rate of 1.8 gallons per minute at sixty pounds per square inch, with 522 optional temporary flow of 2.2 gallons per minute, provided they 523 <u>default to a maximum flow rate of 1.8 gallons per minute at sixty pounds</u>

- 524 per square inch after each use. Public lavatory faucets and their
- 525 replacement aerators shall not exceed a maximum flow rate of 0.5
- 526 <u>gallons per minute at sixty pounds per square inch;</u>
- 527 (H) Gas fireplaces shall comply with the following requirements:
- 528 (i) Gas fireplaces shall be capable of automatically extinguishing any
- 529 pilot flame when the main gas burner flame is extinguished or shall
- 530 prevent any ignition source for the main gas burner flame from
- 531 <u>operating continuously for more than seven days from last use of the</u>
- 532 <u>main burner; and</u>
- (ii) Heating gas fireplaces shall have a fireplace efficiency greater than
 or equal to fifty per cent when tested in accordance with Canadian
 Standards Association P.4.1-15, "Testing Method for Measuring Annual
 Fireplace Efficiency", as amended from time to time;
- (I) High-color rendering index, cold temperature and impactresistant fluorescent lamps shall meet the minimum efficacy
 requirements contained in 10 CFR 430.32(n)(4), as in effect on January 1,
 2021, as measured in accordance with the "Uniform Test Method for
 Measuring Average Lamp Efficacy (LE), Color Rendering Index (CRI),
 and Correlated Color Temperature (CCT) of Electric Lamps" set forth in
 10 CFR 430, Subpart B, Appendix R, as in effect on January 1, 2022;
- 544 (J) Portable electric spas shall meet the requirements of
 545 <u>ANSI/APSP/ICC-14-2019</u>, "American National Standard for Portable
 546 Electric Spa Energy Efficiency";
- 547 (K) In-line residential ventilating fans shall have a fan motor efficacy
 548 of not less than 2.8 cubic feet per minute per watt. All other residential
 549 ventilating fans shall have a fan motor efficacy of not less than 1.4 cubic
 550 feet per minute per watt for airflows less than ninety cubic feet per
 551 minute and not less than 2.8 cubic feet per minute per watt for other

552 <u>airflows when tested in accordance with Home Ventilation Institute</u>
553 <u>Publication 916, "HVI Airflow Test Procedure";</u>

(L) Showerheads shall not exceed a maximum flow rate of 2.0 gallons
per minute at eighty pounds per square inch when tested in accordance
with the "Uniform Test Method for Measuring the Water Consumption
of Faucets and Showerheads" set forth in 10 CFR 430, Subpart B,
Appendix S; and

559 (M) Water coolers included in the scope of the version 2.0 product 560 specification of the "Energy Star Program Requirements for Water Coolers" developed by the United States Environmental Protection 561 562 Agency shall have an on mode with no water draw and energy 563 consumption less than or equal to the following values as measured in 564 accordance with the test requirements of such specification: (i) 0.16 565 kilowatt-hour per day for cold-only water coolers and cook and cold 566 unit water coolers; (ii) 0.87 of one kilowatt-hour per day for storage-type 567 hot and cold unit water coolers; and (iii) 0.18 of one kilowatt-hour per day for on demand hot and cold unit water coolers. 568

569 [(2) Such] (d) (1) Notwithstanding the provisions of section 29-252, 570 such efficiency standards, where in conflict with the State Building 571 Code, shall take precedence over the standards contained in the State 572 Building Code. Not later than [July 1, 2007] October 1, 2026, and 573 biennially thereafter, the Commissioner of Energy and Environmental 574 Protection shall review and increase the level of such efficiency 575 standards by adopting regulations in accordance with the provisions of 576 chapter 54 upon a determination that increased efficiency standards 577 would serve to promote energy conservation in the state and would be 578 cost-effective for consumers who purchase and use such new products, 579 provided no such increased efficiency standards shall become effective 580 [within] not earlier than one year [following] after the adoption of any 581 amended regulations providing for such increased efficiency standards.

582 [(3) (A)] (2) If any of the efficiency standards issued or approved for

583 publication by the Office of the United States Secretary of Energy as of 584 December 31, 2024, pursuant to the Energy Policy and Conservation Act, 10 Code of Federal Regulation Parts 430-431, are withdrawn, 585 repealed or otherwise voided, new products shall meet or exceed the 586 587 minimum efficiency level permitted for products previously subject to federal efficiency standards as of said date. This subdivision shall not 588 apply to any federal efficiency standard set aside by a court upon the 589 590 petition of a person who will be adversely affected, as provided in 591 section 6306(b) of title 42 of the United States Code.

592 (3) The Commissioner of Energy and Environmental Protection 593 [shall] may adopt regulations, or amend regulations previously adopted 594 pursuant to this section, in accordance with the provisions of chapter 54, to designate additional products to be subject to the provisions of this 595 596 section and to establish efficiency or greenhouse gas emissions 597 standards for such products upon a determination that such [efficiency] 598 standards: [(i) would] (A) Would (i) serve to promote energy 599 conservation in the state, (ii) [would] lower greenhouse gas emissions, and (iii) be cost-effective for consumers who purchase and use such new 600 601 products; [,] and [(iii)] (B) would not impose an unreasonable burden on [Connecticut] businesses in the state. Such standards may include, but 602 603 need not be limited to, requirements concerning the ability of a product 604 to interface with a local electric utility's demand response program.

605 (4) The Commissioner of Energy and Environmental Protection may 606 adopt regulations, in accordance with the provisions of chapter 54, to 607 designate additional products that shall be subject to the provisions of this section for any product that energy standards were issued for or 608 609 approved for publication on or before January 1, 2018, pursuant to the 610 Energy Policy and Conservation Act, 42 USC 6201 et seq., by the United 611 States Department of Energy and that were subsequently withdrawn, repealed or otherwise voided. For such products, the minimum energy-612 efficiency level permitted shall be such previously applicable federal 613 energy conservation standards, as such standards existed on January 1, 614 615 2018. This subdivision shall not apply to any federal energy 616 conservation standard set aside by a court upon the petition of a person
617 who will be adversely affected, as provided in 42 USC 6306(b).

618 [(B) The Commissioner of Energy and Environmental Protection, in 619 consultation with the Multi-State Appliance Standards Collaborative, 620 shall identify additional appliance and equipment efficiency standards. 621 The commissioner shall review all California standards and may review 622 standards from other states in such collaborative. The commissioner 623 shall issue notice of such review in the Connecticut Law Journal, allow 624 for public comment and may hold a public hearing within six months of 625 adoption of an efficiency standard by a cooperative member state 626 regarding a product for which no equivalent Connecticut or federal 627 standard currently exists. The commissioner shall adopt regulations in 628 accordance with the provisions of chapter 54 adopting such efficiency 629 standard unless the commissioner makes a specific finding that such 630 standard does not meet the criteria in subparagraph (A) of this 631 subdivision.

632 (e) On or after July 1, 2006, except for commercial clothes washers, for 633 which the date shall be July 1, 2007, commercial refrigerators and 634 freezers, for which the date shall be July 1, 2008, and large packaged air-635 conditioning equipment, for which the date shall be July 1, 2009, no new 636 product of a type set forth in subsection (b) of this section or designated 637 by the Commissioner of Energy and Environmental Protection may be 638 sold, offered for sale, or installed in the state unless the energy efficiency 639 of the new product meets or exceeds the efficiency standards set forth 640 in such regulations adopted pursuant to subsection (d) of this section.

(f) The Commissioner of Energy and Environmental Protection shall
adopt procedures for testing the energy efficiency of the new products
set forth in subsection (b) of this section or designated by the
commissioner if such procedures are not provided for in the State
Building Code. The commissioner shall use United States Department
of Energy approved test methods, or in the absence of such test
methods, other appropriate nationally recognized test methods. The

648 manufacturers of such products shall cause samples of such products to

- 649 be tested in accordance with the test procedures adopted pursuant to
- this subsection or those specified in the State Building Code.

651 (g) Manufacturers of any new products set forth in subsection (b) of 652 this section for which (1) no efficiency standards exist in California, and 653 (2) the Commissioner of Energy and Environmental Protection adopts 654 efficiency standards, shall certify to the commissioner that such 655 products are in compliance with the provisions of this section, except 656 that certification is not required for single voltage external AC to DC 657 power supplies and walk-in refrigerators and walk-in freezers. All 658 single voltage external AC to DC power supplies shall be labeled as 659 described in the January 2006 California Code of Regulations, Title 20, Section 1607(9). The commissioner shall promulgate regulations 660 661 governing the certification of such products.]

662 (e) Manufacturers of products subject to the provisions of this section shall submit documentation, on a form prescribed by the commissioner, 663 concerning the certification of such products by the California Energy 664 Commission, the United States Environmental Protection Agency's 665 666 Water Sense program or a successor program that promotes water 667 efficiency, the federal Energy Star program or a successor program that 668 promotes energy efficiency, or a third-party certification body designated by the commissioner, as applicable, for compliance with this 669 section or compliance with identical standards adopted by another 670 671 jurisdiction. The commissioner shall publish an annual list of Jany 672 products set forth in subsection (b) of this section on the department's 673 Internet web site that designates which such products are certified in 674 California and which such products not certified in California have 675 demonstrated compliance with efficiency standards adopted by the 676 commissioner pursuant to subparagraph (B) of subdivision (3) of 677 subsection (d) of this section] such products.

(f) The commissioner may periodically inspect or cause inspections
 to be made, either in person or online, of distributors and retailers of

680 <u>new products subject to the provisions of this section. The commissioner</u>

- 681 <u>may establish a process to anonymously report potential violations of</u>
- 682 this section through the department's Internet web site.

[(h)] (g) The Attorney General may institute proceedings to enforce the provisions of this section. Any person who violates any provision of this section shall be subject to a civil penalty of not more than two hundred fifty dollars. Each violation of this section shall constitute a separate offense, and each day that such violation continues shall constitute a separate offense.

Sec. 2. Subsection (b) of section 21a-86a of the general statutes is
repealed and the following is substituted in lieu thereof (*Effective October*1, 2025):

692 (b) The maximum water use allowed in the regulations adopted 693 under subsection (a) of this section for [showerheads,] urinals [, faucets 694 and replacement aerators] manufactured or sold on or after October 1, 695 1990, shall be [as follows: For showerheads, 2.5 gallons per minute; for 696 urinals,] 1.0 gallons per flush. [; for bathroom sinks, lavatory and kitchen 697 faucets and replacement aerators, 2.5 gallons per minute, except that 698 lavatories in restrooms of public facilities shall be equipped with outlet 699 devices which limit the flow rate to a maximum of 0.5 gallons per 700 minute.] The maximum water use allowed in the regulations adopted 701 under subsection (a) of this section for tank-type toilets, flushometer-702 valve toilets, flushometer-tank toilets and electromechanical hydraulic 703 toilets manufactured or sold on or after January 1, 1992, shall be 1.6 704 gallons per flush, unless and until equivalent standards for similar types 705 of toilets are adopted by the American National Standards Institute, Inc.

Sec. 3. Section 21a-86b of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2025*):

No person may sell, offer for sale or install any new [showerhead,]
urinal [, faucet or replacement aerator on and after October 1, 1990,] or
any new tank-type toilet, flushometer-valve toilet, flushometer-tank

711 toilet or electromechanical hydraulic toilet on and after January 1, 1992, 712 unless such [showerhead,] urinal, [faucet, replacement aerator,] tank-713 type toilet, flushometer-valve toilet, flushometer-tank toilet or 714 electromechanical hydraulic toilet meets or exceeds the efficiency 715 standards set forth in regulations adopted by the Commissioner of 716 Consumer Protection pursuant to subsection (a) of section 21a-86a, or is 717 authorized under the regulations adopted by the commissioner 718 pursuant to subsection (d) of said section.

719 Sec. 4. (NEW) (Effective from passage) Not later than January 1, 2025, 720 the Commissioner of Energy and Environmental Protection, in 721 collaboration with the Commissioner of Consumer Protection, shall 722 study the current energy-efficiency standards set forth in section 16a-48 723 of the general statutes, as amended by this act, and the current water 724 efficiency standards set forth in section 21a-86a of the general statutes, 725 as amended by this act, to determine the need to update said standards 726 and the addition or deletion of products to or from the standards. In its 727 study, the commissioners shall evaluate topics including, but not 728 limited to (1) an identification of any standards that have been federally 729 preempted; (2) whether the current statutory structure dividing electric 730 and water-efficiency standards should be preserved or revised; and (3) 731 an identification of additional products to include within the standards, 732 the relevant standard for the additional products and an evaluation of 733 potential cost savings of the products for consumers. Not later than 734 January 1, 2026, the Commissioner of Environmental Protection, in 735 accordance with the provisions of section 11-4a of the general statutes, 736 shall submit a report on the results of the study to the joint standing 737 committees of the General Assembly having cognizance of matters 738 relating to the environment and consumer protection.

Sec. 5. (NEW) (*Effective from passage*) Not later than January 1, 2026,
the Public Utilities Regulatory Authority shall initiate an uncontested
proceeding regarding the future of natural gas use in the state in relation
to the provisions of section 22a-200a of the general statutes. Such
proceeding shall include, but need not be limited to, the consideration

744 and implementation of beneficial electrification measures such as 745 geothermal systems and heat pumps and the integration of natural gas 746 and electric company joint planning processes. Upon completion of such 747 uncontested proceeding, said authority shall submit a report, in 748 accordance with the provisions of section 11-4a of the general statutes, 749 to the joint standing committees of the General Assembly having 750 cognizance of matters relating to the environment and energy and 751 technology on any recommendations for legislative changes necessary 752 to implement the findings of such proceeding.

Sec. 6. (NEW) (*Effective from passage*) (a) For the purposes of this section:

"Utility-scale renewable thermal energy network" means 755 (1)distribution infrastructure (A) established for the purpose of providing 756 757 thermal energy for space heating and cooling, domestic hot water 758 production, refrigeration, thermal energy storage or commercial and 759 industrial processes requiring heating or cooling, and (B) implemented 760 through interconnections between one or more renewable thermal 761 energy resources, which may be owned by multiple parties, and 762 between these resources and heat pumps in multiple buildings owned 763 by multiple parties; and

(2) "Renewable thermal energy" means (A) ambient heating or
cooling provided, absorbed or stored by geothermal well boreholes or
other noncombusting, non-fossil-fuel-consuming, nonnuclear thermal
resources, or (B) thermal energy otherwise lost to the atmosphere or
other environmental compartment as waste heat.

(b) Notwithstanding the provisions of title 16 of the general statutes, not later than twelve months after the effective date of this section, the Public Utilities Regulatory Authority shall initiate a proceeding to establish a program for development of utility-scale renewable thermal energy networks by gas companies, as defined in section 16-1 of the general statutes. In establishing said program, the authority shall develop parameters for such networks, procedures or filing proposals
for such networks, and a standardized data collection system enabling
the authority and the public to track the status and performance of
utility-scale renewable thermal energy networks developed pursuant to
this section.

780 (c) The authority shall structure the utility-scale renewable thermal 781 energy network program in the best interest of ratepayers of public 782 service companies, as defined in section 16-1 of the general statutes. For 783 purposes of this section, a determination of the best interest of 784 ratepayers shall be based on an analysis of the reasonableness of the 785 size, scope, scale and character of the project and related budget and the 786 costs and benefits of the project, including, but not limited to: (1) 787 Avoided long-term energy and infrastructure investments in extending 788 or maintaining gas infrastructure; (2) the anticipated contribution of 789 such projects to alleviation of seasonal strains on the state's natural gas 790 supply and electric distribution system; (3) consumer protections and 791 benefits for end users of the project; (4) adherence to best practices 792 emerging from thermal energy network programs and project designs 793 developed in other states or elsewhere in the state; (5) potential for 794 accrual of capital and operational cost savings via interconnection with 795 other existing or future thermal energy networks; (6) improvements in 796 air quality in the buildings and neighborhood served by the project; and 797 (7) reductions in greenhouse gas emissions that contribute to achieving 798 the emissions reductions set forth in section 22a-200a of the general 799 statutes. The authority may approve a utility-scale renewable thermal 800 energy network proposal that meets the parameters established under 801 the program.

(d) The authority shall create a pilot component of the utility-scale
renewable thermal energy network program that requires each gas
company to file with the authority, for its review and approval,
proposals for not less than one and not more than two pilot projects for
the development of utility-scale renewable thermal energy networks
that meet the program parameters established in subsection (c) of this

section. The authority shall review a proposal for a pilot project based
on the program parameters and on the basis of the project's ability to
provide insights into the potential for scaling up future deployment of
thermal energy networks in Connecticut, for improving the
performance of these networks and for bringing down the cost of
broader deployment of these networks.

814 (e) The authority shall require projects submitted to the utility-scale 815 renewable thermal energy network program for approval to include a 816 proposed rate structure for thermal energy services supplied to network 817 end users as well as consumer-protection plans for end users. The 818 authority may approve the proposed rate structure if the projected 819 heating and cooling costs for end users is not greater than the heating 820 and cooling costs the end users would be projected to incur if had they 821 not participated.

(f) The authority shall approve the recovery of prudent costs incurred
by a gas company for the development and construction of projects
approved pursuant to the utility-scale renewable thermal energy
program through a nonbypassable and fully reconciling component of
gas rates for all customers of the gas company.

(g) A gas company may meet its obligation under subsection (b) of
section 16-20 of the general statutes through a project approved by the
authority pursuant to this section.

(h) The authority shall ensure transparency and validity of the
outcomes of the projects developed pursuant to this section through
third-party evaluation of the data the authority collects through its
standardized data collection requirement.

(i) Nothing in this section shall prohibit a municipality from
developing, owning or maintaining a utility-scale renewable thermal
energy network.

(j) As part of the utility-scale renewable thermal energy network

program, the authority shall establish a working group to study thermal
energy networks, comprising representatives of the staffs of the
authority, the Department of Energy and Environmental Protection, the
Connecticut Green Bank, the gas and electric companies and
nongovernmental environmental organizations.

843 (k) As part of the utility-scale renewable thermal energy network 844 program, the authority shall, through the working group established 845 under subsection (j) of this section, undertake a study or studies 846 assessing the potential breadth of deployment of thermal energy 847 networks in the state. Said study shall address factors, including, but not 848 limited to: (1) Technical feasibility; (2) economic feasibility, taking into 849 account the potential for (A) reduction in energy costs of the customer 850 that is the off-taker of the system; (B) reduction in network capital costs 851 as the scale of deployments increases; (C) reduction in capital and 852 operating costs as thermal energy networks are interconnected; (D) 853 avoided cost of expanding and maintaining portions of the gas-854 distribution system; (E) minimization of the cost of expanding the 855 electricity-distribution system to facilitate increasing electrification of 856 thermal loads; (F) reduction in per-kilowatt-hour cost of supplying 857 electricity as more electricity is sold; (G) state and federal financial 858 incentives available; (H) employing and advancing the skills of gas-859 utility workers; (I) providing the gas utility companies a business model 860 not dependent on continued use of combustion of fossil fuels; and (J) 861 improvement of air quality; (3) deployment strategies to maximize the 862 scope, minimize the cost and equitably allocate the cost of thermal 863 energy networks, including systematic identification of significant 864 sources of waste heat across the state; (4) considerations regarding 865 deployment in (A) low and moderate-income communities; (B) environmental-justice 866 communities; (C) new residential and 867 commercial construction versus retrofitting existing residential and 868 commercial buildings; (D) urban versus rural communities; (E) areas 869 with existing gas service versus areas without; and (F) ownership and 870 business models; and (5) appropriate parameters for broader

deployment in the near and medium term, including site selection,
network design, interactions with and impacts on the gas and electricity
distribution systems, ratepayer protections, billing models, consumer
protections, data collection, community engagement and deployment in
low and moderate-income communities and environmental justice
communities.

877 Sec. 7. (NEW) (*Effective from passage*) (a) For the purposes of this 878 section:

879 "Renewable thermal energy network" means distribution (1)infrastructure (A) established for the purpose of providing thermal 880 881 energy for space heating and cooling, domestic hot water production, 882 refrigeration, thermal energy storage or commercial and industrial 883 processes requiring heating or cooling, and (B) implemented through 884 interconnections between one or more renewable thermal energy 885 resources, which may be owned by multiple parties, and between these 886 resources and heat pumps in multiple buildings owned by multiple 887 parties; and

(2) "Renewable thermal energy" means (A) ambient heating or
cooling provided, absorbed or stored by geothermal well boreholes or
other noncombusting, non-fossil-fuel-consuming, nonnuclear thermal
resources, or (B) thermal energy otherwise lost to the atmosphere or
other environmental compartment as waste heat.

893 (b) Notwithstanding the provisions of title 16 of the general statutes, 894 each gas company, as defined in section 16-1 of the general statutes, shall 895 develop an incentive program for renewable thermal energy networks 896 to be owned by municipalities, a municipal utility, as defined in section 897 12-265 of the general statutes, a municipal electric energy cooperative, 898 as defined in section 7-233b of the general statutes, or an entity that has 899 a contractual obligation to a municipality to construct, operate and 900 maintain a renewable thermal network for the purpose of reducing 901 natural gas and electric demand in the state. Such program shall provide

an incentive payment to said entities to connect end use customers to the renewable thermal energy network. Such incentive payment shall be based on the projected natural gas and electric demand reduction of contractually obligated demand for a period of twenty years. The projected natural gas and electric demand reduction shall be based on the expected gas or electric demand that the renewable thermal loop is displacing.

909 (c) A gas company shall design its renewable thermal energy network 910 program in the best interest of ratepayers of public service companies, 911 as defined in section 16-1 of the general statutes, and submit its program 912 design for review and approval by the Public Utilities Regulatory 913 Authority. For purposes of this section, a determination of the best 914 interest of ratepayers shall be based on an analysis of the reasonableness 915 of the size, scope, scale and character of the project and related budget 916 and the costs and benefits of the project, including, but not limited to: 917 (1) Avoided long-term energy and infrastructure investments in 918 extending or maintaining gas infrastructure; (2) the anticipated 919 contribution of such projects to the alleviation of seasonal strains on the 920 state's natural gas supply and electric distribution system; (3) consumer 921 protections and benefits for end users of the project; (4) adherence to 922 best practices emerging from thermal energy network programs and 923 project designs developed in other states or elsewhere in the state; (5) 924 potential for accrual of capital and operational cost savings via 925 interconnection with other existing or future thermal energy networks; 926 (6) improvements in air quality in the buildings and neighborhood 927 served by the project; and (7) reductions in greenhouse gas emissions 928 that contribute to achieving the emissions reductions set forth in section 929 22a-200a of the general statutes.

(d) The Public Utilities Regulatory Authority shall ensure that the
revenues required to fund such incentive payments made pursuant to
this section are provided through a nonbypassable and fully reconciling
component of gas rates for all customers of the gas company, which
shall not exceed more than _____ million dollars in total for the program

935 established under this section, provided that such revenues exceeding 936 two million dollars required to fund such incentive payments shall be 937 paid over a period of not less than two years. Such revenues shall only 938 be collected from the gas customers of the company in whose service 939 area are such renewable thermal energy networks or, as determined by 940 the authority, the company in whose service area the renewable thermal 941 energy network would be but for the existence of a municipal utility or 942 municipal energy cooperative.

(e) The owners of the renewable thermal energy network shall ensure
transparency and validity of the outcomes of the networks developed
pursuant to this section through submitting data to track the status and
performance of said network, which data shall be submitted to the
authority.

948 Sec. 8. Section 16a-3j of the general statutes is repealed and the 949 following is substituted in lieu thereof (*Effective October 1, 2025*):

950 (a) In order to secure cost-effective resources to provide more reliable 951 electric or gas service for the benefit of the state's electric ratepayers and 952 to meet the state's energy and environmental goals and policies 953 established in the Integrated Resources Plan, pursuant to section 16a-3a, 954 and the Comprehensive Energy Strategy, pursuant to section 16a-3d, the 955 Commissioner of Energy and Environmental Protection, in consultation 956 with the procurement manager identified in subsection (l) of section 16-957 2, the Office of Consumer Counsel and the Attorney General, may, in 958 coordination with other states in the control area of the regional 959 independent system operator, as defined in section 16-1, or on behalf of 960 [Connecticut] the state alone, issue multiple solicitations for long-term 961 contracts from providers of resources described in subsections (b), (c) 962 and (d) of this section.

(b) In any solicitation for resources to reduce electric <u>or gas</u> demand
and improve resiliency and <u>electric or gas</u> grid reliability in the state,
issued pursuant to this subsection, the commissioner shall seek

966 proposals for (1) passive demand response measures, including, but not 967 limited to, energy efficiency, load management, and the state's 968 conservation and load management programs, pursuant to section 16-969 245m; [, that are capable, either singly or through aggregation, of 970 reducing electric demand by one megawatt or more;] and (2) Class I 971 renewable energy sources and Class III sources, as defined in section 16-972 1, provided any such project proposal is for a facility that has a 973 nameplate capacity rating of more than two megawatts and less than 974 twenty megawatts. The commissioner may also seek proposals for 975 energy storage systems, as defined in section 16-1, that are capable of 976 storing up to twenty megawatts of energy. Proposals pursuant to this 977 subsection shall not have a contract term exceeding twenty years. Each 978 electric distribution company, as defined in section 16-1, and gas 979 company, as defined in section 16-1, shall, in consultation with the 980 Energy Conservation Management Board established pursuant to 981 section 16-245m, assess whether the submission of a proposal for 982 passive and active demand response measures is feasible pursuant to 983 any solicitation issued pursuant to subdivision (1) of this subsection, 984 provided such proposal only includes electric or gas demand reductions 985 that are in addition to existing and projected demand reductions 986 obtained through the conservation and load management programs.

987 (c) In any solicitation issued pursuant to this subsection, the 988 commissioner shall seek proposals from (1) Class I renewable energy 989 sources, as defined in section 16-1, having a nameplate capacity rating 990 of twenty megawatts or more, and any associated transmission; and (2) 991 verifiable large-scale hydropower, as defined in section 16-1, and any 992 associated transmission. The commissioner may also seek proposals for 993 energy storage systems, as defined in section 16-1, having a nameplate 994 capacity rating of twenty megawatts or more. Proposals under this 995 subsection shall not have a contract term exceeding twenty years. In 996 soliciting Class I renewable energy sources, and any associated 997 transmission, pursuant to this subsection, the commissioner may, for the 998 purpose of balancing such Class I energy deliveries and improving the

999 economic viability of such proposals, also seek proposals for electricity 1000 and capacity from Class II renewable energy sources, as defined in 1001 section 16-1, and existing hydropower resources other than those 1002 described under section 16-1, provided such resources are 1003 interconnected to such associated transmission and are located in the 1004 control area of the regional independent system operator or imported 1005 into the control area of the regional independent system operator from 1006 resources located in an adjacent regional independent system operator's 1007 control area.

1008 (d) In any solicitation for natural gas resources issued pursuant to this 1009 subsection, the commissioner shall seek proposals for (1) interstate 1010 natural gas transportation capacity, (2) liquefied natural gas, (3) 1011 liquefied natural gas storage, and (4) natural gas storage, or a 1012 combination of any such resources, provided such proposals provide 1013 incremental capacity, gas, or storage that has a firm delivery capability 1014 to transport natural gas to natural gas-fired generating facilities located 1015 in the control area of the regional independent system operator. 1016 Proposals under this subsection shall not have a contract term exceeding 1017 a period of twenty years.

1018 (e) The Commissioner of Energy and Environmental Protection, in 1019 consultation with the procurement manager identified in subsection (l) 1020 of section 16-2, the Office of Consumer Counsel and the Attorney 1021 General, shall evaluate project proposals received under any solicitation 1022 issued pursuant to subsection (b), (c) or (d) of this section, based on 1023 factors including, but not limited to, (1) improvements to the reliability 1024 of the electric system, including during winter peak demand; (2) 1025 whether the benefits of the proposal outweigh the costs to ratepayers; 1026 (3) fuel diversity; (4) the extent to which the proposal contributes to 1027 meeting the requirements to reduce greenhouse gas emissions and improve air quality in accordance with sections 16-245a, 22a-174 [,] and 1028 1029 22a-200a; (5) whether the proposal is in the best interest of ratepayers; 1030 and (6) whether the proposal is aligned with the policy goals outlined 1031 in the Integrated Resources Plan, pursuant to section 16a-3a, and the

1032 Comprehensive Energy Strategy, pursuant to section 16a-3d, including, 1033 but not limited to, environmental impacts. In conducting such 1034 evaluation, the commissioner may also consider the extent to which 1035 project proposals provide economic benefits for the state. In evaluating 1036 project proposals received under any solicitation issued pursuant to 1037 subsection (b), (c) or (d) of this section, the commissioner shall compare 1038 the costs and benefits of such proposals relative to the expected or actual 1039 costs and benefits of other resources eligible to respond to the other 1040 procurements authorized pursuant to this section.

1041 (f) The commissioner may hire consultants with expertise in 1042 quantitative modeling of electric and gas markets, and physical gas and 1043 electric system modeling, as applicable, to assist in implementing this 1044 section, including, but not limited to, the evaluation of proposals 1045 submitted pursuant to this section. All reasonable costs, not exceeding 1046 one million five hundred thousand dollars, associated with the 1047 commissioner's solicitation and review of proposals pursuant to this 1048 section shall be recoverable through the nonbypassable federally 1049 mandated congestion charge, as defined in subsection (a) of section 16-1050 1. Such costs shall be recoverable even if the commissioner does not 1051 select any proposals pursuant to solicitations issued pursuant to this 1052 section.

1053 (g) If the commissioner finds proposals received pursuant to this 1054 section to be in the best interest of [electric] ratepayers, in accordance 1055 with the provisions of subsection (e) of this section, the commissioner 1056 may select any such proposal or proposals, provided the total capacity 1057 of the resources selected under all solicitations issued pursuant to this 1058 section in the aggregate do not exceed three hundred seventy-five 1059 million cubic feet per day of natural gas capacity, or the equivalent 1060 megawatts of electricity, electric demand reduction or combination 1061 thereof. Any proposals selected pursuant to subsections (b) and (c) of 1062 this section shall not, in the aggregate, exceed ten per cent of the load 1063 distributed by the state's electric distribution companies or ten per cent 1064 of the load distributed by the state's gas companies. The commissioner

1065 may, on behalf of all customers of electric distribution companies, direct 1066 the electric distribution companies to enter into long-term contracts for 1067 active or passive demand response measures that result in electric savings, electricity time-of-use shifts, electricity, electric capacity, 1068 1069 environmental attributes, energy storage, interstate natural gas 1070 transportation capacity, liquefied natural gas, liquefied natural gas 1071 storage, and natural gas storage, or any combination thereof, from 1072 proposals submitted pursuant to this section, provided the benefits of 1073 such contracts to customers of electric distribution companies outweigh 1074 the costs to such companies' customers. The commissioner may, on 1075 behalf of the customers of gas companies, direct the gas companies to 1076 enter into long-term contracts for active or passive demand response 1077 measures that result in gas savings or time-of-use shifts from proposals submitted pursuant to this section, provided the benefits of such 1078 1079 contracts to customers of gas companies outweigh the costs to such 1080 companies' customers.

1081 (h) Any agreement entered into pursuant to this section shall be 1082 subject to review and approval by the Public Utilities Regulatory 1083 Authority. The electric distribution company or gas company shall file 1084 an application for the approval of any such agreement with the 1085 authority. The authority shall approve such agreement if it is cost 1086 effective and in the best interest of electric or gas ratepayers. The 1087 authority shall issue a decision not later than ninety days after such 1088 filing. If the authority does not issue a decision within ninety days after 1089 such filing, the agreement shall be deemed approved. Where an electric 1090 distribution company or gas company both apply for recovery of net 1091 costs of the same such agreement, the authority shall determine which 1092 net costs are attributable to each company. The net costs of any such 1093 agreement, including costs incurred by the electric distribution 1094 company or gas company under the agreement and reasonable costs incurred by the electric distribution company in connection with the 1095 1096 agreement, shall be recovered on a timely basis through a fully 1097 reconciling component of electric rates or gas rates for all customers of 1098 the electric distribution company or gas company. Any net revenues 1099 from the sale of products purchased in accordance with long-term 1100 contracts entered into pursuant to this section shall be credited to 1101 customers through the same fully reconciling rate component for all 1102 customers of the contracting electric distribution company. For any 1103 contract for interstate natural gas transportation capacity, liquefied 1104 natural gas, liquefied natural gas storage or natural gas storage entered 1105 into pursuant to this section, the electric distribution company may 1106 contract with a gas supply manager to sell such interstate natural gas 1107 transportation capacity, liquefied natural gas, liquefied natural gas 1108 storage or natural gas storage, or a combination thereof, into the 1109 wholesale markets at the best available price in a manner that meets all 1110 applicable requirements pursuant to all applicable regulations of the 1111 Federal Energy Regulatory Commission.

1112 (i) Certificates issued by the New England Power Pool Generation 1113 Information System for any Class I renewable energy source or Class III 1114 source procured by an electric distribution company pursuant to this 1115 section may be: (1) Sold into the New England Power Pool Generation 1116 Information System renewable energy credit market to be used by any 1117 electric supplier or electric distribution company to meet the 1118 requirements of section 16-245a, so long as the revenues from such sale 1119 are credited to electric distribution company customers as described in 1120 this subsection; or (2) retained by the electric distribution company to 1121 meet the requirements of section 16-245a. In considering whether to sell 1122 or retain such certificates the company shall select the option that is in 1123 the best interest of such company's ratepayers.

Sec. 9. (NEW) (*Effective October 1, 2025*) (a) The Commissioner of Energy and Environmental Protection shall develop a plan for the installation of efficient heat pumps for affordable heating and cooling systems in the state.

1128 (b) Such plan shall provide for the availability of affordable heat 1129 pump options, with a focus on heat pump applications that have the 1130 greatest potential benefits, including, but not limited to, lowering 1131 consumers' energy costs, reducing impacts to the electric grid and 1132 improving building resilience, including, but not limited to, (1) 1133 residences in environmental justice communities and long-term care 1134 facilities where not less than eighty per cent of such residents are 1135 Medicaid recipients in good financial standing with the state, (2) access 1136 to energy-efficient affordable air conditioning for residents experiencing 1137 high energy bills and health risks during heat waves, (3) increased 1138 resilience during extreme heat events for homes and businesses, (4) 1139 improved flood resilience for homes and businesses by enabling home 1140 heating systems to be located above ground, and (5) low or no interest 1141 loans to replace heating, ventilation and air conditioning equipment to 1142 residences impacted by extreme weather events. Such plan shall 1143 describe how the state could best utilize any available or future grant or 1144 loan funding. Not later than January 1, 2027, the commissioner shall 1145 submit a report, in accordance with the provisions of section 11-4a of the general statutes, to the joint standing committees of the General 1146 1147 Assembly having cognizance of matters relating to the environment and 1148 energy on the status of such plan and any recommendations for 1149 expanding or revising such plan.

Sec. 10. (Effective from passage) Not later than January 15, 2026, the 1150 1151 chairperson of the Public Utilities Regulatory Authority shall submit, in 1152 accordance with the provisions of section 11-4a of the general statutes, 1153 the results of a study to develop a solar canopy strategic plan and 1154 program design to the joint standing committee of the General 1155 Assembly having cognizance of matters relating to energy and 1156 technology. The plan shall identify opportunities for solar canopies in 1157 the state and shall prioritize the development of solar canopies in 1158 environmental justice communities, as defined in section 22a-20a of the 1159 general statutes. The plan shall include an examination of different ways 1160 to promote solar canopies, including at schools, government buildings 1161 and parking lots, and shall include recommendations for policies, 1162 programs or regulations to promote the construction of solar canopies

in the state, consistent with the greenhouse gas reduction goalsestablished in section 22a-200a of the general statutes.

This act shall take effect as follows and shall amend the following sections:				
Section 1	October 1, 2025	16a-48		
Sec. 2	October 1, 2025	21a-86a(b)		
Sec. 3	October 1, 2025	21a-86b		
Sec. 4	from passage	New section		
Sec. 5	from passage	New section		
Sec. 6	from passage	New section		
Sec. 7	from passage	New section		
Sec. 8	October 1, 2025	16a-3j		
Sec. 9	October 1, 2025	New section		
Sec. 10	from passage	New section		

Statement of Purpose:

To (1) amend certain energy and water efficiency standards, (2) require a study of certain energy and water efficiency standards, (3) require the Public Utilities Regulatory Authority to initiate a docket to examine the future of natural gas in the state, (4) establish programs to incentivize the development of thermal energy networks, (5) increase electric and gas grid reliability and reduce electric and gas demand, and (6) incentivize the adoption of heat pumps and solar canopies.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]