

General Assembly

Raised Bill No. 1352

January Session, 2025

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:

- 1 Section 1. Section 16a-48 of the general statutes is repealed and the
- 2 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 <u>to section 29-252;</u>
- 10 [(2)] (4) "Fluorescent lamp ballast" or "ballast" means a device
- designed to operate fluorescent lamps by providing a starting voltage
- and current and limiting the current during normal operation, but does
- 13 not include such devices that have a dimming capability or are intended

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- 14 for use in ambient temperatures of zero degrees Fahrenheit or less or
- 15 have a power factor of less than sixty-one hundredths for a single
- 16 F40T12 lamp;
- [(3)] (5) "F40T12 lamp" means a tubular fluorescent lamp that is a
- 18 nominal forty-watt lamp, with a forty-eight-inch tube length and one
- 19 and one-half inches in diameter;
- [(4) "F96T12 lamp" means a tubular fluorescent lamp that is a nominal
- 21 seventy-five-watt lamp with a ninety-six-inch tube length and one and
- 22 one-half inches in diameter;
- 23 (5) "Luminaire" means a complete lighting unit consisting of a
- 24 fluorescent lamp, or lamps, together with parts designed to distribute
- 25 the light, to position and protect such lamps, and to connect such lamps
- 26 to the power supply;
- 27 (6) "New product" means a product that is sold, offered for sale, or
- 28 installed for the first time and specifically includes floor models and
- 29 demonstration units;
- 30 (7) "Commissioner" means the Commissioner of Energy and
- 31 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
- 35 fixture with a reflector bowl giving light directed upward [so as] to give
- 36 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

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43 any oil fired heating system;

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- 44 (11) "Transformer" means a device consisting of two or more coils of 45 insulated wire that transfers alternating current by electromagnetic 46 induction from one coil to another in order to change the original 47 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;
- 56 (13) "Pass-through cabinet" means a refrigerator or freezer with 57 hinged or sliding doors on both the front and rear of the refrigerator or 58 freezer;
 - (14) "Reach-in cabinet" means a refrigerator, freezer, or combination thereof, 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;

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- (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;
- 76 (19) "Packaged air-conditioning equipment" means air-conditioning 77 equipment that is built as a package and shipped as a whole to end-user 78 sites:
- 79 (20) "Large packaged air-conditioning equipment" means air-cooled 80 packaged air-conditioning equipment having not less than two hundred 81 forty thousand BTUs per hour of capacity;

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- (21) "Commercial clothes washer" means a soft mount front-loading or soft mount top-loading clothes washer that is designed for use in (A) applications where the occupants of more than one household will be using it, such as in multifamily housing common areas and coin laundries; or (B) other commercial applications, if the clothes container compartment is no greater than three and one-half cubic feet for horizontal-axis clothes washers or no greater than four cubic feet for vertical-axis clothes washers;
- (22) "Energy efficiency ratio" means a measure of the relative efficiency of a heating or cooling appliance that is equal to the unit's output in BTUs per hour divided by its consumption of energy, measured in watts;
- 94 (23) "Electricity ratio" means the ratio of furnace electricity use to total 95 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 designed 100 to supply heated air through ducts of more than ten inches in length;

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

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- (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;
- 118 [(28)] (7) "High-intensity discharge lamp" means a lamp in which 119 light is produced by the passage of an electric current through a vapor 120 or gas, the light-producing arc is stabilized by bulb wall temperature 121 and the arc tube has a bulb wall loading in excess of three watts per 122 square centimeter;
- 123 [(29)] (8) "Metal halide lamp" means a high intensity discharge lamp 124 in which the major portion of the light is produced by radiation of metal 125 halides and their products of dissociation, possibly in combination with 126 metallic vapors;
- 127 [(30)] (9) "Metal halide lamp fixture" means a light fixture designed 128 to be operated with a metal halide lamp and a ballast for a metal halide 129 lamp;
- 130 [(31)] (10) "Probe start metal halide ballast" means a ballast used to operate metal halide lamps that does not contain an ignitor and that

LCO No. 4862 **5** of 39 instead starts lamps by using a third starting electrode probe in the arc tube;

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

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

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

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- [(35)] (12) "Commercial hot food holding cabinet" means a heated, fully-enclosed compartment with one or more solid or [partial glass] transparent doors [that is] designed to maintain the temperature of hot food that has been cooked [in] using a separate appliance. "Commercial hot food holding cabinet" does not include heated glass merchandizing 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 and 177 filter pool water to maintain clarity and sanitation;

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- (39) "Walk-in refrigerator" means a space refrigerated to temperatures at or above 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 refrigerated storage of food and food products. "Walk-in refrigerator" does not include refrigerated warehouses and products designed and marketed exclusively for 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 model that consists of one or more factory-made assemblies, which normally

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- 194 include an evaporator or cooling coil, compressor and condenser.
- 195 Central air conditioning models may provide the function of air cooling,
- air cleaning, dehumidifying or humidifying;
- 197 [(42)] (14) "Combination television" means a system in which a
- 198 television or television monitor and an additional device or devices,
- including, but not limited to, a digital versatile disc player or video
- 200 cassette recorder, are combined into a single unit in which the additional
- 201 devices are included in the television casing;
- [(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
- or more of the following media: Magnetic tape, compact disc, digital
- 206 versatile disc or flash memory. "Compact audio player" does not mean
- a 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)] (15) "Component television" means a television composed of
- 211 two or more separate components, such as a separate display device and
- 212 tuner, marketed and sold as a television under one model or system
- 213 designation, which may have more than one power cord;
- 214 [(45)] (16) "Computer monitor" [means an analog or digital device
- 215 designed primarily for the display of computer generated signals and
- 216 that is not marketed for use as a television] has the same meaning as
- 217 provided in section 1602 of the California Code of Regulations, Title 20,
- 218 Division 2, Chapter 4, Article 4;
- [(46)] (17) "Digital versatile disc" means a laser-encoded plastic
- 220 medium capable of storing a large amount of digital audio, video and
- 221 computer data;
- 222 [(47)] (18) "Digital versatile disc player" means a commercially
- 223 available electronic product encased in a single housing that includes an

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- integral power supply and for which the sole purpose is the decoding of 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;

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- (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

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253 by applying sprays of detergent solution, with or without blasting 254 media granules, and a sanitizing rinse; (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; (25) "Commercial oven" means a chamber designed for heating, 263 264 roasting or baking food by conduction, convection, radiation or electromagnetic energy; 265 266 (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; 272 (27) "High color rendering index fluorescent lamp" means a 273 fluorescent lamp with a color rendering index of eighty-seven or greater 274 that is not a compact fluorescent lamp; (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

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identify the lamp as being impact-resistant, shatter-resistant, shatter-

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proof or shatter-protected;

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	discharge into a lavatory;		
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	(34) "Showerhead" means a device through which water is		
297	discharged for a shower bath and includes a hand-held showerhead but		
298	does not include a safety shower showerhead;		
299	(35) "Hand-held showerhead" means a showerhead that can be held		
300	or fixed in place for the purpose of spraying water onto a bather and		
301	that is connected to a flexible hose;		
302	(36) "Water cooler" means a freestanding device that consumes		
303	energy to cool or heat potable water;		
304	(37) "Hot and cold unit water cooler" means a water cooler that		
305	dispenses both hot and cold water and may dispense room-temperature		
306	water;		
307	(38) "Cook and cold unit water cooler" means a water cooler that		
308	dispenses both cold and room-temperature water;		

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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	deliver;
316	(41) "Gas fireplace" means a decorative gas fireplace or a heating gas
317	fireplace;
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	(42) "Heating gas firenless" means a vented firenless including
	(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

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regulated incandescent reflector lamps; (14) bottle-type water

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- 339 dispensers; (15) commercial hot food holding cabinets; (16) portable
- electric spas; (17) walk-in refrigerators and walk-in freezers; (18) pool
- 341 heaters; (19) compact audio players; (20) televisions; (21) digital versatile
- disc players; (22) digital versatile disc recorders; and (23) any other
- 343 products as may be designated by the commissioner in accordance with
- 344 subdivision (3) of subsection (d) of this section.]
- 345 [(c)] (b) The provisions of this section do not apply to (1) new
- 346 products manufactured in the state and sold outside the state, (2) new
- 347 products manufactured outside the state and sold at wholesale inside
- 348 the state for final retail sale and installation outside the state, (3)
- 349 products installed in mobile manufactured homes at the time of
- 350 construction, or (4) products designed expressly for installation and use
- 351 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
- energy efficiency standards for the types of new products set forth in
- subsection (b) of this section. The regulations shall provide for the
- 357 following minimum energy efficiency standards:
- 358 (A) Commercial clothes washers shall meet the requirements shown
- in Table P-3 of section 1605.3 of the California Code of Regulations, Title
- 360 20: Division 2, Chapter 4, Article 4;
- 361 (B) Commercial refrigerators and freezers shall meet the August 1,
- 362 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"
- developed by the United States Environmental Protection Agency;
- 366 (D) Large packaged air-conditioning equipment having not more
- 367 than seven hundred sixty thousand BTUs per hour of capacity shall
- 368 meet a minimum energy efficiency ratio of 10.0 for units using both

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- electric heat and air conditioning or units solely using electric air conditioning, and 9.8 for units using both natural gas heat and electric air conditioning;
- 372 (E) Large packaged air-conditioning equipment having not less than 373 seven hundred sixty-one thousand BTUs per hour of capacity shall meet 374 a minimum energy efficiency ratio of 9.7 for units using both electric 375 heat and air conditioning or units solely using electric air conditioning, 376 and 9.5 for units using both natural gas heat and electric air 377 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:

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- [(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;
- [(H) Traffic signal modules shall meet the product specification of the "Energy Star Program Requirements for Traffic Signals" developed by the United States Environmental Protection Agency that took effect in February, 2001, except where the department, in consultation with the Commissioner of Transportation, determines that such specification would compromise safe signal operation;
 - (I) Unit heaters shall not have pilot lights and shall have either power venting or an automatic flue damper;
- 396 (J) On or after January 1, 2009, residential furnaces and boilers 397 purchased by the state shall meet or exceed the following annual fuel

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utilization efficiency: (i) For gas and propane furnaces, ninety per cent annual fuel utilization efficiency, (ii) for oil furnaces, eighty-three per cent annual fuel utilization efficiency, (iii) for gas and propane hot water boilers, eighty-four per cent annual fuel utilization efficiency, (iv) for oil-fired hot water boilers, eighty-four per cent annual fuel utilization efficiency, (v) for gas and propane steam boilers, eighty-two per cent annual fuel utilization efficiency, (vi) for oil-fired steam boilers, eighty-two per cent annual fuel utilization efficiency, and (vii) for furnaces with furnace air handlers, an electricity ratio of not more than 2.0, except air handlers for oil furnaces with a capacity of less than ninety-four 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;

[(L) Single-voltage external AC to DC power supplies manufactured 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 Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations. This standard applies to single voltage AC to DC power supplies that are sold individually and to those that are sold as a component of or in conjunction with another product. This standard shall not apply to single-voltage external AC to DC power supplies sold with products subject to certification by the United States Food and Drug Administration. A single-voltage external AC to DC power supply that is made available by a manufacturer directly to a consumer or to a service or repair facility after and separate from the original sale of the product requiring the power supply as a service part or spare part shall not be required to meet the standards in said table U-1 until five years after the effective dates indicated in the table;]

[(M)] (C) [On or after January 1, 2009, state] State regulated incandescent reflector lamps shall be manufactured to meet the

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- 430 minimum average lamp efficacy requirements for federally regulated
- incandescent reflector lamps contained in [42 USC 6295(i)(1)(A)] 42 USC
- 432 6295(i)(1)(B). Each lamp shall indicate the date of manufacture;
- 433 [(N) On or after January 1, 2009, bottle-type water dispensers,
- commercial hot food holding cabinets, portable electric spas, walk-in
- 435 refrigerators and walk-in freezers shall meet the efficiency requirements
- 436 of section 1605.3 of the January 2006 California Code of Regulations,
- 437 Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency
- Regulations. On or after January 1, 2010, residential pool pumps shall
- 439 meet said efficiency requirements;
- (O) On or after January 1, 2009, pool heaters shall meet the efficiency
- 441 requirements of sections 1605.1 and 1605.3 of the January 2006
- California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4:
- 443 Appliance Efficiency Regulations;
- 444 (P) By January 1, 2014, compact audio players, digital versatile disc
- players and digital versatile disc recorders shall meet the requirements
- 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)
- 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
- subparagraph (A) of subdivision (3) of this subsection; and
- 460 [(R)] (E) In addition to the requirements of subparagraph [(Q)] (D) of

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- this subdivision, televisions manufactured on or after January 1, 2014,
- shall meet the efficiency requirements of Sections 1605.3(v)(3)(A),
- 463 1605.3(v)(3)(B) and 1605.3(v)(3)(C) of the November 2009 amendments
- 464 to the California Code of Regulations, Title 20, Division 2, Chapter 4,
- 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
- 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
- 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
- 477 Environmental Protection Agency shall meet the qualification criteria of
- 478 such specification;
- (B) Commercial fryers included in the scope of the version 2.0
- 480 product specification of the "Energy Star Program Requirements for
- 481 Commercial Fryers" developed by the United States Environmental
- 482 Protection Agency shall meet the qualification criteria of such
- 483 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;
- 488 (D) Commercial ovens included in the scope of the version 2.2
- 489 product specification of the "Energy Star Program Requirements for
- 490 Commercial Ovens" developed by the United States Environmental

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- 491 <u>Protection Agency shall meet the qualification criteria of such</u> 492 specification;
- 493 (E) Commercial steam cookers shall meet the version 1.2 product 494 specification of the "Energy Star Program Requirements for Commercial
- 495 <u>Steam Cookers" developed by the United States Environmental</u>
- 496 Protection Agency;

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- 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;
 - (G) Faucets, except metering faucets, shall meet the standards in this subparagraph 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. Lavatory faucets and their replacement aerators shall not exceed a maximum flow rate of 1.5 gallons per minute at sixty pounds per square inch. Kitchen faucets and their replacement aerators shall not exceed a maximum flow rate of 1.8 gallons per minute at sixty pounds per square inch, with optional temporary flow of 2.2 gallons per minute, provided they

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523	default to a maximum flow rate of 1.8 gallons per minute at sixty pounds		
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	gallons per minute at sixty pounds per square inch;		
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		
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532	operating continuously for more than seven days from last use of the		
332	main burner; and		
533	(ii) Heating gas fireplaces shall have a fireplace efficiency greater than		
534	or equal to fifty per cent when tested in accordance with Canadian		
535	Standards Association P.4.1-15, "Testing Method for Measuring Annual		
536	Fireplace Efficiency", as amended from time to time;		
537	(I) High-color rendering index, cold temperature and impact-		
538	resistant fluorescent lamps shall meet the minimum efficacy		
539	requirements contained in 10 CFR 430.32(n)(4), as in effect on January 1,		
540	2021, as measured in accordance with the "Uniform Test Method for		
541	Measuring Average Lamp Efficacy (LE), Color Rendering Index (CRI),		
542	and Correlated Color Temperature (CCT) of Electric Lamps" set forth in		
543	10 CFR 430, Subpart B, Appendix R, as in effect on January 1, 2022;		
= 4.4			
544	(I) Portable electric spas shall meet the requirements of		
545	ANSI/APSP/ICC-14-2019, "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 loss than 2.8 cubic foot nor minute nor watt for other		

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552 airflows when tested in accordance with Home Ventilation Institute 553 Publication 916, "HVI Airflow Test Procedure"; (L) Showerheads shall not exceed a maximum flow rate of 2.0 gallons 554 555 per minute at eighty pounds per square inch when tested in accordance 556 with the "Uniform Test Method for Measuring the Water Consumption 557 of Faucets and Showerheads" set forth in 10 CFR 430, Subpart B, 558 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

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

[within] not earlier than one year [following] after the adoption of any

amended regulations providing for such increased efficiency standards.

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

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

(4) The Commissioner of Energy and Environmental Protection may adopt regulations, in accordance with the provisions of chapter 54, to designate additional products that shall be subject to the provisions of this section for any product that energy standards were issued for or approved for publication on or before January 1, 2018, pursuant to the Energy Policy and Conservation Act, 42 USC 6201 et seq., by the United States Department of Energy and that were subsequently withdrawn, repealed or otherwise voided. For such products, the minimum energy-efficiency level permitted shall be such previously applicable federal energy conservation standards, as such standards existed on January 1, 2018. This subdivision shall not apply to any federal energy

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conservation standard set aside by a court upon the petition of a person who will be adversely affected, as provided in 42 USC 6306(b).

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- [(B) The Commissioner of Energy and Environmental Protection, in consultation with the Multi-State Appliance Standards Collaborative, shall identify additional appliance and equipment efficiency standards. The commissioner shall review all California standards and may review standards from other states in such collaborative. The commissioner shall issue notice of such review in the Connecticut Law Journal, allow for public comment and may hold a public hearing within six months of adoption of an efficiency standard by a cooperative member state regarding a product for which no equivalent Connecticut or federal standard currently exists. The commissioner shall adopt regulations in accordance with the provisions of chapter 54 adopting such efficiency standard unless the commissioner makes a specific finding that such standard does not meet the criteria in subparagraph (A) of this subdivision.
- (e) On or after July 1, 2006, except for commercial clothes washers, for which the date shall be July 1, 2007, commercial refrigerators and freezers, for which the date shall be July 1, 2008, and large packaged airconditioning equipment, for which the date shall be July 1, 2009, no new product of a type set forth in subsection (b) of this section or designated by the Commissioner of Energy and Environmental Protection may be sold, offered for sale, or installed in the state unless the energy efficiency of the new product meets or exceeds the efficiency standards set forth 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

LCO No. 4862 **22** of 39 manufacturers of such products shall cause samples of such products to be tested in accordance with the test procedures adopted pursuant to this subsection or those specified in the State Building Code.

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- (g) Manufacturers of any new products set forth in subsection (b) of this section for which (1) no efficiency standards exist in California, and (2) the Commissioner of Energy and Environmental Protection adopts efficiency standards, shall certify to the commissioner that such products are in compliance with the provisions of this section, except that certification is not required for single voltage external AC to DC power supplies and walk-in refrigerators and walk-in freezers. All single voltage external AC to DC power supplies shall be labeled as described in the January 2006 California Code of Regulations, Title 20, Section 1607(9). The commissioner shall promulgate regulations governing the certification of such products.]
- (e) Manufacturers of products subject to the provisions of this section shall submit documentation, on a form prescribed by the commissioner, concerning the certification of such products by the California Energy Commission, the United States Environmental Protection Agency's Water Sense program or a successor program that promotes water efficiency, the federal Energy Star program or a successor program that promotes energy efficiency, or a third-party certification body designated by the commissioner, as applicable, for compliance with this section or compliance with identical standards adopted by another jurisdiction. The commissioner shall publish an annual list of [any products set forth in subsection (b) of this section on the department's Internet web site that designates which such products are certified in California and which such products not certified in California have demonstrated compliance with efficiency standards adopted by the commissioner pursuant to subparagraph (B) of subdivision (3) of 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

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- 680 new products subject to the provisions of this section. The commissioner 681 may establish a process to anonymously report potential violations of 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):

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

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

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

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- Sec. 6. (NEW) (*Effective from passage*) (a) For the purposes of this section:
 - (1) "Utility-scale renewable thermal energy network" means distribution infrastructure (A) established for the purpose of providing thermal energy for space heating and cooling, domestic hot water production, refrigeration, thermal energy storage or commercial and industrial processes requiring heating or cooling, and (B) implemented through interconnections between one or more renewable thermal energy resources, which may be owned by multiple parties, and between these resources and heat pumps in multiple buildings owned 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

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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.

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

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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.

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

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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.

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

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- 872 network design, interactions with and impacts on the gas and electricity
- 873 distribution systems, ratepayer protections, billing models, consumer
- 874 protections, data collection, community engagement and deployment in
- 875 low and moderate-income communities and environmental justice
- 876 communities.
- Sec. 7. (NEW) (Effective from passage) (a) For the purposes of this
- 878 section:

- (1) "Renewable thermal energy network" means distribution infrastructure (A) established for the purpose of providing thermal energy for space heating and cooling, domestic hot water production, refrigeration, thermal energy storage or commercial and industrial processes requiring heating or cooling, and (B) implemented through interconnections between one or more renewable thermal energy resources, which may be owned by multiple parties, and between these resources and heat pumps in multiple buildings owned 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, each gas company, as defined in section 16-1 of the general statutes, shall develop an incentive program for renewable thermal energy networks to be owned by municipalities, a municipal utility, as defined in section 12-265 of the general statutes, a municipal electric energy cooperative, as defined in section 7-233b of the general statutes, or an entity that has a contractual obligation to a municipality to construct, operate and maintain a renewable thermal network for the purpose of reducing natural gas and electric demand in the state. Such program shall provide

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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

907 the expected gas or electric demand that the renewable thermal loop is

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

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established under this section, provided that such revenues exceeding two million dollars required to fund such incentive payments shall be paid over a period of not less than two years. Such revenues shall only be collected from the gas customers of the company in whose service area are such renewable thermal energy networks or, as determined by the authority, the company in whose service area the renewable thermal energy network would be but for the existence of a municipal utility or 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 following is substituted in lieu thereof (*Effective October 1, 2025*):
 - (a) In order to secure cost-effective resources to provide more reliable electric or gas service for the benefit of the state's electric ratepayers and to meet the state's energy and environmental goals and policies established in the Integrated Resources Plan, pursuant to section 16a-3a, and the Comprehensive Energy Strategy, pursuant to section 16a-3d, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, may, in coordination with other states in the control area of the regional independent system operator, as defined in section 16-1, or on behalf of [Connecticut] the state alone, issue multiple solicitations for long-term contracts from providers of resources described in subsections (b), (c) 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

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

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

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

- (d) In any solicitation for natural gas resources issued pursuant to this subsection, the commissioner shall seek proposals for (1) interstate natural gas transportation capacity, (2) liquefied natural gas, (3) liquefied natural gas storage, and (4) natural gas storage, or a combination of any such resources, provided such proposals provide incremental capacity, gas, or storage that has a firm delivery capability to transport natural gas to natural gas-fired generating facilities located in the control area of the regional independent system operator. Proposals under this subsection shall not have a contract term exceeding a period of twenty years.
- (e) The Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, shall evaluate project proposals received under any solicitation issued pursuant to subsection (b), (c) or (d) of this section, based on factors including, but not limited to, (1) improvements to the reliability of the electric system, including during winter peak demand; (2) whether the benefits of the proposal outweigh the costs to ratepayers; (3) fuel diversity; (4) the extent to which the proposal contributes to meeting the requirements to reduce greenhouse gas emissions and improve air quality in accordance with sections 16-245a, 22a-174 [,] and 22a-200a; (5) whether the proposal is in the best interest of ratepayers; and (6) whether the proposal is aligned with the policy goals outlined in the Integrated Resources Plan, pursuant to section 16a-3a, and the

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

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

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

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may, on behalf of all customers of electric distribution companies, direct the electric distribution companies to enter into long-term contracts for active or passive demand response measures that result in electric savings, electricity time-of-use shifts, electricity, electric capacity, environmental attributes, energy storage, interstate natural gas transportation capacity, liquefied natural gas, liquefied natural gas storage, and natural gas storage, or any combination thereof, from proposals submitted pursuant to this section, provided the benefits of such contracts to customers of electric distribution companies outweigh the costs to such companies' customers. The commissioner may, on behalf of the customers of gas companies, direct the gas companies to enter into long-term contracts for active or passive demand response measures that result in gas savings or time-of-use shifts from proposals submitted pursuant to this section, provided the benefits of such contracts to customers of gas companies outweigh the costs to such companies' customers.

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(h) Any agreement entered into pursuant to this section shall be subject to review and approval by the Public Utilities Regulatory Authority. The electric distribution company or gas company shall file an application for the approval of any such agreement with the authority. The authority shall approve such agreement if it is cost effective and in the best interest of electric or gas ratepayers. The authority shall issue a decision not later than ninety days after such filing. If the authority does not issue a decision within ninety days after such filing, the agreement shall be deemed approved. Where an electric distribution company or gas company both apply for recovery of net costs of the same such agreement, the authority shall determine which net costs are attributable to each company. The net costs of any such agreement, including costs incurred by the electric distribution company or gas company under the agreement and reasonable costs incurred by the electric distribution company in connection with the agreement, shall be recovered on a timely basis through a fully reconciling component of electric rates or gas rates for all customers of

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the electric distribution company or gas company. Any net revenues from the sale of products purchased in accordance with long-term contracts entered into pursuant to this section shall be credited to customers through the same fully reconciling rate component for all customers of the contracting electric distribution company. For any contract for interstate natural gas transportation capacity, liquefied natural gas, liquefied natural gas storage or natural gas storage entered into pursuant to this section, the electric distribution company may contract with a gas supply manager to sell such interstate natural gas transportation capacity, liquefied natural gas, liquefied natural gas storage or natural gas storage, or a combination thereof, into the wholesale markets at the best available price in a manner that meets all applicable requirements pursuant to all applicable regulations of the Federal Energy Regulatory Commission.

- (i) Certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy source or Class III source procured by an electric distribution company pursuant to this section may be: (1) Sold into the New England Power Pool Generation Information System renewable energy credit market to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a, so long as the revenues from such sale are credited to electric distribution company customers as described in this subsection; or (2) retained by the electric distribution company to meet the requirements of section 16-245a. In considering whether to sell or retain such certificates the company shall select the option that is in 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.
- (b) Such plan shall provide for the availability of affordable heat pump options, with a focus on heat pump applications that have the

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1130 greatest potential benefits, including, but not limited to, lowering consumers' energy costs, reducing impacts to the electric grid and 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 to energy-efficient affordable air conditioning for residents experiencing 1137 high energy bills and health risks during heat waves, (3) increased 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 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.

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

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This act shall take effect as follows and shall amend the following						
sections:						
Section 1	<i>October 1, 2025</i>	16a-48				
Sec. 2	October 1, 2025	21a-86a(b)				
Sec. 3	<i>October 1, 2025</i>	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.]

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