

Senate

General Assembly

File No. 325

January Session, 2025

Substitute Senate Bill No. 4

Senate, March 31, 2025

The Committee on Energy and Technology reported through SEN. NEEDLEMAN of the 33rd Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

AN ACT CONCERNING ENERGY AFFORDABILITY, ACCESS AND ACCOUNTABILITY.

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

- Section 1. Section 22a-136 of the general statutes is repealed and the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: (1) "Advanced nuclear reactor" has the
- 4 same meaning as provided in 42 USC 16271, as amended from time to
- 5 time, and (2) "high level nuclear waste" means those aqueous wastes
- 6 resulting from the operation of the first cycle of the solvent extraction
- 7 system or equivalent and the concentrated wastes of the subsequent
- 8 extraction cycles or equivalent in a facility for reprocessing irradiated
- 9 reactor fuel and includes spent fuel assemblies prior to fuel
- 10 <u>reprocessing.</u>

11 (b) No construction shall commence on a [fifth] <u>new</u> nuclear power

12 facility [until the] <u>in the state unless:</u>

(1) The Commissioner of Energy and Environmental Protection finds 13 14 that the United States Government, through its authorized agency, has identified and approved a demonstrable technology or means for the 15 16 disposal of high level nuclear waste; [. The provisions of this section 17 shall not apply to construction at any nuclear power generating facility 18 operating in the state as of October 1, 2022. As used in this section, "high 19 level nuclear waste" means those aqueous wastes resulting from the 20 operation of the first cycle of the solvent extraction system or equivalent 21 and the concentrated wastes of the subsequent extraction cycles or 22 equivalent in a facility for reprocessing irradiated reactor fuel and shall 23 include spent fuel assemblies prior to fuel reprocessing.] 24 (2) The nuclear power facility is proposed to be sited at a nuclear 25 power generating facility operating in the state as of October 1, 2022; or 26 (3) The construction is for an advanced nuclear reactor facility and 27 (A) such facility is sited in a municipality that has consented to such 28 facility's development through the affirmative vote of such 29 municipality's legislative body or a referendum held in such 30 municipality, and (B) any additional municipality within the emergency 31 planning zone, as determined by the Nuclear Regulatory Commission, 32 of the proposed facility consents to such facility's development through 33 the affirmative vote of such municipality's legislative body or a referendum held in such municipality. 34 35 (c) The entity proposing such new nuclear power facility, including 36 advanced nuclear reactors, shall obtain all permits, licenses, permissions or approvals governing the construction, operation and funding of 37 38 decommissioning of such nuclear power facility as required by: (1) Any 39 applicable federal statutes, including, but not limited to, the Atomic 40 Energy Act of 1954, the Energy Reorganization Act of 1974, the Low-41 Level Radioactive Waste Policy Amendments Act of 1985 and the 42 Energy Policy Act of 1992, as amended from time to time; (2) any

- 42 regulations promulgated or enforced by the United States Nuclear
- 44 Regulatory Commission, including, but not limited to, those codified at
- 45 Title X, Parts 20, 30, 40, 50, 52, 53, 70 and 72 of the Code of Federal

46 <u>Regulations, as amended from time to time; and (3) any other federal or</u>
47 <u>state statute, rule or regulation governing the permitting, licensing,</u>
48 construction, operation or decommissioning of such facility.

49 Sec. 2. (NEW) (Effective July 1, 2025) (a) As used in this section, (1) 50 "eligible recipient" means (A) a regional governmental entity, 51 municipality, regional council of governments, public authority, state or 52 federally recognized tribe or municipal electric utility or cooperative 53 with a demonstrated interest in hosting advanced nuclear reactors or 54 offshore wind energy facilities, as determined by the Commissioner of 55 Energy and Environmental Protection, (B) a private entity partnering or 56 interested in partnering with said entities for the development of 57 advanced nuclear reactors or offshore wind energy facilities, or (C) an 58 institution of higher education in the state; and (2) "advanced nuclear 59 reactor" has the same meaning as provided in 42 USC 16271, as amended 60 from time to time.

(b) The Commissioner of Energy and Environmental Protection shall
establish a competitive advanced nuclear reactor and offshore wind
energy site readiness funding program. The commissioner may provide
funding through the program in the form of grants or loans to eligible
recipients in support of:

66 (1) Environmental and technical studies required for early site
67 permitting for advanced nuclear reactors or offshore wind energy
68 facilities;

69 (2) Local and regional infrastructure assessments to support the
70 development of advanced nuclear reactors or offshore wind energy
71 facilities;

(3) Community engagement and planning initiatives related to
hosting advanced nuclear reactors or offshore wind energy facilities;
and

(4) Other necessary expenses identified by the commissioner toadvance site readiness for advanced nuclear reactors or offshore wind

77 energy facilities.

78 (c) The commissioner may use bond funds authorized in support of 79 the program or federal funds allocated to the state in support of the 80 program established under this section. In the case of federal funds 81 allocated for such purposes, the commissioner may revise its advanced 82 nuclear reactor and offshore wind and energy site readiness grant 83 program criteria to be consistent with the requirements of the federal 84 funding program criteria. The commissioner may use said funds to hire 85 a technical consultant to support the implementation of this section.

Sec. 3. (NEW) (*Effective July 1, 2025*) (a) For the purposes described in subsection (b) of this section, the State Bond Commission shall have the power from time to time to authorize the issuance of bonds of the state in one or more series and in principal amounts not exceeding in the aggregate five million dollars.

(b) The proceeds of the sale of such bonds shall be used by the
Department of Energy and Environmental Protection for the purpose of
funding grants or loans through the advanced nuclear reactor and
offshore wind energy facility site readiness funding program
established pursuant to section 2 of this act.

Sec. 4. Subsection (a) of section 16a-102 of the general statutes is
repealed and the following is substituted in lieu thereof (*Effective October*1, 2025):

99 (a) The Commissioner of Energy and Environmental Protection shall 100 coordinate all atomic development activities in the state. Said 101 commissioner or [his] the commissioner's designee shall (1) advise the 102 Governor with respect to atomic industrial development within the 103 state; (2) act as coordinator of the development and regulatory activities 104 of the state relating to the industrial and commercial uses of atomic 105 energy; (3) act as the Governor's designee in matters relating to atomic 106 energy, including participation in the activities of any committee 107 formed by the New England states to represent their interests in such 108 matters and also cooperation with other states and with the government

109 of the United States; (4) coordinate the studies, recommendations and 110 proposals of the several departments and agencies of the state required 111 by section 16a-103 with each other and also with the programs and 112 activities of the development commission; and (5) act as a point of 113 contact for public and private stakeholders to assist in compliance with 114 federal, state and local requirements relevant to atomic development, 115 including, but not limited to, siting considerations and permitting 116 requirements. The commissioner shall consult with and review 117 regulations and procedures of the agencies of the state with respect to 118 the regulation of sources of radiation to assure consistency and to 119 prevent unnecessary duplication, inconsistencies or gaps in regulatory 120 requirements.

121 Sec. 5. Section 16a-3j of the general statutes is repealed and the 122 following is substituted in lieu thereof (*Effective October 1, 2025*):

123 (a) In order to secure cost-effective resources to provide more reliable 124 electric or gas service for the benefit of the state's electric ratepayers and 125 to meet the state's energy and environmental goals and policies 126 established in the Integrated Resources Plan, pursuant to section 16a-3a, 127 and the Comprehensive Energy Strategy, pursuant to section 16a-3d, the 128 Commissioner of Energy and Environmental Protection, in consultation 129 with the procurement manager identified in subsection (l) of section 16-130 2, the Office of Consumer Counsel and the Attorney General, may, in 131 coordination with other states in the control area of the regional 132 independent system operator, as defined in section 16-1, or on behalf of 133 [Connecticut] <u>the state</u> alone, issue multiple solicitations for long-term 134 contracts from providers of resources described in subsections (b), (c) 135 and (d) of this section.

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

142 245m; [, that are capable, either singly or through aggregation, of 143 reducing electric demand by one megawatt or more;] and (2) Class I 144 renewable energy sources and Class III sources, as defined in section 16-145 1, provided any such project proposal is for a facility that has a 146 nameplate capacity rating of more than two megawatts and less than 147 twenty megawatts. The commissioner may also seek proposals for 148 energy storage systems, as defined in section 16-1, that are capable of 149 storing up to twenty megawatts of energy. Proposals pursuant to this 150 subsection shall not have a contract term exceeding twenty years. Each 151 electric distribution company, as defined in section 16-1, and gas 152 company, as defined in section 16-1, shall, in consultation with the 153 Energy Conservation Management Board established pursuant to 154 section 16-245m, assess whether the submission of a proposal for 155 passive and active demand response measures is feasible pursuant to 156 any solicitation issued pursuant to subdivision (1) of this subsection, 157 provided such proposal only includes electric or gas demand reductions 158 that are in addition to existing and projected demand reductions 159 obtained through the conservation and load management programs.

160 (c) In any solicitation issued pursuant to this subsection, the 161 commissioner shall seek proposals from (1) Class I renewable energy 162 sources, as defined in section 16-1, having a nameplate capacity rating 163 of twenty megawatts or more, and any associated transmission; and (2) 164 verifiable large-scale hydropower, as defined in section 16-1, and any 165 associated transmission. The commissioner may also seek proposals for 166 energy storage systems, as defined in section 16-1, having a nameplate 167 capacity rating of twenty megawatts or more. Proposals under this 168 subsection shall not have a contract term exceeding twenty years. In 169 soliciting Class I renewable energy sources, and any associated 170 transmission, pursuant to this subsection, the commissioner may, for the 171 purpose of balancing such Class I energy deliveries and improving the 172 economic viability of such proposals, also seek proposals for electricity 173 and capacity from Class II renewable energy sources, as defined in 174 section 16-1, and existing hydropower resources other than those 175 described under section 16-1, provided such resources are 176 interconnected to such associated transmission and are located in the

177 control area of the regional independent system operator or imported
178 into the control area of the regional independent system operator from
179 resources located in an adjacent regional independent system operator's
180 control area.

181 (d) In any solicitation for natural gas resources issued pursuant to this 182 subsection, the commissioner shall seek proposals for (1) interstate 183 natural gas transportation capacity, (2) liquefied natural gas, (3) 184 liquefied natural gas storage, and (4) natural gas storage, or a 185 combination of any such resources, provided such proposals provide 186 incremental capacity, gas, or storage that has a firm delivery capability 187 to transport natural gas to natural gas-fired generating facilities located 188 in the control area of the regional independent system operator. 189 Proposals under this subsection shall not have a contract term exceeding 190 a period of twenty years.

191 (e) The Commissioner of Energy and Environmental Protection, in 192 consultation with the procurement manager identified in subsection (l) 193 of section 16-2, the Office of Consumer Counsel and the Attorney 194 General, shall evaluate project proposals received under any solicitation 195 issued pursuant to subsection (b), (c) or (d) of this section, based on 196 factors including, but not limited to, (1) improvements to the reliability 197 of the electric system, including during winter peak demand; (2) 198 whether the benefits of the proposal outweigh the costs to ratepayers; 199 (3) fuel diversity; (4) the extent to which the proposal contributes to 200 meeting the requirements to reduce greenhouse gas emissions and 201 improve air quality in accordance with sections 16-245a, 22a-174 [,] and 202 22a-200a; (5) whether the proposal is in the best interest of ratepayers; 203 and (6) whether the proposal is aligned with the policy goals outlined 204 in the Integrated Resources Plan, pursuant to section 16a-3a, and the 205 Comprehensive Energy Strategy, pursuant to section 16a-3d, including, 206 but not limited to, environmental impacts. In conducting such 207 evaluation, the commissioner may also consider the extent to which 208 project proposals provide economic benefits for the state. In evaluating 209 project proposals received under any solicitation issued pursuant to 210 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.

214 (f) The commissioner may hire consultants with expertise in 215 quantitative modeling of electric and gas markets, and physical gas and 216 electric system modeling, as applicable, to assist in implementing this 217 section, including, but not limited to, the evaluation of proposals 218 submitted pursuant to this section. All reasonable costs, not exceeding 219 one million five hundred thousand dollars, associated with the 220 commissioner's solicitation and review of proposals pursuant to this 221 section shall be recoverable through the nonbypassable federally 222 mandated congestion charge, as defined in subsection (a) of section 16-223 1. Such costs shall be recoverable even if the commissioner does not 224 select any proposals pursuant to solicitations issued pursuant to this 225 section.

226 (g) If the commissioner finds proposals received pursuant to this 227 section to be in the best interest of [electric] ratepayers, in accordance 228 with the provisions of subsection (e) of this section, the commissioner 229 may select any such proposal or proposals, provided the total capacity 230 of the resources selected under all solicitations issued pursuant to this 231 section in the aggregate do not exceed three hundred seventy-five 232 million cubic feet per day of natural gas capacity, or the equivalent 233 megawatts of electricity, electric demand reduction or combination 234 thereof. Any proposals selected pursuant to subsections (b) and (c) of 235 this section shall not, in the aggregate, exceed ten per cent of the load 236 distributed by the state's electric distribution companies or ten per cent 237 of the load distributed by the state's gas companies. The commissioner 238 may, on behalf of all customers of electric distribution companies, direct 239 the electric distribution companies to enter into long-term contracts for 240 active or passive demand response measures that result in electric 241 savings, electricity time-of-use shifts, electricity, electric capacity, 242 environmental attributes, energy storage, interstate natural gas 243 transportation capacity, liquefied natural gas, liquefied natural gas 244 storage [,] and natural gas storage, or any combination thereof, from

245 proposals submitted pursuant to this section, provided the benefits of 246 such contracts to customers of electric distribution companies outweigh 247 the costs to such companies' customers. The commissioner may, on behalf of the customers of gas companies, direct the gas companies to 248 249 enter into long-term contracts for active or passive demand response 250 measures that result in gas savings or time-of-use shifts from proposals 251 submitted pursuant to this section, provided the benefits of such 252 contracts to customers of gas companies outweigh the costs to such 253 companies' customers.

254 (h) Any agreement entered into pursuant to this section shall be 255 subject to review and approval by the Public Utilities Regulatory 256 Authority. The electric distribution company or gas company shall file 257 an application for the approval of any such agreement with the 258 authority. The authority shall approve such agreement if it is cost 259 effective and in the best interest of electric or gas ratepayers. The 260 authority shall issue a decision not later than ninety days after such 261 filing. If the authority does not issue a decision within ninety days after 262 such filing, the agreement shall be deemed approved. When an electric 263 distribution company or gas company both apply for recovery of net 264 costs of the same such agreement, the authority shall determine which 265 net costs are attributable to each company. The net costs of any such 266 agreement, including costs incurred by the electric distribution 267 company or gas company under the agreement and reasonable costs 268 incurred by the electric distribution company in connection with the 269 agreement, shall be recovered on a timely basis through a fully 270 reconciling component of electric rates or gas rates for all customers of 271 the electric distribution company or gas company. Any net revenues 272 from the sale of products purchased in accordance with long-term 273 contracts entered into pursuant to this section shall be credited to 274 customers through the same fully reconciling rate component for all 275 customers of the contracting electric distribution company. For any 276 contract for interstate natural gas transportation capacity, liquefied 277 natural gas, liquefied natural gas storage or natural gas storage entered 278 into pursuant to this section, the electric distribution company may 279 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.

285 (i) Certificates issued by the New England Power Pool Generation 286 Information System for any Class I renewable energy source or Class III 287 source procured by an electric distribution company pursuant to this 288 section may be: (1) Sold into the New England Power Pool Generation 289 Information System renewable energy credit market to be used by any 290 electric supplier or electric distribution company to meet the 291 requirements of section 16-245a, so long as the revenues from such sale 292 are credited to electric distribution company customers as described in 293 this subsection; or (2) retained by the electric distribution company to 294 meet the requirements of section 16-245a. In considering whether to sell 295 or retain such certificates the company shall select the option that is in 296 the best interest of such company's ratepayers.

Sec. 6. Section 16a-3m of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2025*):

299 (a) For the purposes of this section:

300 (1) "Best interest of ratepayers" means the benefits of a contract or 301 proposal outweigh the costs to electric ratepayers, based on whether the 302 delivered prices of sources included in such contract or proposal are less 303 than the forecasted price of energy and capacity, as determined by the 304 commissioner or the commissioner's designee, and based on a 305 consideration of the following factors, as determined by the 306 commissioner or the commissioner's designee: (A) Impacts on electric 307 system operations and reliability; (B) the extent to which such contract 308 or proposal will contribute to (i) the local sourcing requirement set by 309 the regional independent system operator, as defined in section 16-1, 310 and (ii) meeting the requirements to reduce greenhouse gas emissions 311 and improve air quality in accordance with sections 16-245a, 22a-174 312 and 22a-200a; (C) fuel diversity; and (D) whether the proposal is aligned

313 with the policy goals outlined in the Integrated Resources Plan 314 developed pursuant to section 16a-3a and the Comprehensive Energy 315 Strategy developed pursuant to section 16a-3d, including, but not 316 limited to, environmental impacts; and

317 (2) "Eligible nuclear power generating facility" means a nuclear 318 power generating facility that is located in the control area of the 319 regional independent system operator, as defined in section 16-1, and is 320 licensed to operate through January 1, 2030, or later.

321 (b) The Commissioner of Energy and Environmental Protection and 322 the Public Utilities Regulatory Authority shall (1) conduct an appraisal 323 regarding nuclear power generating facilities in accordance with 324 subsection (c) of this section, and (2) determine whether a solicitation 325 process for nuclear power generating facilities shall be conducted 326 pursuant to subsection (d) of this section. On or before February 1, 2018, 327 the commissioner and the authority shall report, in accordance with 328 section 11-4a, the results of the appraisal and the selection conducted 329 pursuant to subsection (d) of this section to the General Assembly. If the 330 General Assembly does not reject such results by a simple majority vote 331 in each house on or before March 1, 2018, such results shall be deemed 332 approved.

333 (c) The appraisal conducted pursuant to subdivision (1) of subsection 334 (b) of this section shall assess: (1) The current economic condition of 335 nuclear generating facilities located in the control area of the regional 336 independent system operator, as defined in section 16-1; (2) the 337 projected economic condition of nuclear power generating facilities 338 located in the control area of the regional independent system operator, 339 as defined in section 16-1; (3) the impact on the following considerations 340 if such nuclear power generating facilities retire before July 1, 2027: (A) 341 Electric markets, fuel diversity, energy security and grid reliability, (B) 342 the state's greenhouse gas emissions mandated levels established 343 pursuant to section 22a-200a, and (C) the state, regional and local 344 economy.

345 (d) After completing the appraisal, if the results of such appraisal sSB4 / File No. 325 11

demonstrate that action is necessary, the commissioner shall act and 346 347 may issue one or more solicitations, in consultation with the 348 procurement manager identified in subsection (l) of section 16-2 and the 349 Office of Consumer Counsel established in section 16-2a, for zero-350 carbon electricity generating resources, including, but not limited to, 351 eligible nuclear power generating facilities, hydropower, Class I 352 renewable energy sources, as defined in section 16-1, and energy storage 353 systems, provided (1) the total annual energy output of any proposals 354 selected, in the aggregate, shall be not more than twelve million 355 megawatt hours of electricity, (2) any agreement entered into pursuant 356 to this subdivision with an eligible nuclear power generating facility or 357 hydropower shall be for a period of not less than three years and not 358 more than ten years, and (3) any agreement entered into pursuant to this 359 subdivision with Class I renewable energy sources, as defined in section 360 16-1, and energy storage systems shall be for a period of not more than 361 twenty years. On or before May 1, 2018, if the results of such appraisal 362 demonstrate that one or more solicitations pursuant to this subsection 363 are necessary, the commissioner shall initiate such solicitation process 364 pursuant to this subsection, in accordance with subsection (e) of this 365 section, provided any changes made, contracts entered into or 366 agreements entered into are in the best interest of ratepayers.

367 (e) (1) Any solicitation issued pursuant to subsection (d) of this 368 section for zero-carbon electricity generating resources, including, but 369 not limited to, eligible nuclear power generating facilities, hydropower, 370 Class I renewable energy sources, as defined in section 16-1, and energy 371 storage systems, shall be for resources delivered into the control area of 372 the regional independent system operator, as defined in section 16-1, 373 and any agreement entered into pursuant to subdivision (2) of this 374 subsection shall be in the best interest of ratepayers. If the commissioner 375 finds proposals received pursuant to such solicitations to be in the best 376 interest of ratepayers, the commissioner may select any such proposal 377 or proposals, provided (A) the total annual energy output of any 378 proposals selected, in the aggregate, shall be not more than twelve 379 million megawatt hours of electricity, (B) any agreement entered into 380 pursuant to this subdivision with an eligible nuclear power generating

facility or hydropower shall be for a period of not less than three years and not more than ten years, and (C) any agreement entered into pursuant to this subdivision with Class I renewable energy sources, as defined in section 16-1, and energy storage systems shall be for a period of not more than twenty years.

(2) If the commissioner has made the determination and finding
pursuant to subdivision (1) of this subsection, the commissioner shall,
on behalf of all customers of electric distribution companies, direct the
electric distribution companies to enter into agreements for energy,
capacity and any environmental attributes, or any combination thereof,
from proposals submitted pursuant to this subdivision.

392 (3) Any agreement entered into pursuant to subdivision (2) of this 393 subsection shall be subject to review and approval by the Public Utilities 394 Regulatory Authority. The electric distribution company shall file an 395 application for the approval of any such agreement with the authority. 396 The authority's review shall commence upon the filing of the signed 397 power purchase agreement with the authority. The authority shall 398 approve agreements that it determines (A) provide for the delivery of 399 adequate and reliable products and services, for which there is a clear 400 public need, at a just and reasonable price, (B) are prudent and cost 401 effective, and (C) that the respondent to the solicitation has the technical, 402 financial and managerial capabilities to perform pursuant to such 403 agreement. For any eligible nuclear power generating facility selected in 404 any solicitation described in subsection (g) of this section, the authority 405 shall require any such agreement to be conditioned upon the approval 406 of such a power purchase agreement or other agreement for energy, 407 capacity and any environmental attributes, or any combination thereof, 408 with such eligible nuclear power generating facility, in at least two other 409 states, by the applicable officials of such states or by electric utilities or 410 other entities designated by the applicable officials of such states. The 411 authority shall issue a decision not later than one hundred eighty days 412 after such filing. If the authority does not issue a decision within one 413 hundred eighty days after such filing, the agreement shall be deemed 414 approved. The net costs of any such agreement, including costs incurred

415 by the electric distribution company under the agreement and 416 reasonable costs incurred by the electric distribution company in 417 connection with the agreement, but excluding costs associated with the provision of standard service pursuant to subsection (h) of this section, 418 419 shall be recovered on a timely basis through a nonbypassable fully 420 reconciling component of electric rates for all customers of the electric 421 distribution company. Any net revenues from the sale of products 422 purchased in accordance with long-term contracts entered into pursuant 423 to this subsection, except any such net revenues associated with the 424 provision of standard service pursuant to subsection (h) of this section, 425 shall be credited to customers through the same nonbypassable fully 426 reconciling rate component for all customers of the contracting electric 427 distribution company.

(f) Each person owning and operating a nuclear power generating
facility in the state shall pay a pro rata share of all reasonable costs
associated with the department's appraisal pursuant to subsection (c) of
this section, determination pursuant to subsection (d) of this section,
and actions taken pursuant to subsection (e) of this section in an amount
not to exceed one million dollars.

434 (g) Any solicitation issued pursuant to this section on or after July 1, 435 2024, for eligible nuclear power generating facilities shall be conducted 436 in coordination with two or more other states in the control area of the 437 regional independent system operator, as defined in section 16-1. The 438 commissioner may not direct any electric distribution company to enter 439 into an agreement with an eligible nuclear power generating facility 440 pursuant to this section unless the applicable officials of at least two 441 such states select a proposal for energy, capacity and any environmental 442 attributes, or any combination thereof, from an eligible nuclear power 443 generating facility in response to such coordinated solicitation. The 444 commissioner may revise the appraisal conducted pursuant to 445 subsections (b) and (c) of this section in a manner determined by the 446 commissioner and in furtherance of any such solicitation, at the 447 commissioner's discretion.

448	(h) (1) Notwithstanding the provisions of subsections (a) to (g),
449	inclusive, of this section, subsection (a) of section 16-244c and section 16-
450	244m, an electric distribution company may request the procurement
451	manager of the Public Utilities Regulatory Authority to authorize such
452	company to use any portion of the energy, capacity or other energy
453	products, or any combination thereof, that such company purchases
454	from an eligible nuclear power generating facility pursuant to an
455	agreement entered into pursuant to subsection (e) of this section for the
456	purpose of providing electric generation services for standard service.
457	Not later than fifteen days after receiving such request, the procurement
458	manager shall, in consultation with the Office of Consumer Counsel,
459	approve or deny such request. The procurement manager may approve
460	such a request only if the procurement manager concludes that such
461	request is in the best interest of standard service customers.
1.60	
462	(2) For any request that the procurement manager approves pursuant
463	to this subsection, the procurement manager shall establish: (A) The
464	time period during which such company shall use such energy, capacity
465	or other energy products to provide electric generation services for
466	standard service; (B) the quantity of energy, capacity or other energy
467	products that such company shall use to provide electric generation
468	services for standard service; and (C) the price that standard service
469	customers shall pay for such energy, capacity and other energy
470	products, provided the procurement manager may not establish a price
471	that is higher than the applicable price specified in the agreement that
472	such company entered into pursuant to subsection (e) of this section.
473	(3) If the procurement manager approves such request and
473 474	<u>authorizes such company to use such portion of the energy, capacity or</u>
475	other energy products to provide electric generation services for
475 476	
	standard service, the cost of such portion of energy, capacity or other
477 478	energy products shall be paid solely by standard service customers, in
478	accordance with the quantity and price established by the procurement
479	manager pursuant to subdivision (2) of this subsection.
480	(4) No person owning and operating a nuclear power generating

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481	facility in the state shall pay any administrative costs associated with the
482	procurement manager's actions pursuant to this subsection.
483 484 485 486	(5) Nothing in this subsection or subsection (g) of this section shall be construed to amend or alter the terms or conditions of any agreement that an electric distribution company entered into pursuant to subsection (e) of this section.
487 488	Sec. 7. (NEW) (<i>Effective from passage</i>) (a) For the purposes of this section:
489 490 491 492 493 494 495 496 497	(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
498	(2) "Renewable thermal energy" means (A) ambient heating or

(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.

503 (b) Notwithstanding the provisions of title 16 of the general statutes, 504 not later than twelve months after the effective date of this section, the 505 Public Utilities Regulatory Authority shall initiate a proceeding to 506 establish a program for development of utility-scale renewable thermal 507 energy networks by gas companies, as defined in section 16-1 of the 508 general statutes. In establishing said program, the authority shall 509 develop parameters for such networks, procedures for filing proposals 510 for such networks and a standardized data collection system enabling 511 the authority and the public to track the status and performance of 512 utility-scale renewable thermal energy networks developed pursuant to 513 this section.

514 (c) The authority shall structure the utility-scale renewable thermal 515 energy network program in the best interest of ratepayers of public 516 service companies, as defined in section 16-1 of the general statutes. For 517 purposes of this section, a determination of the best interest of 518 ratepayers shall be based on an analysis of the reasonableness of the 519 size, scope, scale and character of the project and related budget and the 520 costs and benefits of the project, including, but not limited to: (1) 521 Avoided long-term energy and infrastructure investments in extending 522 or maintaining gas infrastructure; (2) the anticipated contribution of 523 such projects to alleviation of seasonal strains on the state's natural gas 524 supply and electric distribution system; (3) consumer protections and 525 benefits for end users of the project; (4) adherence to best practices 526 emerging from thermal energy network programs and project designs 527 developed in other states or elsewhere in the state; (5) potential for 528 accrual of capital and operational cost savings via interconnection with 529 other existing or future thermal energy networks; (6) improvements in 530 air quality in the buildings and neighborhood served by the project; and 531 (7) reductions in greenhouse gas emissions that contribute to achieving 532 the emissions reductions set forth in section 22a-200a of the general 533 statutes. The authority may approve a utility-scale renewable thermal 534 energy network proposal that meets the parameters established under 535 the program.

536 (d) The authority shall create a pilot component of the utility-scale 537 renewable thermal energy network program that requires each gas 538 company to file with the authority, for the authority's review and 539 approval, proposals for not less than one and not more than two pilot 540 projects for the development of utility-scale renewable thermal energy 541 networks that meet the program parameters established in subsection 542 (c) of this section. The authority shall review a proposal for a pilot 543 project based on the program parameters and on the basis of the 544 project's ability to provide insights into the potential for scaling up 545 future deployment of thermal energy networks in Connecticut, for 546 improving the performance of these networks and for bringing down 547 the cost of broader deployment of these networks.

548 (e) The authority shall require projects submitted to the utility-scale 549 renewable thermal energy network program for approval to include a 550 proposed rate structure for thermal energy services supplied to network 551 end users and consumer-protection plans for end users. The authority 552 may approve the proposed rate structure if the projected heating and 553 cooling costs for end users is not greater than the heating and cooling 554 costs the end users would be projected to incur if had they not 555 participated.

556 (f) The authority shall approve the recovery of prudent costs incurred 557 by a gas company for the development and construction of projects 558 approved pursuant to the utility-scale renewable thermal energy 559 program through a nonbypassable and fully reconciling component of 560 gas rates for all customers of the gas company.

561 (g) A gas company may meet its obligation under subsection (b) of 562 section 16-20 of the general statutes through a project approved by the 563 authority pursuant to this section.

564 (h) The authority shall ensure the transparency and validity of the 565 outcomes of the projects developed pursuant to this section through 566 third-party evaluation of the data the authority collects through its 567 standardized data collection requirement.

568 (i) Nothing in this section shall prohibit a municipality from 569 developing, owning or maintaining a utility-scale renewable thermal 570 energy network.

571 (i) As part of the utility-scale renewable thermal energy network 572 program, the authority shall establish a working group to study thermal 573 energy networks comprising representatives of the staffs of the 574 authority, the Department of Energy and Environmental Protection, the 575 Connecticut Green Bank, the gas and electric companies and 576 nongovernmental environmental organizations.

577 (k) As part of the utility-scale renewable thermal energy network sSB4 / File No. 325

578 program, the authority shall, through the working group established 579 under subsection (j) of this section, undertake a study or studies 580 assessing the potential breadth of deployment of thermal energy 581 networks in the state. Such study shall address factors including, but not 582 limited to: (1) Technical feasibility; (2) economic feasibility, taking into 583 account the potential for (A) reduction in energy costs of the customer 584 that is the off-taker of the system; (B) reduction in network capital costs 585 as the scale of deployments increases; (C) reduction in capital and 586 operating costs as thermal energy networks are interconnected; (D) 587 avoided cost of expanding and maintaining portions of the gas-588 distribution system; (E) minimization of the cost of expanding the 589 electricity distribution system to facilitate increasing electrification of 590 thermal loads; (F) reduction in per-kilowatt-hour cost of supplying 591 electricity as more electricity is sold; (G) state and federal financial 592 incentives available; (H) employing and advancing the skills of gas-593 utility workers; (I) providing the gas utility companies a business model 594 not dependent on continued use of combustion of fossil fuels; and (J) 595 improvement of air quality; (3) deployment strategies to maximize the 596 scope, minimize the cost and equitably allocate the cost of thermal 597 energy networks, including systematic identification of significant sources of waste heat across the state; (4) considerations regarding 598 599 deployment in (A) low and moderate income communities, (B) 600 environmental justice communities, (C) new residential and commercial 601 construction versus retrofitting existing residential and commercial 602 buildings, (D) urban versus rural communities, (E) areas with existing 603 gas service versus areas without, and (F) ownership and business 604 models; and (5) appropriate parameters for broader deployment in the 605 near and medium term, including site selection, network design, 606 interactions with, and impacts on, the gas and electricity distribution 607 systems, ratepayer protections, billing models, consumer protections, 608 data collection, community engagement and deployment in low and 609 moderate income communities and environmental justice communities.

610 Sec. 8. Section 16-32e of the general statutes is repealed and the 611 following is substituted in lieu thereof (*Effective October 1, 2025*): sSB4

(a) As used in this section, "emergency" means any (1) hurricane, 612 613 tornado, storm, flood, high water, wind-driven water, tidal wave, 614 tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought or fire explosion, or (2) attack or series of attacks 615 616 by an enemy of the United States causing, or which may cause, 617 substantial damage or injury to civilian property or persons in the 618 United States in any manner by sabotage or by the use of bombs, 619 shellfire or atomic, radiological, chemical, bacteriological or biological 620 means or other weapons or processes.

621 (b) Not later than July 1, 2012, and every two years thereafter, each 622 public service company, as defined in section 16-1, each 623 telecommunications company, as defined in section 16-1, that installs, 624 maintains, operates or controls poles, wires, conduits or other fixtures 625 under or over any public highway for the provision of 626 telecommunications service authorized by section 16-247c, each voice 627 over Internet protocol service provider, as defined in section 28-30b, and 628 each municipal utility furnishing electric, gas or water service shall file 629 with the Public Utilities Regulatory Authority, the Department of 630 Emergency Services and Public Protection and each municipality 631 located within the service area of the public service company, 632 telecommunications company, voice over Internet protocol service 633 provider or municipal utility an updated plan for restoring service 634 which is interrupted as a result of an emergency, except no such plan 635 shall be required of a public service company or municipal utility that 636 submits a water supply plan pursuant to section 25-32d. Plans filed by 637 public service companies and municipal utilities furnishing water shall 638 be prepared in accordance with the memorandum of understanding 639 entered into pursuant to section 4-67e.

(c) (1) Each company, provider or utility required to file a plan for
restoring service pursuant to subsection (b) of this section shall establish
an emergency service restoration planning committee to prepare such
plan. Not less than fifty per cent of the members of such committee shall
be line and restoration crew members employed by such company,
provider or utility. The balance of the members appointed to such

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646	committee shall be appointed by such company, provider or utility.
647	(2) If line and restoration crew members employed by such company,
648	provider or utility are members of a collective bargaining unit, the
649	collective bargaining unit shall select the line and restoration crew
650	members appointed to such committee. If such line and restoration crew
651	members are not members of a collective bargaining unit, the line and
652	crew members appointed to such committee shall be selected through a
653	process determined by the line and crew members employed by such
654	company, provider or utility.
655	(3) A committee established pursuant to this subsection shall have
656	two cochairpersons, one of whom shall be a line and restoration crew
657	member employed by such company, provider or utility elected by the
658	members of the committee who are line and restoration crew members,
659	and one of whom shall be elected by the members of the committee who
660	are not line and restoration crew members.
661	(4) A committee established pursuant to this subsection shall take
662	minutes of each meeting, make such minutes available to any employee
663	of such company, provider or utility upon request and submit such
664	minutes to the Public Utilities Regulatory Authority and the
665	Department of Emergency Services and Public Protection upon request.
666	A majority of the members of the committee shall constitute a quorum
667	for the transaction of committee business. Decisions of the committee
668	shall be made by majority vote of the members present at any meeting.
669	(d) Each such plan for restoring service which is interrupted as a
670	result of an emergency shall include measures for (1) communication
671	and coordination with state officials, municipalities and other public
672	service companies and telecommunications companies during a major
673	disaster, as defined in section 28-1, or an emergency; [and] (2)
674	participation in training exercises as directed by the Commissioner of
675	Emergency Services and Public Protection <u>; (3) measures to protect the</u>

676 <u>health and safety of line and restoration crews during an emergency and</u>
 677 <u>during the restoration of service, including the provision of appropriate</u>

678 personal protective equipment; (4) measures to protect the health and

679 safety of household and community members during an emergency and 680 during the restoration of service; and (5) a training and skills plan for 681 line and restoration workers. If line and restoration crew members are 682 members of a collective bargaining unit, such training and skills plan 683 shall be jointly developed by the company, provider or utility and such 684 collective bargaining unit. Each such plan shall include such company's, 685 provider's or municipal utility's response for service outages affecting 686 more than ten per cent, thirty per cent, fifty per cent and seventy per 687 cent of such company's, provider's or municipal utility's customers. On 688 or before September 1, 2012, and biannually thereafter, the authority 689 shall submit a report, in accordance with section 11-4a, to the joint 690 standing committee of the General Assembly having cognizance of 691 matters relating to public utilities summarizing such plans. Not later 692 than September 15, 2012, and every two years thereafter, the Public 693 Utilities Regulatory Authority may conduct public hearings on such 694 plans and, in consultation with the Department of Emergency Services 695 and Public Protection, the Department of Public Health and the joint 696 standing committee of the General Assembly having cognizance of 697 matters relating to public utilities, revise such plans to the extent 698 necessary to provide properly for the public convenience, necessity and 699 welfare. If the Public Utilities Regulatory Authority revises the 700 emergency plan of a public service company, telecommunications company, voice over Internet protocol service provider or municipal 701 702 utility, such company, provider or municipal utility shall file a copy of 703 the revised plan with each municipality located within the service area 704 of the company, provider or municipal utility. Any information 705 provided in any such plan shall be considered confidential, not subject 706 to disclosure under the Freedom of Information Act, as defined in 707 section 1-200, and any such information shall not be transmitted to any 708 person except as needed to comply with this section.

[(c)] (e) At the discretion of the Commissioner of Emergency Services and Public Protection or after an emergency or major disaster is declared in the state by the Governor under the laws of this state or by the President of the United States under federal law, each telephone company, certified telecommunications provider, holder of a certificate

714 of video franchise authority or holder of a certificate of cable franchise 715 authority, as those terms are defined in section 16-1, with more than 716 twenty-five thousand subscribers, shall provide a representative to staff 717 the emergency operations center of an affected electric distribution 718 company, as defined in section 16-1, as needed to ensure 719 communication and coordination during emergency response and 720 restoration efforts.

721 Sec. 9. Section 16-32l of the general statutes is repealed and the 722 following is substituted in lieu thereof (*Effective October 1, 2025*):

723 (a) For the purposes of this section:

724 (1) "Emergency" means any hurricane, tornado, storm, flood, high 725 water, wind-driven water, tidal wave, earthquake, landslide, mudslide, 726 snowstorm, drought or fire explosion that results in sixty-nine per cent 727 or less of the electric distribution company's customers experiencing an 728 outage at the period of peak electrical demand;

729 (2) "Electric distribution company" has the same meaning as 730 provided in section 16-1; and

731 (3) "After the occurrence of an emergency" means the conclusion of 732 the emergency, as determined by the authority in its discretion, through 733 a review of the following: (A) The time when the electric distribution 734 company could first deploy resources safely in its service territory; (B) 735 the first of any official declarations concerning the end of the emergency; 736 or (C) the expiration of the first of any National Weather Service 737 warning applicable to the service territory.

738 (b) Notwithstanding any other provision of the general statutes, on 739 and after July 1, 2021, each electric distribution company shall provide 740 to residential customers of such company a credit of twenty-five dollars, 741 on the balance of such customer's account, for each day of distribution-742 system service outage that occurs for such customers for more than 743 ninety-six consecutive hours after the occurrence of an emergency.

744 (c) Any costs incurred by an electric distribution company pursuant to this section shall not be recoverable.

746 (d) Not later than fourteen calendar days after the occurrence of an 747 emergency, an electric distribution company may petition the authority 748 for a waiver of the requirements of this section. Any petition for a waiver 749 made under this subsection shall include the severity of the emergency, 750 line and restoration crew safety issues and conditions on the ground, 751 and shall be conducted as a contested case proceeding. The burden of 752 proving that such waiver is reasonable and warranted shall be on the 753 electric distribution company. In determining whether to grant such 754 waiver, the authority shall consider whether the electric distribution 755 company received approval and reasonable funding allowances, as 756 determined by the authority, to meet infrastructure resiliency efforts to 757 improve such company's performance.

(e) No electric distribution company shall require any line and
 restoration crew member to work in unsafe conditions to avoid
 providing credits to customer accounts pursuant to subsection (b) of this
 section or for any other reason.

(f) No electric distribution company shall discipline, terminate,
 withhold wages from or otherwise retaliate against any line and
 restoration crew member for failing to restore a distribution system
 outage within the ninety-six-hour period specified in subsection (b) of
 this section.

767 [(e)] (g) On or before January 1, 2021, the Public Utilities Regulatory 768 Authority shall initiate a proceeding to consider the implementation of 769 the residential customer credit and waiver provisions of this section and 770 establish circumstances, standards and methodologies applicable to 771 each electric distribution company and necessary to implement the 772 provisions of this section, including any modifications to the ninety-six-773 consecutive-hour standard in subsection (b) of this section. The 774 authority shall issue a final decision in such proceeding on or before July 775 1, 2021.

Sec. 10. Section 16-32m of the general statutes is repealed and the

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following is substituted in lieu thereof (*Effective October 1, 2025*):

(a) For the purposes of this section:

(1) "Emergency" means any hurricane, tornado, storm, flood, high
water, wind-driven water, tidal wave, earthquake, landslide, mudslide,
snowstorm, drought or fire explosion that results in sixty-nine per cent
or less of the electric distribution company's customers experiencing an
outage at the period of peak electrical demand;

(2) "Electric distribution company" has the same meaning asprovided in section 16-1; and

(3) "After the occurrence of an emergency" means the conclusion of
the emergency, as determined by the authority in its discretion, through
a review of the following: (A) The time when the electric distribution
company could first deploy resources safely in its service territory; (B)
the first of any official declarations concerning the end of the emergency;
or (C) the expiration of the first of any National Weather Service
warning applicable to the service territory.

(b) On and after July 1, 2021, each electric distribution company shall
provide to each residential customer compensation in an amount of two
hundred fifty dollars, in the aggregate, for any medication and food that
expires or spoils due to a distribution-system service outage that lasts
more than ninety-six consecutive hours in duration after the occurrence
of an emergency.

(c) Any costs incurred by an electric distribution company pursuantto this section shall not be recoverable.

(d) Not later than fourteen calendar days after the occurrence of an
emergency, an electric distribution company may petition the authority
for a waiver of the requirements of this section. Any petition for a waiver
made under this subsection shall include the severity of the emergency,
line and restoration crew safety issues and conditions on the ground,
and shall be conducted as a contested case proceeding. The burden of
proving that such waiver is reasonable and warranted shall be on the

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808 electric distribution company. In determining whether to grant such
809 waiver, the authority shall consider whether the electric distribution
810 company received approval and reasonable funding allowances, as
811 determined by the authority, to meet infrastructure resiliency efforts to
812 improve such company's performance.

(e) No electric distribution company shall require any line and
restoration crew member to work in unsafe conditions to avoid
providing credits to customer accounts pursuant to subsection (b) of this
section or for any other reason.

817 (f) No electric distribution company shall discipline, terminate,
 818 withhold wages from or otherwise retaliate against any line and
 819 restoration crew member for failing to restore a distribution system
 820 outage within the ninety-six-hour period specified in subsection (b) of
 821 this section.

822 [(e)] (g) On or before January 1, 2021, the Public Utilities Regulatory 823 Authority shall initiate a proceeding to consider the implementation of 824 the compensation reimbursement and waiver provisions of this section 825 and establish circumstances, standards and methodologies applicable to 826 each electric distribution company and necessary to implement the 827 provisions of this section, including any modifications to the ninety-six-828 consecutive-hour standard in subsection (b) of this section. The 829 authority shall issue a final decision in such proceeding on or before July 830 1,2021.

831 Sec. 11. (NEW) (Effective from passage) (a) Not later than July 1, 2025, 832 the Public Utilities Regulatory Authority shall open an uncontested 833 proceeding, or amend the notice of proceeding in an active proceeding, 834 to evaluate the criteria and standards related to appropriate protections 835 from service termination for customers of a regulated gas company or 836 electric distribution company, as those terms are defined in section 16-1 837 of the general statutes, with a serious illness or life-threatening medical condition. Such evaluation shall include, but need not be limited to: 838

839 (1) Reviewing protections for customers with a serious illness or life-

threatening medical condition, and making recommendations on 840 841 appropriate standards for conditioning protections to such customers 842 on their ability to pay; 843 (2) Evaluating whether additional notice requirements prior to 844 shutoff would be appropriate for customers with a serious illness and 845 life-threatening medical condition; 846 (3) Evaluating the current procedures and practices and the relevant 847 information collected for verification of hardship status; 848 (4) Evaluating the impact on the ratepayers; and 849 (5) Evaluating the requirement for a medical hardship customer to 850 enroll in a payment plan. 851 (b) Not later than February 4, 2026, the chairperson of the Public 852 Utilities Regulatory Authority shall submit a report, in accordance with 853 the provisions of section 11-4a of the general statutes, to the joint

standing committee of the General Assembly having cognizance of
matters relating to energy and technology, summarizing the results of
such proceeding and providing recommendations regarding service
termination policies, and procedures evaluated in such proceeding.

This act shall take effect as follows and shall amend the following sections:

Section 1	<i>October 1, 2025</i>	22a-136
Sec. 2	July 1, 2025	New section
Sec. 3	July 1, 2025	New section
Sec. 4	<i>October 1, 2025</i>	16a-102(a)
Sec. 5	October 1, 2025	16a-3j
Sec. 6	<i>October 1, 2025</i>	16a-3m
Sec. 7	from passage	New section
Sec. 8	<i>October 1, 2025</i>	16-32e
Sec. 9	<i>October 1, 2025</i>	16-32 <i>l</i>
Sec. 10	October 1, 2025	16-32m
Sec. 11	from passage	New section

Statement of Legislative Commissioners:

In Section 4(a), "his" was changed to "[his] <u>the commissioner's</u>" for consistency with the general statutes; and in Section 7(k), "Said" was changed to "Such" for proper form.

ET Joint Favorable Subst.

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

OFA Fiscal Note

State Impact:

Agency Affected	Fund-Effect	FY 26 \$	FY 27 \$
Treasurer, Debt Serv.	GF - Cost	See Below	See Below
DEEP/PURA ¹	CC&PUCF-Cost	345,811	345,811

Note: GF=General Fund; CC&PUCF=Consumer Counsel and Public Utility Control Fund

Municipal Impact: None

Explanation

The bill makes various changes related to nuclear energy, energy procurements, and renewable thermal energy networks. The corresponding fiscal impacts are described below.

Nuclear Energy

The bill creates a new moratorium exception for advanced nuclear reactors, and also requires the Commissioner of the Department of Energy and Environmental Protection (DEEP) to be a point of contact for requirements related to atomic development. These changes are not anticipated to result in a fiscal impact to the state or municipalities, as DEEP has the staff and expertise necessary to implement the changes.

Additionally, the bill authorizes \$5 million in General Obligation bonds for the purpose of funding grants or loans through the advanced

¹The fringe benefit costs for employees funded out of other appropriated funds are budgeted within the fringe benefit account of those funds, as opposed to the fringe benefit accounts within the Office of the State Comptroller. The estimated active employee fringe benefit cost associated with most personnel changes for other appropriated fund employees is 83.26% of payroll in FY 26.

nuclear reactor and offshore wind energy facility site readiness funding program, which is established in the bill. To the extent bonds are fully allocated when available, total debt repayment is anticipated to be approximately \$7.2 million over the 20-year duration of the bonds, with the earliest annual payment of up to \$250,000 possible in FY 27.

Energy Procurements

The bill requires DEEP to make various procedural and administrative changes to procurement authorization to include active demand response projects and gas demand response projects. Additionally, the bill creates a process to allow electric distribution companies to use power and related products purchased from nuclear facilities to meet standard service requirements. These modifications are not anticipated to result in a fiscal impact as DEEP has the staff and expertise necessary to implement the changes.

Renewable Thermal Energy Networks

The bill results in additional annual costs to the Public Utilities Regulatory Authority (PURA), beginning in FY 26, of approximately \$345,811, associated with the establishment of a utility-scale renewable thermal energy network program, which includes a pilot component, working group, and a study of various issues.

PURA would require two additional full-time staff to complete the requirements contained within the bill. The new positions would include: one full-time Economist, with an approximate annual salary of \$85,700 (plus 71,353 in fringe benefits) and one full-time Associate Research Analyst, with an approximate annual salary of \$103,000 (\$85,758 in fringe benefits). The new staff would be responsible for developing parameters and procedures or filing proposals for the networks as well as standardizing a data collection system that allows PURA and the public to track a network's status and performance.

The bill makes various other changes to emergency service restoration planning committees and line and restoration crew members

safety, which do not have a fiscal impact to the state or municipalities, as the changes impact electric distribution companies.

Rate Payer Impact

There are several mechanisms within the bill that could impact rate payers. However, it is estimated that the various changes within the bill will (on average) result in a potential savings to rate payers. The bill is likely to expand efficiency and demand response programs that have provided bill reductions for direct program participants and avoids costs at the system level.

Allowing active demand response projects and gas demand response projects to settle Renewable Energy Certificates instead of reselling them in the market, would likely save administrative fees, which could be passed on to rate payers in the form of savings. Additionally, the bill seeks to avoid costs associated with gas expansion through the development of thermal energy networks, which could also result in savings to the rate payer.

The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation and the terms of any bonds issued.

OLR Bill Analysis

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AN ACT CONCERNING ENERGY AFFORDABILITY, ACCESS AND ACCOUNTABILITY.

TABLE OF CONTENTS:

<u>§§ 1 & 4 — NEW NUCLEAR CONSTRUCTION</u>

Creates a second exception from the nuclear moratorium for advanced nuclear reactors that meet certain requirements and expands DEEP's duties related to atomic development activity

<u>§§ 2 & 3 — ADVANCED NUCLEAR REACTOR AND OFFSHORE WIND</u> ENERGY SITE READINESS FUNDING PROGRAM

Requires DEEP to establish an advanced nuclear reactor and offshore wind site readiness funding program; authorizes up to \$5 million in state bonds to fund it

§ 5 — GAS EFFICIENCY AND ACTIVE DEMAND RESPONSE

Expands an existing procurement authorization to include active demand response projects and gas demand response projects

<u>§ 6 — MILLSTONE POWER PURCHASE AGREEMENT AND</u> STANDARD SERVICE PROCUREMENT

Creates a process for EDCs to use power and related products purchased from nuclear facilities to meet standard service requirements

<u>§ 7 — RENEWABLE THERMAL ENERGY NETWORKS</u>

Requires PURA to establish a utility-scale renewable thermal energy network program, including a pilot component, working group, and study

<u>§ 8 — EMERGENCY SERVICE RESTORATION PLANNING</u>

<u>COMMITTEES</u>

Requires utilities and other companies to form emergency service restoration planning committees with line and restoration crew members to prepare their emergency restoration plan and expands the plan's required contents

<u>§§ 9 & 10 — LINEWORKER AND RESTORATION CREW MEMBER</u> <u>SAFETY</u> Prohibits EDCs from requiring line and restoration crew members to work in unsafe conditions or retaliating against them for not restoring service within 96 hours

<u>§ 11 — PURA PROCEEDING ON MEDICAL HARDSHIP CUSTOMERS</u>

Requires PURA to evaluate service termination protections for medical hardship customers and report to the Energy and Technology Committee by February 4, 2026

SUMMARY

This bill makes various changes in energy-related laws on nuclear energy, energy site readiness funding, energy procurements, renewable thermal energy networks, and restoration crew safety, as described in the section-by-section analysis below.

EFFECTIVE DATE: Various, see below.

§§ 1 & 4 — NEW NUCLEAR CONSTRUCTION

Nuclear Moratorium Exceptions (§ 1)

Creates a second exception from the nuclear moratorium for advanced nuclear reactors that meet certain requirements and expands DEEP's duties related to atomic development activity

Current law generally prohibits construction from starting on a new nuclear facility unless and until the Department of Energy and Environmental Protection (DEEP) commissioner finds that the federal government identified and approved a demonstrable technology or way to dispose of high-level nuclear waste, with an exception for construction at a nuclear power generating facility currently operating in the state (i.e. Millstone Power Station in Waterford).

The bill creates a second exemption from the moratorium for advanced nuclear reactor facilities. Under federal law, advanced nuclear reactors are:

- nuclear fission reactors, including prototype plants, with significant improvements compared to reactors operating in 2020 (e.g., additional safety features, lower waste yields, and improved fuel and material performance);
- 2. fusion reactors; and

3. radioisotope power systems that generate energy using heat from radioactive decay.

The moratorium exception for advanced nuclear reactors applies to facilities that get consent, either by a referendum or a vote of the legislative body, from (1) the municipality where the proposed facility is sited and (2) any other municipality in the proposed facility's emergency planning zone, as the federal Nuclear Regulatory Commission (NRC) determines.

For both exceptions (construction at Millstone and advanced nuclear reactors), the bill requires the entity proposing a new facility to get all permits, licenses, and permissions or approvals for the facility's construction, operation, and decommissioning funding required under any applicable federal laws, NRC regulations, and any other federal or state law, rule, or regulation on the facility's permitting, licensing, construction, operation, or decommissioning.

DEEP's Atomic Development Activity Coordination Duties (§ 4)

Existing law requires the DEEP commissioner to coordinate all atomic development activities in the state, including advising the governor and coordinating the state's development and regulatory activities on atomic energy's industrial and commercial uses, among other things. The bill additionally requires the commissioner to be a point of contact for public and private stakeholders to help them comply with federal, state, and local requirements related to atomic development (e.g., siting considerations and permitting).

EFFECTIVE DATE: October 1, 2025

§§ 2 & 3 — ADVANCED NUCLEAR REACTOR AND OFFSHORE WIND ENERGY SITE READINESS FUNDING PROGRAM

Requires DEEP to establish an advanced nuclear reactor and offshore wind site readiness funding program; authorizes up to \$5 million in state bonds to fund it

The bill requires the DEEP commissioner to establish a competitive advanced nuclear reactor and offshore wind energy site readiness funding program. It allows the commissioner to give "eligible

- 1. environmental and technical studies required for early site permitting,
- 2. local and regional infrastructure assessments to support facility development,
- 3. community engagement and planning initiatives for hosting facilities, and
- 4. other necessary expenses the commissioner identifies to advance site readiness.

Under the bill, eligible recipients for the program's grants and loans are:

- regional governmental entities, municipalities, regional councils of government, public authorities, state or federally recognized tribes, or municipal electric utilities or cooperatives, with a demonstrated interest in hosting advanced nuclear reactors or offshore wind facilities as the commissioner determines;
- 2. private entities partnering with or interested in doing so with the entities described above to develop these facilities; and
- 3. higher education institutions in the state.

The bill authorizes up to \$5 million in state bonding for the DEEP commissioner to award the program's grants and loans. It also allows the commissioner to (1) use federal funds allocated to the state to support the program, (2) revise its program criteria to be consistent with federal funding program criteria, and (3) use the federal funds to hire a technical consultant to implement the bill's provisions on the program.

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EFFECTIVE DATE: July 1, 2025
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§ 5 — GAS EFFICIENCY AND ACTIVE DEMAND RESPONSE

Expands an existing procurement authorization to include active demand response projects and gas demand response projects

Current law authorizes DEEP to solicit proposals for passive demand response measures to reduce demand and improve reliability, and then direct electric distribution companies (EDCs, i.e. Eversource and United Illuminating) to enter into 20-year contracts for selected projects. The bill expands this authorization (1) to include active demand response measures and (2) by allowing DEEP to solicit and direct gas companies into 20-year contracts for active or demand response proposals. (Generally, "demand response" refers to measures designed to save energy. Passive measures reduce energy demand at all times, while active measures can be activated when needed.)

The bill correspondingly (1) removes a requirement that demand response projects reduce electric demand by at least one megawatt (MW) and (2) requires gas companies, in addition to EDCs, to consult with the Energy Conservation Management Board to assess the feasibility of demand response proposals. Existing law and the bill limit these proposals to projects that are additive to existing and projected demand reduction achieved through the conservation and load management programs.

The bill requires the DEEP commissioner to consider the same factors as under current law when selecting proposals, including whether benefits to ratepayers outweigh costs, fuel diversity, and contributions to meeting state greenhouse gas (GHG) reduction requirements, among other things.

Current law caps the proposals DEEP may select at 10% of EDC load, with the cap applying to the aggregate amount of proposals for demand response measures as well as proposals existing law authorizes for (1) Class I renewable energy sources (e.g., wind and solar) and Class III resources (e.g., combined heat and power) of up to two MW in capacity; (2) energy storage systems; (3) Class I renewable energy sources of 20 MW or larger; and (4) verifiable large-scale hydropower. The bill additionally caps the aggregate amount of these proposals at 10% of the state's gas utility load.

Current law allows the DEEP commissioner to direct the EDCs into long-term contracts for selected passive demand response measures, among other things. The bill additionally allows DEEP to direct them to enter into long-term contracts for active demand response measures and electricity time-of-use shifts, and requires that active or passive demand response measures yield electric savings. It also allows the DEEP commissioner to direct the gas companies to enter into long-term contracts for active or passive demand response measures that yield gas savings or time-of-use shifts from proposals submitted under the bill, so long as the contract's benefits outweigh its costs to gas customers.

Current law requires EDCs to submit any agreement to the Public Utilities Regulatory Authority (PURA) for approval and PURA to approve it if it is cost effective and in ratepayers' best interests. If PURA does not issue a decision within 90 days after the submission, the agreement is deemed approved. By law, EDCs must recover the net costs of agreements on a timely basis through a fully reconciling component of electric rates. The bill similarly requires gas companies to submit agreements to PURA for approval and recover net costs the same way. Under the bill, if an EDC and gas company both apply to recover net costs for the same agreement, PURA must determine which costs are attributable to each company.

EFFECTIVE DATE: October 1, 2025

Background — Related Bill

sHB 5004, § 18, favorably reported by the Environment Committee, similarly expands this procurement authority for gas companies and active demand response.

§ 6 — MILLSTONE POWER PURCHASE AGREEMENT AND STANDARD SERVICE PROCUREMENT

Creates a process for EDCs to use power and related products purchased from nuclear facilities to meet standard service requirements

The bill creates a process for EDCs to use any portion or combination of the energy, capacity, or other energy products purchased from an eligible nuclear power generating facility as a result of DEEP's procurements for zero-carbon resources.

Existing law authorizes the DEEP commissioner to solicit proposals for up to 12 million MW-hours of energy annually, in the aggregate, from zero-carbon electricity generating resources that meet certain requirements. If she finds one or more proposals to be in the ratepayers' best interests, she must direct the EDCs to enter into agreements to purchase energy, capacity, and environmental attributes under the selected proposals. Agreements are subject to PURA's review and approval, and the EDCs must recover their net costs of the agreements through a nonbypassable, fully reconciling component of ratepayer bills. In practice, DEEP conducted solicitations under these provisions and the EDCs entered into contracts with selected bidders, including Millstone Power Station in Waterford and Seabrook Station in New Hampshire. For any solicitations DEEP issues after July 1, 2024, for eligible nuclear power generating facilities, existing law requires DEEP to conduct them with at least two other New England states. It also prohibits the commissioner from directing EDCs to enter into contracts unless two other New England states also select a proposal. Eligible nuclear facilities are those in the ISO-New England control area that are licensed to operate through at least January 1, 2030.

The bill allows EDCs to request that PURA's procurement manager authorize the EDC to use any portion of the energy, capacity, or other energy products procured through DEEP's zero-carbon solicitation to provide electric generating services for standard service (the supply purchased for residential customers who do not opt to purchase from a retail electric supplier). It requires the procurement manager to:

- 1. approve or deny the request, in consultation with the Office of Consumer Counsel, within 15 days after receiving it;
- 2. only approve requests the procurement manager concludes are in standard service customers' best interests;

- 3. set the quantity for products the EDC uses for standard service under any approved request and the time period over which they will be used; and
- 4. set the price standard service customers will pay for products the EDC uses for standard service under any approved request, which the bill caps at the price the company paid under agreements entered into under DEEP's zero carbon procurement.

Under the bill, if the procurement manager approves the request, the cost of the products must be paid solely by standard service customers, in accordance with the quantity and price the procurement manager establishes.

The bill prohibits nuclear power generating facility owners and operators from paying any administrative costs associated with the procurement manager's actions in making determinations under the bill's provisions on using energy products from nuclear generating facilities for the standard service. The bill also specifies that its provisions do not amend or alter terms or conditions of contracts entered into under DEEP's zero carbon procurements.

EFFECTIVE DATE: October 1, 2025

Background — Related Bill

sSB 1194, favorably reported by the Energy and Technology Committee, allows EDCs to use energy or related products purchased under the zero-carbon procurement or any other approved procurement, to provide standard service.

§ 7 — RENEWABLE THERMAL ENERGY NETWORKS

Requires PURA to establish a utility-scale renewable thermal energy network program, including a pilot component, working group, and study

The bill requires PURA to start a proceeding within 12 months after the bill passes to establish a program for gas companies to develop utility-scale renewable thermal energy networks. Under the bill, a network is distribution infrastructure to provide thermal energy for the following uses:

- 1. space heating and cooling,
- 2. domestic hot water production,
- 3. refrigeration,
- 4. thermal energy storage, or
- 5. commercial and industrial processes that require heating or cooling.

These networks are implemented through interconnections between at least one renewable thermal energy resource, that may be owned by multiple parties, and heat pumps in multiple buildings owned by multiple parties. Renewable thermal energy is (1) ambient heating or cooling provided, absorbed, or stored by geothermal well boreholes or other noncombusting, nonnuclear thermal resources that does not consume fossil fuel or (2) thermal energy otherwise lost to the atmosphere or other environmental compartment as waste heat.

The bill requires PURA to develop parameters and procedures for filing proposals for the networks. PURA must also develop a standardized data collection system that allows it and the public to track a network's status and performance. The bill requires PURA to have data it collects evaluated by a third party to ensure transparency and validity of project outcomes.

The bill specifies that it does not prohibit a municipality from developing, owning, or maintaining a utility-scale renewable thermal energy network.

Ratepayers' Best Interests

The bill requires PURA to structure the utility-scale renewable thermal energy network program in the best interest of utility ratepayers. PURA must base its best-interest determination on the (1) reasonableness of the project's size, scope, scale, and character; (2) related budget; and (3) project's costs and benefits. Under the bill, the costs and benefits PURA must consider include at least the following:

- 1. avoided long-term energy and infrastructure investments in extending or maintaining gas infrastructure,
- 2. the project's anticipated contribution to easing seasonal strains on the state's natural gas supply and electric distribution system,
- 3. consumer protections and benefits for the project's end users,
- 4. adherence to best practices emerging from thermal energy network programs and project designs developed in other states or elsewhere in the state,
- 5. a project's potential to accrue capital and operational cost savings through interconnection with other existing or future networks,
- 6. air quality improvements in the buildings and neighborhood a project serves, and
- 7. GHG emissions reductions that contribute to meeting the state's goals.

The bill allows PURA to approve a utility-scale renewable thermal energy network proposal that meets PURA's parameters for the program.

Pilot Component

The bill requires PURA to create a pilot component within the program that requires each gas company to file proposals for one or two pilot projects to develop networks that meet PURA's program parameters. It requires PURA to review proposals based on the program parameters and the project's ability to provide insights into the potential for (1) scaling up future network deployment in the state, (2) improving network performance, and (3) reducing the cost to deploy networks more broadly.

Rate Structures, Cost Recovery, and Other Obligations

Under the bill, PURA must require any network projects submitted to the program to include (1) a proposed rate structure for thermal energy services supplied to network end users and (2) consumer protection plans for end users. The bill allows PURA to approve proposed rate structures if the projected heating and cooling costs for end users is no greater than the costs that would occur had they not participated.

The bill requires PURA to approve a gas company's recovery of prudent costs to develop and build projects under the program through a nonbypassable and fully reconciling component of gas rates for all its customers. It allows a gas company to meet its obligation to furnish adequate service at reasonable rates through an approved project.

Working Group and Study

As part of the program, the bill requires PURA to establish a working group to study thermal energy networks. The working group must include staff from DEEP, the Connecticut Green Bank, gas and electric companies, and nongovernmental environmental organizations.

The bill requires PURA to do at least one study through the working group to assess the potential breadth of thermal energy network deployment in the state. The study must address (1) technical and economic feasibility; (2) deployment strategies to maximize the scope and minimize and equitably allocate network costs, including systematically identifying significant waste heat sources across the state; (4) deployment considerations; and (5) appropriate parameters for broader deployment in the near and medium term.

The study's economic feasibility analysis must consider the potential for the following:

 reduced (a) energy costs for customers who are off-takers of the system, (b) network capital costs as deployment scale increases, and (c) capital and operating costs as thermal energy networks are connected;

- 2. avoided costs of expanding and maintaining the gas distribution system;
- 3. minimized costs of expanding the electricity distribution system to facilitate increased electrification of thermal loads;
- 4. reduced per-kilowatt-hour costs to supply electricity as more electricity is sold;
- 5. available state and federal financial incentives;
- 6. employing gas utility workers and advancing their skills;
- 7. providing gas utility companies a business model that is not dependent on continued fossil fuel combustion; and
- 8. air quality improvement.

The study must consider deployment in low- and moderate-income communities, environmental justice communities, new residential and commercial buildings versus retrofitting, urban versus rural communities, areas with existing gas services versus areas without, and ownership and business models.

The study's consideration for appropriate parameters for broader deployment must include the following:

- 1. site selection,
- 2. network design,
- 3. interactions with and impacts on the gas and electric distribution system,
- 4. ratepayer and consumer protections,
- 5. billing models,
- 6. data collection, and

7. community engagement and deployment in low- and moderateincome communities and environmental justice communities.

EFFECTIVE DATE: Upon passage

Background — Related Bill

sHB 5004, § 16, favorably reported by the Environment Committee, also requires PURA to establish a utility-scale renewable thermal energy network program, including a pilot component, working group, and study.

§ 8 — EMERGENCY SERVICE RESTORATION PLANNING COMMITTEES

Requires utilities and other companies to form emergency service restoration planning committees with line and restoration crew members to prepare their emergency restoration plan and expands the plan's required contents

The bill requires each company, provider, or utility required under existing law to submit a service restoration plan (see *Background – Service Restoration Plans*) to establish an emergency service restoration planning committee to prepare the plan. By law, the plan generally includes ways to communicate and coordinate with officials and participate in training exercises.

The bill requires at least half the committee's members to be line and restoration crew members employed by the company, provider, or utility. The line and crew members must select committee members through a process they determine, unless they belong to a collective bargaining unit, in which case the bargaining unit selects the members. The company, provider, or utility appoints the remaining committee members.

Under the bill, the planning committee has two co-chairpersons: one who is a line and crew member elected by line and crew members on the committee and one who is elected by the other members. A majority of members constitutes a quorum to transact committee business, and decisions are made by a majority vote of members present at any meeting. The bill requires the planning committee to (1) take minutes at each meeting; (2) make them available to any company, utility, or provider employee upon request; and (3) submit them upon request to PURA and the Department of Emergency Services and Public Protection (DESPP).

The bill also expands the required contents of a service restoration plan to include measures to protect the health and safety of (1) line and restoration crews during an emergency and when restoring service, including providing appropriate personal protective equipment, and (2) household and community members during an emergency and during service restoration. The plan must also have a training and skills plan for line and restoration workers.

If the company, provider, or utility's line and restoration crew members belong to a collective bargaining unit, the bill requires the company, provider, or utility and the collective bargaining unit to jointly develop the training and skills plan.

Background — Service Restoration Plans

Existing law requires utilities and certain other companies to file and update plans to restore service interrupted by an emergency (e.g., hurricane, storm, flood, and enemy attack) with PURA, DESPP, and each municipality in the company's service area. Specifically, this requirement applies to:

- 1. EDCs, gas, telephone, pipeline, sewage, and water companies that own, lease, maintain, operate, manage, or control plants or equipment;
- 2. telecommunications companies that install, maintain, operate, or control poles, wires, conduits, or other fixtures under or over a public highway to provide telecommunications services;
- 3. voice over internet protocol service providers; and
- 4. municipal utilities that provide electric, gas, or water service.

Certain water companies are exempt from the requirement if they

submit a water supply plan under a separate law.

EFFECTIVE DATE: October 1, 2025

§§ 9 & 10 — LINEWORKER AND RESTORATION CREW MEMBER SAFETY

Prohibits EDCs from requiring line and restoration crew members to work in unsafe conditions or retaliating against them for not restoring service within 96 hours

Existing law (1) requires EDCs to make certain payments to residential customers for prolonged outages after an emergency (e.g., a storm, flood, or earthquake) and (2) prohibits them from recovering these costs through rates. Specifically, it requires EDCs to give a (1) \$25 credit for each day an outage occurs for more than 96 consecutive hours after an emergency and (2) \$250 payment for food or medication that spoils due to an outage lasting more than 96 consecutive hours after an emergency.

The bill prohibits EDCs from requiring line and restoration crew members to work in unsafe conditions to avoid making these credits and payments. It further prohibits them from disciplining, terminating, withholding wages from, or otherwise retaliating against line and restoration crew members for failing to restore service within the 96hour period.

EFFECTIVE DATE: October 1, 2025

§ 11 — PURA PROCEEDING ON MEDICAL HARDSHIP CUSTOMERS

Requires PURA to evaluate service termination protections for medical hardship customers and report to the Energy and Technology Committee by February 4, 2026

The bill requires PURA to evaluate the criteria and standards related to appropriate service termination protections for gas company or EDC customers with a serious illness or life-threatening medical condition.

Under the bill, PURA must, by July 1, 2025, open an uncontested proceeding or amend the notice of an active proceeding to do this evaluation to review protections for these customers and make recommendations on the appropriate standards for conditioning protections to them on their ability to pay. The evaluation must also assess the following:

- 1. whether additional notice requirements before shutoff would be appropriate for the customers,
- 2. the current procedures and practices and the relevant information collected to verify hardship status,
- 3. ratepayer impacts, and
- 4. the requirement for these customers to enroll in a payment plan.

The bill requires PURA to submit a report to the Energy and Technology Committee by February 4, 2026, with a summary of the proceeding's results, recommendations on service termination policies, and procedures evaluated in the proceeding.

EFFECTIVE DATE: Upon passage

COMMITTEE ACTION

Energy and Technology Committee

Joint Favorable Substitute Yea 17 Nay 8 (03/13/2025)