



General Assembly

**Substitute Bill No. 463**

February Session, 2010

\* SB00463APP\_\_042610\_\_ \*

**AN ACT CONCERNING FINANCING OF ENERGY EFFICIENCY AND RENEWABLE ENERGY.**

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

1 Section 1. (NEW) (*Effective from passage*) (a) As used in this section:

2 (1) "Eligible entities" means (A) any residential, commercial,  
3 institutional or industrial customer of an electric distribution company  
4 or natural gas company, as defined in section 16-1 of the general  
5 statutes, as amended by this act, who employs or installs an eligible in-  
6 state energy savings technology, (B) an energy service company  
7 certified as a Connecticut electric efficiency partner by the Department  
8 of Public Utility Control, or (C) an installer certified by the Renewable  
9 Energy Investments Fund;

10 (2) "Energy savings infrastructure" means tangible equipment,  
11 installation, labor, cost of engineering, permits, application fees and  
12 other reasonable costs incurred by eligible entities for operating  
13 eligible in-state energy savings technologies designed to reduce  
14 electricity consumption, natural gas consumption, heating oil  
15 consumption or to promote renewable energy technologies or  
16 combined heat and power systems; and

17 (3) "Eligible in-state energy savings technologies" means Class I  
18 renewable energy sources, as defined in section 16-1 of the general

19 statutes, as amended by this act, solar hot water technologies for  
20 domestic hot water only, combined heat and power systems with an  
21 engineered efficiency rating of not less than sixty per cent, and energy  
22 conservation and load management technologies that reduce energy  
23 consumption, including, but not limited to, heating oil, natural gas and  
24 electricity consumption. Such technologies may include, but not be  
25 limited to, high efficiency insulation and windows, boilers and  
26 furnaces, commercial burners, high efficiency heating, ventilating and  
27 cooling systems and electric energy savings investments and shall be  
28 installed and operated within Connecticut.

29 (b) Each electric distribution company shall establish an energy  
30 savings infrastructure loan program to provide \_\_\_\_ interest loans to  
31 eligible entities for investments in energy savings infrastructure  
32 through the purchase of eligible in-state energy savings technologies.  
33 Each such company shall establish such program for its service  
34 territory. Such company shall establish an entity to administer such  
35 program within the division or department of each company having  
36 cognizance of financial management. Each such division or  
37 department shall work with in-state banks and investment  
38 organizations to establish private sector funding opportunities.

39 (c) To qualify for a loan, eligible entities shall meet the following  
40 requirements:

41 (1) For boilers and furnaces, the existing boiler or furnace shall be  
42 not less than seven years old with an efficiency rating of not more than  
43 seventy-five per cent and the new boiler or furnace shall have an  
44 efficiency rating of not less than eighty-four per cent if oil-fired and not  
45 less than ninety per cent if gas-fired;

46 (2) For combined heat and power systems, that the system  
47 optimizes fossil fuel consumption for generating electricity and  
48 simultaneous thermal energy for space heating, space cooling or  
49 process manufacturing requirements;

50 (3) For Class I renewable energy resources, that such technologies

51 will reduce demand on the grid or fossil fuel consumption; and

52 (4) For energy conservation and load management technologies,  
53 that energy saving measures were reviewed and certified by a licensed  
54 contractor with a state license held in good standing.

55 (d) Eligible entities seeking a loan under the loan program  
56 established in this section shall (1) contract with Connecticut-based  
57 licensed contractors, installers or tradesmen for the installation of an  
58 eligible in-state energy savings technology; (2) provide evidence of the  
59 cost of purchase and installation of the eligible in-state energy savings  
60 technology; and (3) periodically provide evidence of the operation and  
61 functionality of the eligible in-state energy savings technology to  
62 ensure that such technology is operating as intended during the term  
63 of the loan. If the electric distribution company determines pursuant to  
64 this subsection that an eligible in-state energy savings technology has  
65 not functioned as intended or designed for more than sixty days, such  
66 loan shall be immediately due in full at the discretion of such electric  
67 distribution company.

68 (e) At the request of an eligible entity, electric distribution  
69 companies and natural gas companies shall provide for repayment of  
70 loans made pursuant to this section as part of the loan recipient's  
71 monthly electric or gas bill. An eligible entity participating in the loan  
72 program established pursuant to this section may transfer their loan to  
73 a subsequent property owner if (1) the loan is current, (2) the eligible  
74 in-state energy savings technology is functioning as intended or  
75 designed, and (3) the new owner agrees to continue to adhere to the  
76 operational parameters of the technology. An eligible entity that  
77 participates in the loan program may pay back the loan principal with  
78 no prepayment penalties. The term of the loan shall be for a period that  
79 shall not exceed the lesser of (A) the estimated period needed to pay  
80 for one hundred twenty-five per cent of the investment through  
81 savings, or (B) the manufacturer's rated useful life of the eligible in-  
82 state energy savings technology.

83 (f) Each electric distribution company shall develop a prescriptive  
84 one-page loan application. Such application shall include, but not be  
85 limited to: (1) Detailed information, specifications and documentation  
86 of the eligible in-state energy technology's installed costs and projected  
87 energy savings, and (2) for requests for loans in excess of one hundred  
88 thousand dollars, certification by a licensed professional engineer with  
89 a state license held in good standing.

90 (g) No single project shall receive a loan for more than one million  
91 dollars and investments in any one eligible in-state energy savings  
92 technology shall not exceed twenty-five per cent of the energy savings  
93 infrastructure loan account, as established in section 2 of this act. Not  
94 less than \_\_\_\_ per cent of each company's loan program shall be  
95 reserved for residential projects and not less than \_\_\_\_ per cent shall be  
96 approved for projects in any one county. Class I renewable energy  
97 resources, as defined in section 16-1 of the general statutes, as  
98 amended by this act, shall receive not less than \_\_\_\_ per cent of  
99 available funds for such loan program, with the following  
100 commitments: (1) \_\_\_\_ per cent for solar photovoltaic installations, and  
101 (2) \_\_\_\_ per cent for fuel cell installations. Combined heat and power  
102 technologies shall receive not less than \_\_\_\_ per cent of available funds  
103 for such loan program. Conservation and load management projects  
104 shall receive not less than \_\_\_\_ per cent of available funds for such loan  
105 program.

106 (h) Each electric distribution company may examine additional  
107 funding resources for the energy savings infrastructure loan program,  
108 including, but not limited to, American Recovery and Reinvestment  
109 Act funds, federally mandated congestion charges, the Renewable  
110 Energy Investments Fund, regional greenhouse gas initiative auction  
111 revenue and forward capacity market revenue.

112 (i) On or before October 1, 2010, each electric distribution company  
113 shall establish a plan that includes procedures and parameters for its  
114 energy savings infrastructure loan program established pursuant to  
115 this section and submit such plan to \_\_\_\_ for approval or modification.

116 The \_\_\_\_ shall approve or modify such plan within thirty days. If the  
117 \_\_\_\_ does not respond within thirty days, the plan shall be deemed to  
118 be approved.

119 (j) On or before January 15, 2011, and annually thereafter, each  
120 electric distribution company shall, in accordance with the provisions  
121 of section 11-4a of the general statutes, report to the joint standing  
122 committee of the General Assembly having cognizance of matters  
123 relating to energy with regard to the energy savings infrastructure loan  
124 program established pursuant to this section and the loans provided  
125 pursuant to such program.

126 Sec. 2. Section 16-245a of the general statutes is repealed and the  
127 following is substituted in lieu thereof (*Effective from passage*):

128 (a) An electric supplier and an electric distribution company  
129 providing standard service or supplier of last resort service, pursuant  
130 to section 16-244c, shall demonstrate:

131 (1) On and after January 1, 2006, that not less than two per cent of  
132 the total output or services of any such supplier or distribution  
133 company shall be generated from Class I renewable energy sources  
134 and an additional three per cent of the total output or services shall be  
135 from Class I or Class II renewable energy sources;

136 (2) On and after January 1, 2007, not less than three and one-half per  
137 cent of the total output or services of any such supplier or distribution  
138 company shall be generated from Class I renewable energy sources  
139 and an additional three per cent of the total output or services shall be  
140 from Class I or Class II renewable energy sources;

141 (3) On and after January 1, 2008, not less than five per cent of the  
142 total output or services of any such supplier or distribution company  
143 shall be generated from Class I renewable energy sources and an  
144 additional three per cent of the total output or services shall be from  
145 Class I or Class II renewable energy sources;

146 (4) On and after January 1, 2009, not less than six per cent of the  
147 total output or services of any such supplier or distribution company  
148 shall be generated from Class I renewable energy sources and an  
149 additional three per cent of the total output or services shall be from  
150 Class I or Class II renewable energy sources;

151 (5) On and after January 1, 2010, not less than seven per cent of the  
152 total output or services of any such supplier or distribution company  
153 shall be generated from Class I renewable energy sources and an  
154 additional three per cent of the total output or services shall be from  
155 Class I or Class II renewable energy sources;

156 (6) On and after January 1, 2011, not less than [eight] seven per cent  
157 of the total output or services of any such supplier or distribution  
158 company shall be generated from Class I renewable energy sources  
159 and an additional three per cent of the total output or services shall be  
160 from Class I or Class II renewable energy sources;

161 (7) On and after January 1, 2012, not less than [nine] seven and one-  
162 half per cent of the total output or services of any such supplier or  
163 distribution company shall be generated from Class I renewable  
164 energy sources and an additional three per cent of the total output or  
165 services shall be from Class I or Class II renewable energy sources;

166 (8) On and after January 1, 2013, not less than [ten] eight per cent of  
167 the total output or services of any such supplier or distribution  
168 company shall be generated from Class I renewable energy sources  
169 and an additional three per cent of the total output or services shall be  
170 from Class I or Class II renewable energy sources;

171 (9) On and after January 1, 2014, not less than [eleven] eight and  
172 one-half per cent of the total output or services of any such supplier or  
173 distribution company shall be generated from Class I renewable  
174 energy sources and an additional three per cent of the total output or  
175 services shall be from Class I or Class II renewable energy sources;

176 (10) On and after January 1, 2015, not less than [twelve and one-half]

177 nine per cent of the total output or services of any such supplier or  
178 distribution company shall be generated from Class I renewable  
179 energy sources and an additional three per cent of the total output or  
180 services shall be from Class I or Class II renewable energy sources;

181 (11) On and after January 1, 2016, not less than [fourteen] nine and  
182 one-half per cent of the total output or services of any such supplier or  
183 distribution company shall be generated from Class I renewable  
184 energy sources and an additional three per cent of the total output or  
185 services shall be from Class I or Class II renewable energy sources;

186 (12) On and after January 1, 2017, not less than [fifteen and one-half]  
187 ten per cent of the total output or services of any such supplier or  
188 distribution company shall be generated from Class I renewable  
189 energy sources and an additional three per cent of the total output or  
190 services shall be from Class I or Class II renewable energy sources;

191 (13) On and after January 1, 2018, not less than [seventeen] ten and  
192 one-half per cent of the total output or services of any such supplier or  
193 distribution company shall be generated from Class I renewable  
194 energy sources and an additional three per cent of the total output or  
195 services shall be from Class I or Class II renewable energy sources;

196 (14) On and after January 1, 2019, not less than [nineteen and one-  
197 half] eleven per cent of the total output or services of any such supplier  
198 or distribution company shall be generated from Class I renewable  
199 energy sources and an additional three per cent of the total output or  
200 services shall be from Class I or Class II renewable energy sources;

201 (15) On and after January 1, 2020, not less than [twenty] eleven and  
202 one-half per cent of the total output or services of any such supplier or  
203 distribution company shall be generated from Class I renewable  
204 energy sources and an additional three per cent of the total output or  
205 services shall be from Class I or Class II renewable energy sources.

206 (b) An electric supplier or electric distribution company may satisfy  
207 the requirements of this section (1) by purchasing certificates issued by

208 the New England Power Pool Generation Information System,  
209 provided the certificates are for (A) energy produced by a generating  
210 unit using Class I or Class II renewable energy sources and the  
211 generating unit is located in the jurisdiction of the regional  
212 independent system operator, or (B) energy imported into the control  
213 area of the regional independent system operator pursuant to New  
214 England Power Pool Generation Information System Rule 2.7(c), as in  
215 effect on January 1, 2006; (2) for those renewable energy certificates  
216 under contract to serve end-use customers in the state on or before  
217 October 1, 2006, by participating in a renewable energy trading  
218 program within said jurisdictions as approved by the Department of  
219 Public Utility Control; or (3) by purchasing eligible renewable  
220 electricity and associated attributes from residential customers who are  
221 net producers.

222 (c) Any supplier who provides electric generation services solely  
223 from a Class II renewable energy source shall not be required to  
224 comply with the provisions of this section.

225 (d) An electric supplier or an electric distribution company shall  
226 base its demonstration of generation sources, as required under  
227 subsection (a) of this section on historical data, which may consist of  
228 data filed with the regional independent system operator.

229 (e) (1) A supplier or an electric distribution company may make up  
230 any deficiency within its renewable energy portfolio within the first  
231 three months of the succeeding calendar year or as otherwise provided  
232 by generation information system operating rules approved by New  
233 England Power Pool or its successor to meet the generation source  
234 requirements of subsection (a) of this section for the previous year.

235 (2) No such supplier or electric distribution company shall receive  
236 credit for the current calendar year for generation from Class I or Class  
237 II renewable energy sources pursuant to this section where such  
238 supplier or distribution company receives credit for the preceding  
239 calendar year pursuant to subdivision (1) of this subsection.

240 (f) The department shall adopt regulations, in accordance with the  
241 provisions of chapter 54, to implement the provisions of this section.

242 (g) (1) Notwithstanding the provisions of this section and section 16-  
243 244c, for periods beginning on and after January 1, 2008, each electric  
244 distribution company may procure renewable energy certificates from  
245 Class I, Class II and Class III renewable energy sources through long-  
246 term contracting mechanisms. The electric distribution companies may  
247 enter into long-term contracts for not more than fifteen years to  
248 procure such renewable energy certificates. The electric distribution  
249 companies shall use any renewable energy certificates obtained  
250 pursuant to this section to meet their standard service and supplier of  
251 last resort renewable portfolio standard requirements.

252 (2) On or before July 1, 2007, the department shall initiate a  
253 contested case proceeding to examine whether long-term contracts  
254 should be used to procure Class I, Class II and Class III certificates. In  
255 such examination, the department shall determine (A) the impact of  
256 such contracts on price stability, fuel diversity and cost; (B) the method  
257 and timing of crediting of the procurement of renewable energy  
258 certificates against the renewable portfolio standard purchase  
259 obligations of electric suppliers and the electric distribution companies  
260 pursuant to subsection (a) of this section; (C) the terms and conditions,  
261 including reasonable performance assurance commitments, that may  
262 be imposed on entities seeking to supply renewable energy certificates;  
263 (D) the level of one-time compensation, not to exceed one mill per  
264 kilowatt hour of output and services associated with the renewable  
265 energy certificates purchased pursuant to this subsection, which may  
266 be payable to the electric distribution companies for administering the  
267 procurement provided for under this subsection and recovered as part  
268 of the generation services charge or through an appropriate  
269 nonbypassable rate component on customers' bills; (E) the manner in  
270 which costs for such program may be recovered from electric  
271 distribution company customers; and (F) any other issues the  
272 department deems appropriate. Revenues from such compensation  
273 shall not be included in calculating the electric distribution companies'

274 earnings to determine if rates are just and reasonable, for earnings  
275 sharing mechanisms or for purposes of sections 16-19, 16-19a and 16-  
276 19e.

277 (3) On or before October 1, 2010, each electric distribution company  
278 shall determine (A) the cost of a certain percentage of each electric  
279 supplier and electric distribution company's total output or services of  
280 any such supplier or company from Class I renewable energy sources,  
281 (B) the manner in which such supplier or company shall recover such  
282 cost from customers, and (C) the manner in which such supplier or  
283 company will deposit such amount into an energy savings  
284 infrastructure account, which shall be a separately held account. The  
285 costs determined pursuant to subparagraph (A) of this subdivision  
286 shall be the present day value pursuant to subdivision (4) of this  
287 subsection for the following percentages: (i) In 2011, one per cent; (ii)  
288 in 2012, one and one-half per cent; (iii) in 2013, two per cent; (iv) in  
289 2014, two and one-half per cent; (v) in 2015, three and one-half per  
290 cent; (vi) in 2016, four and one-half per cent; (vii) in 2017, five and one-  
291 half per cent; (viii) in 2018, six and one-half per cent; (ix) in 2019, seven  
292 and one-half per cent; and (x) in 2020, eight and one-half per cent.

293 (4) Each electric distribution company shall determine the present  
294 day value of the costs determined pursuant to subdivision (3) of this  
295 subsection shall be no less than \_\_\_ dollars per megawatt hour and  
296 shall not exceed the noncompliance penalty value and submit such  
297 determination to the Department of Public Utility Control for  
298 approval. Once approved, such mount shall be transferred into a  
299 separately held account pursuant to said subdivision (3).

300 Sec. 3. Section 16-243i of the general statutes is repealed and the  
301 following is substituted in lieu thereof (*Effective from passage*):

302 (a) The Department of Public Utility Control shall, not later than  
303 January 1, 2006, establish a program to grant awards to retail end use  
304 customers of electric distribution companies to fund the capital costs of  
305 obtaining projects of customer-side distributed resources, as defined in

306 section 16-1, as amended by this act. Any project shall receive a one-  
307 time, nonrecurring award in an amount of [not less than] two hundred  
308 dollars [and not more than five hundred dollars] per kilowatt of  
309 capacity for such customer-side distributed resources, recoverable  
310 from federally mandated congestion charges, as defined in section 16-  
311 1, as amended by this act. [No such award may be made unless the  
312 projected reduction in federally mandated congestion charges  
313 attributed to the project for such distributed resources is greater than  
314 the amount of the award. The amount of an award shall depend on the  
315 impact that the customer-side distributed resources project has on  
316 reducing federally mandated congestion charges, as defined in section  
317 16-1. Not later than October 1, 2005, the department shall conduct a  
318 contested case proceeding, in accordance with chapter 54, to establish  
319 additional standards for the amount of such awards and additional  
320 criteria and the process for making such awards.]

321 (b) The Department of Public Utility Control shall, not later than  
322 January 1, 2006, establish a program to grant to an electric distribution  
323 company a one-time, nonrecurring award to educate, assist and  
324 promote investments in customer-side distributed resources  
325 developed in such company's service territory; [, which resources the  
326 department determines will reduce federally mandated congestion  
327 charges, in accordance with the following:] (1) On or before January 1,  
328 [2008] 2011, two hundred fifty dollars per kilowatt of such resources,  
329 (2) on or before January 1, [2009] 2012, one hundred [fifty] forty dollars  
330 per kilowatt of such resources, (3) on or before January 1, [2010, one  
331 hundred] 2013, thirty dollars per kilowatt of such resources, and (4)  
332 [fifty] twenty-five dollars per kilowatt of such resources thereafter.  
333 Payment of the award shall be made at the time each such resource  
334 becomes operational. The cost of the award shall be recoverable from  
335 federally mandated congestion charges. Revenues from such awards  
336 shall not be included in calculating the electric distribution company's  
337 earnings for the purpose of determining whether its rates are just and  
338 reasonable under sections 16-19, 16-19a and 16-19e.

339 Sec. 4. Subdivision (44) of subsection (a) of section 16-1 of the 2010

340 supplement to the general statutes is repealed and the following is  
341 substituted in lieu thereof (*Effective from passage*):

342 (44) "Class III source" means the electricity output from combined  
343 heat and power systems with an operating efficiency level of no less  
344 than fifty per cent, determined quarterly on a rolling annual average  
345 basis, that are part of customer-side distributed resources developed at  
346 commercial and industrial facilities in this state on or after January 1,  
347 2006, a waste heat recovery system installed on or after April 1, 2007,  
348 that produces electrical or thermal energy by capturing preexisting  
349 waste heat or pressure from industrial or commercial processes, or the  
350 electricity savings created in this state from conservation and load  
351 management programs begun on or after January 1, 2006;

352 Sec. 5. Subsection (a) of section 16-243q of the general statutes is  
353 repealed and the following is substituted in lieu thereof (*Effective from*  
354 *passage*):

355 (a) On and after January 1, 2007, each electric distribution company  
356 providing standard service pursuant to section 16-244c and each  
357 electric supplier as defined in section 16-1 shall demonstrate to the  
358 satisfaction of the Department of Public Utility Control that not less  
359 than one per cent of the total output of such supplier or such standard  
360 service of an electric distribution company shall be obtained from  
361 Class III sources. On and after January 1, 2008, not less than two per  
362 cent of the total output of any such supplier or such standard service of  
363 an electric distribution company shall, on demonstration satisfactory to  
364 the Department of Public Utility Control, be obtained from Class III  
365 sources. On or after January 1, 2009, not less than three per cent of the  
366 total output of any such supplier or such standard service of an electric  
367 distribution company shall, on demonstration satisfactory to the  
368 Department of Public Utility Control, be obtained from Class III  
369 sources. On and after January 1, 2010, not less than four per cent of the  
370 total output of any such supplier or such standard service of an electric  
371 distribution company shall, on demonstration satisfactory to the  
372 Department of Public Utility Control, be obtained from Class III

373 sources. Electric power obtained from customer-side distributed  
374 resources that does not meet air and water quality standards of the  
375 Department of Environmental Protection is not eligible for purposes of  
376 meeting the percentage standards in this section. Notwithstanding  
377 section 16-243t, the number of Class III credits supplied by programs  
378 supported by the Energy Conservation and Load Management Fund  
379 shall not constitute more than twenty-five per cent of the requirements  
380 for any calendar year, as set forth in this section, for any electric  
381 supplier or electric distribution company providing standard service  
382 based on the prior calendar year's load in megawatt hours.

383 Sec. 6. (NEW) (*Effective from passage*) (a) As used in this section:

384 (1) "Energy improvements" means any renovation or retrofitting of  
385 qualifying real property to reduce energy consumption or installation  
386 of a renewable energy system to service qualifying real property, and

387 (2) "Qualifying real property" means single-family or multifamily  
388 residential dwellings or commercial or industrial buildings that a  
389 municipality has determined can benefit from energy improvements.

390 (b) Any municipality may establish a sustainable energy loan  
391 program for the purpose of financing energy improvements to  
392 qualifying real property located within the municipality.

393 (c) Notwithstanding the provisions of section 7-374 of the general  
394 statutes or any other public or special act that limits or imposes  
395 conditions on municipal bond issues, any municipality that establishes  
396 a sustainable energy loan program under this section may issue bonds,  
397 as necessary, for the purpose of (1) offering loans to the owners of  
398 qualifying real property within the municipality to finance energy  
399 improvements, (2) related energy audits, and (3) renewable energy  
400 system feasibility studies and the verification of the installation of such  
401 improvements. Such funds may also be used in a guarantee or loan  
402 loss reserve to support loans from other sources, including, but not  
403 limited to, private sources.

404 (d) Before establishing a program under this section, the  
405 municipality shall provide notice to the electric distribution company,  
406 as defined in section 16-1 of the general statutes, that services the  
407 municipality.

408 (e) If the owner of record of qualifying real property requests a loan  
409 under this section, the municipality implementing the sustainable  
410 energy loan program shall:

411 (1) Require performance of an energy audit or renewable energy  
412 system feasibility analysis on the qualifying real property before  
413 approving a loan;

414 (2) Enter into a loan agreement with the owner and any other  
415 person benefited by the loan in a principal amount sufficient to pay the  
416 costs of energy improvements the municipality determines will benefit  
417 the qualifying real property and the borrowers, the costs of the energy  
418 audit and any associated costs;

419 (3) Impose requirements to ensure that the loan is consistent with  
420 the purpose of the program; and

421 (4) Impose requirements and conditions on loans to ensure timely  
422 repayment.

423 (f) Any loan made under the sustainable energy loan program shall  
424 be repaid over a term not to exceed the calculated payback period for  
425 the installed energy improvements, as determined by the municipality,  
426 and shall have no prepayment penalty. The municipality shall set a  
427 fixed rate of interest for the repayment of the principal amount of each  
428 loan at the time the loan is made. Such interest rate shall be sufficient  
429 to pay the financing costs of the program, including loan  
430 delinquencies.

431 (g) Any municipality implementing a sustainable energy loan  
432 program may:

433 (1) Secure the loan with a lien on the benefited qualifying real

434 property;

435 (2) Assess the benefited qualifying real property for the amounts  
436 due under a loan agreement;

437 (3) Collect loan payments through a charge on the real property  
438 benefitted by such loan. Such charge shall be on the real property and  
439 shall be levied and collected at the same time and in the same manner  
440 as municipal taxes, provided such charge shall be separately listed on  
441 the tax bill; and

442 (4) Secure a loan in any other manner that the municipality  
443 determines reasonable subject to the criteria established pursuant to  
444 this section.

445 Sec. 7. (NEW) (*Effective from passage*) (a) For purposes of this section,  
446 "municipal and state energy efficiency and improvement program"  
447 means the coordinated effort between an electric distribution company  
448 and customers operating municipal and state facilities that provides  
449 for the development, installation and recovery of energy efficiency  
450 equipment and systems at such facilities as approved by the  
451 Department of Public Utility Control.

452 (b) Notwithstanding section 16-245m of the general statutes, to  
453 facilitate the promotion of energy efficiency and other improved  
454 energy end uses and to lower annual energy costs at municipal and  
455 state facilities, an electric distribution company, upon application to  
456 the department, may offer a municipal and state energy efficiency and  
457 improvement program to its municipal and state customers to improve  
458 the energy usage profile of such facilities to maximize potential  
459 conservation and energy efficiency opportunities. Such program shall  
460 establish arrangements between the electric distribution company and  
461 such customers that provides for savings for such facilities in energy  
462 costs and repayment of the entire cost of the program through a  
463 customer-specific facilities charge, provided any such arrangement  
464 shall be funded up to one hundred per cent by the electric distribution  
465 company. Notwithstanding any provision of the general statutes,

466 customers operating municipal or state facilities may negotiate and  
467 enter into arrangements with an electric distribution company in  
468 which service territory such facility resides if such arrangements are  
469 pursuant to a municipal and state energy efficiency and improvement  
470 program developed pursuant to this section. The department shall  
471 approve an application for a program not later than sixty days after its  
472 submittal. The provisions of section 16-43 of the general statutes shall  
473 not apply to this program.

474 (c) The municipal and state energy efficiency and improvement  
475 program shall include, but not be limited to, development and  
476 installation of energy efficiency measures and equipment, fuel cells,  
477 thermal storage, high efficiency boilers and burners, controls and  
478 monitoring equipment, renewable or emergency generation, and  
479 combined heat and power systems. An electric distribution company  
480 shall use local contractors, service companies and installers to assist in  
481 the development and installation of technologies at such facilities to  
482 the extent practical and economic.

483 (d) An arrangement between an electric distribution company and a  
484 customer operating a municipal or state facility shall provide for  
485 payments from such customer for such facility based on a formula to  
486 calculate monthly charges that provides for full recovery of any  
487 incurred costs, including a return on investment, based on cost-of-  
488 service principles pursuant to section 16-19e of the general statutes.  
489 Such formula shall be subject to approval by the department after a  
490 hearing held in a proceeding or proceedings separate from other  
491 distribution rate proceedings. Once approved, such formula and  
492 facility-specific charges may be adopted and included in each  
493 arrangement. Monthly charges may be designed in a manner that  
494 provide for levelized repayment. Energy efficiency and improvement  
495 projects shall be eligible for any state or federal incentives, grants or  
496 credits, including, but not limited to, those available under programs  
497 administered by the Renewable Energy Investment Board, and any  
498 proceeds realized from such sources shall be used to offset costs for  
499 such facility. Monthly charges may be included in the customer's

500 electric bills for such facility or charged separately.

501 (e) Arrangements between an electric distribution company and a  
502 customer operating a municipal or state facility may not exceed ten  
503 years, provided, if approved by the department or if the arrangement  
504 includes the installation of renewable, emergency or combined heat  
505 and power generation, such arrangement may be for up to twenty  
506 years.

507 (f) An electric distribution company may fund the municipal and  
508 state energy efficiency and improvement program annually at a level  
509 up to one per cent of its total annual revenues for the last calendar year  
510 as reported to the department. An electric distribution company shall  
511 determine the level of annual funding for such program.

512 (g) Commencing in June 2012, and annually thereafter, an electric  
513 distribution company providing services under a municipal and state  
514 facility energy efficiency and improvement program shall provide a  
515 report to the department and the joint standing committee of the  
516 General Assembly having cognizance of matters relating to energy, in  
517 accordance with section 11-4a of the general statutes, on the costs and  
518 savings associated with such program. Any incremental costs  
519 associated with such monitoring and reports shall be recovered  
520 through the systems benefits charge.

521 (h) Notwithstanding any provision of the general statutes, a state  
522 agency responsible for the energy costs of a facility participating in the  
523 program may retain twenty-five per cent of the net savings over the  
524 first three years of the project for such agency's operating budget and  
525 such retention shall not be factored into the state budgeting process for  
526 such agency.

527 Sec. 8. (NEW) (*Effective from passage*) (a) Any residential solar  
528 photovoltaic direct incentive program administered by the Renewable  
529 Energy Investment Fund shall be structured and implemented  
530 pursuant to this section and shall result in a minimum of thirty  
531 megawatts of new residential solar photovoltaic installations on or

532 before December 31, 2021. For the purposes of this section and section  
533 10 of this act, "residential" means dwellings with one to four units.

534 (b) The Renewable Energy Investments Board, through the  
535 Renewable Energy Investment Fund, shall offer direct financial  
536 incentives, in the form of performance-based incentives or expected  
537 performance-based buydowns, for the purchase or lease of qualifying  
538 residential solar photovoltaic systems. For the purposes of this section,  
539 "performance-based incentives" means incentives paid out on a per  
540 kilowatt-hour basis, and "expected performance-based buydowns"  
541 means incentives paid out as a one-time upfront incentive based on  
542 expected system performance. The Renewable Energy Investments  
543 Board shall consider willingness to pay studies and verified solar  
544 photovoltaic system characteristics, such as operational efficiency, size,  
545 location, shading and orientation, when determining the type and  
546 amount of incentive.

547 (c) Beginning with the comprehensive plan covering the period  
548 from July 1, 2010, to June 30, 2012, the Renewable Energy Investments  
549 Board shall develop and publish in each such plan a proposed  
550 schedule for the offering of performance-based incentives or expected  
551 performance-based buydowns over the duration of any such solar  
552 incentive program. Such schedule shall: (1) Provide for a series of solar  
553 capacity blocks the combined total of which shall be a minimum of  
554 thirty megawatts and projected incentive levels for each such block; (2)  
555 provide incentives that decline over time and will foster the sustained,  
556 orderly development of a state-based solar industry; (3) automatically  
557 adjust to the next block once the board has issued reservations for  
558 financial incentives provided pursuant to this section from the  
559 Renewable Energy Investment Fund fully committing the target solar  
560 capacity and available incentives in that block; and (4) provide  
561 comparable economic incentives for the purchase or lease of qualifying  
562 residential solar photovoltaic systems. The Renewable Energy  
563 Investments Board may retain the services of a third-party entity with  
564 expertise in the area of solar energy program design to assist in the  
565 development of the incentive schedule or schedules. The Department

566 of Public Utility Control shall review and approve such schedule.  
567 Nothing in this subsection shall restrict the board from modifying the  
568 approved incentive schedule before the issuance of its next  
569 comprehensive plan to account for changes in federal or state law or  
570 regulation or developments in the solar market when such changes  
571 would affect the expected return on investment for a typical residential  
572 solar photovoltaic system by twenty per cent or more.

573 (d) The Renewable Energy Investments Board shall establish and  
574 periodically update program guidelines, including, but not limited to,  
575 requirements for systems and program participants related to: (1)  
576 Eligibility criteria, (2) standards for deployment of energy efficient  
577 equipment or building practices as a condition for receiving incentive  
578 funding, and (3) procedures to provide reasonable assurance that such  
579 reservations are made and incentives are paid out only to qualifying  
580 residential solar photovoltaic systems demonstrating a high likelihood  
581 of being installed and operated as indicated in application materials.

582 (e) The Renewable Energy Investment Fund shall maintain on its  
583 web site the schedule of incentives, solar capacity remaining in the  
584 current block and available funding and incentive estimators.

585 (f) Funding for the residential performance-based incentive  
586 program and expected performance-based buydowns shall be  
587 apportioned from the moneys collected under the surcharge specified  
588 in section 16-245n of the general statutes, as amended by this act,  
589 provided such apportionment shall not exceed one-third of the total  
590 surcharge collected annually, and supplemented by federal funding as  
591 may become available.

592 (g) The Renewable Energy Investments Board shall identify barriers  
593 to the development of a permanent Connecticut-based solar workforce  
594 and shall make provision for comprehensive training, accreditation  
595 and certification programs through institutions and individuals  
596 accredited and certified to national standards.

597 (h) On or before January 1, 2013, and every two years thereafter for

598 the duration of the program, the Renewable Energy Investments Board  
599 shall report to the joint standing committee of the General Assembly  
600 having cognizance of matters relating to energy on progress toward  
601 the goals identified in subsection (a) of this section.

602 Sec. 9. Section 16-245n of the general statutes is amended by adding  
603 subsection (i) as follows (*Effective from passage*):

604 (NEW) (i) The Renewable Energy Investments Board, through the  
605 Renewable Energy Investment Fund, shall establish funding for  
606 performance-based incentives to qualifying residential solar energy  
607 systems pursuant to section 8 of this act by: (1) Including in its  
608 comprehensive plan for the period July 1, 2010, to June 30, 2012,  
609 inclusive, an estimate of the total funding needed to support the  
610 performance-based incentives to qualifying residential solar energy  
611 systems in its entirety and allocating up to one-third for such purpose,  
612 (2) including in its comprehensive plan for the period July 1, 2012, to  
613 June 30, 2014, inclusive, an estimate of remaining funding needed to  
614 support the outstanding capacity blocks for performance-based  
615 incentives to qualifying residential solar energy systems and allocating  
616 up to one-half of all such funding, (3) carrying forward any funding  
617 allocated to support performance-based incentives pursuant to  
618 subdivision (1) or (2) of this subsection disbursed during the two-year  
619 period covered by the comprehensive plan for the same purpose until  
620 all capacity blocks have been filled, (4) allocating the balance of the  
621 funding as necessary, and (5) monitoring the status of available funds  
622 and expected demand and including such assessment in its annual  
623 report to the Department of Public Utility Control pursuant to  
624 subsection (f) of section 8 of this act.

625 Sec. 10. (NEW) (*Effective from passage*) (a) Commencing on January 1,  
626 2011, and within the period established in subsection (a) of section 11  
627 of this act, each electric distribution company shall solicit and file with  
628 the Department of Public Utility Control for its approval, one or more  
629 long-term power purchase contracts with owners or developers of  
630 customer-sited, nonresidential solar photovoltaic generation projects

631 located in this state that are less than two thousand kilowatts in size,  
632 located on the customer side of the revenue meter and connected to the  
633 distribution system of the electric distribution company. For purposes  
634 of this subsection, "nonresidential" shall include all utility retail rate  
635 classes with the exception of residential, as defined in subsection (a) of  
636 section 8 of this act.

637 (b) Solicitations conducted by the electric distribution company  
638 shall be for the purchase of solar renewable energy credits produced  
639 by eligible nonresidential, customer-sited solar photovoltaic generating  
640 projects over the duration of the long-term contract. For purposes of  
641 this section, a long-term contract is a contract for a minimum of fifteen  
642 years. The electric distribution company may solicit proposals for a  
643 combination of renewable energy and associated solar renewable  
644 energy credits.

645 (c) The aggregate procurement of solar renewable energy credits by  
646 electric distribution companies pursuant to this section shall be no less  
647 than four million three hundred fifty thousand. The production of a  
648 megawatt hour of electricity from a nonresidential Class I solar  
649 renewable energy source first placed in service on or after the effective  
650 date of this section shall create one solar renewable energy credit. The  
651 obligation to purchase solar renewable energy credits shall be  
652 apportioned to electric distribution companies based on their  
653 respective distribution system loads at the commencement of the  
654 procurement period, as determined by the department.

655 (d) Notwithstanding subdivision (1) of subsection (j) of section 16-  
656 244c of the general statutes, an electric distribution company may  
657 retire the solar renewable energy credits it procures through long-term  
658 contracting to satisfy its obligation pursuant to section 16-245a of the  
659 general statutes, as amended by this act.

660 (e) Nothing in this section shall preclude the resale or other  
661 disposition of energy or associated solar renewable energy credits  
662 purchased by the electric distribution company, provided the

663 distribution company shall net the cost of payments made to projects  
664 under the long-term contracts against the proceeds of the sale of  
665 energy or solar renewable energy credits and the difference shall be  
666 credited or charged to distribution customers through a reconciling  
667 component of electric rates as determined by the department.

668 Sec. 11. (NEW) (*Effective from passage*) (a) Each electric distribution  
669 company shall, not later than one hundred eighty days after the  
670 effective date of this section, propose a ten-year solar solicitation plan  
671 that shall include a timetable and methodology for soliciting proposals  
672 for long-term solar renewable energy credits or energy contracts from  
673 in-state generators. The electric distribution company's solar  
674 solicitation plan shall be subject to the review and approval of the  
675 Department of Public Utility Control, provided contracts comprising  
676 no less than twenty-five per cent of the electric distribution company's  
677 obligation shall be submitted for department approval on or before  
678 January 1, 2012, no less than fifty per cent of such obligation shall be  
679 submitted for such approval on or before July 1, 2014, and no less than  
680 seventy-five per cent of such obligation shall be submitted for such  
681 approval on or before July 1, 2016.

682 (b) The electric distribution company's approved solar solicitation  
683 plan shall be designed to foster a diversity of solar project sizes and  
684 participation among all eligible customer classes subject to cost-  
685 effectiveness considerations. Separate procurement processes shall be  
686 conducted for (1) nonresidential systems between ten kilowatts and  
687 fifty kilowatts, and (2) nonresidential systems greater than fifty  
688 kilowatts but less than two thousand kilowatts. The department shall  
689 give preference to competitive bidding for resources of more than fifty  
690 kilowatts, unless the department determines that an alternative  
691 methodology is in the best interests of the electric distribution  
692 company's customers and the development of a competitive and self-  
693 sustaining solar market. Systems up to fifty kilowatts in size shall be  
694 eligible to receive a solar renewable energy credit price equivalent to  
695 the highest accepted bid price in the most recent solicitation for  
696 systems greater than fifty kilowatts but less than two thousand

697 kilowatts, plus an additional incentive of ten per cent.

698 (c) Each electric distribution company shall execute its approved  
699 ten-year solicitation plan and submit for department review and  
700 approval its preferred solar procurement plan comprised of any  
701 proposed contract or contracts with independent solar developers.

702 (d) The department shall hold a hearing that shall be conducted as  
703 an uncontested case, in accordance with the provisions of chapter 54 of  
704 the general statutes, to approve, reject or modify an application for  
705 approval of the electric distribution company's solar procurement  
706 plan. The department shall only approve such proposed plan if the  
707 department finds that (1) the solicitation and evaluation conducted by  
708 the electric distribution company was the result of a fair, open,  
709 competitive and transparent process; (2) approval of the solar  
710 procurement plan would result in the greatest expected ratepayer  
711 value from solar energy or solar renewable energy credits at the lowest  
712 reasonable cost; and (3) such procurement plan satisfies other criteria  
713 established in the approved solicitation plan. The department shall not  
714 approve any proposal made under such plan unless it determines that  
715 the plan and proposals encompass all foreseeable sources of revenue  
716 or benefits and that such proposals, together with such revenue or  
717 benefits, would result in the greatest expected ratepayer value from  
718 solar energy or solar renewable energy credits. The department may,  
719 in its discretion, retain the services of an independent consultant with  
720 expertise in the area of energy procurement. The independent  
721 consultant shall be unaffiliated with the electric distribution company  
722 or its affiliates and shall not, directly or indirectly, have benefited from  
723 employment or contracts with the electric distribution company or its  
724 affiliates in the preceding five years, except as an independent  
725 consultant. For purposes of such audit, the electric distribution  
726 company shall provide the independent consultant immediate and  
727 continuing access to all documents and data reviewed, used or  
728 produced by the electric distribution company in its bid solicitation  
729 and evaluation process. The electric distribution company shall make  
730 all its personnel, agents and contractors used in the bid solicitation and

731 evaluation available for interview by the consultant. The electric  
732 distribution company shall conduct any additional modeling  
733 requested by the independent auditor to test the assumptions and  
734 results of the bid evaluation process. The independent consultant shall  
735 not participate in or advise the electric distribution company with  
736 respect to any decisions in the bid solicitation or bid evaluation  
737 process. The department's administrative costs in reviewing the  
738 electric distribution company's solar procurement plan and the costs of  
739 the consultant shall be recovered through a reconciling component of  
740 electric rates as determined by the department.

741 (e) The electric distribution company shall be entitled to recover its  
742 reasonable costs of complying with its approved solar procurement  
743 plan through a reconciling component of electric rates as determined  
744 by the department.

745 (f) If, by January 1, 2012, the department has not received proposed  
746 long-term solar renewable energy credit contracts consisting of at least  
747 twenty-five per cent of each electric distribution company's  
748 procurement obligation or by July 1, 2014, has not received proposed  
749 long-term solar renewable energy contracts consisting of at least fifty  
750 per cent of each electric distribution company's procurement  
751 obligation, or by July 1, 2016, has not proposed long-term solar  
752 renewable energy contracts consisting of at least seventy-five per cent  
753 of each electric distribution company's procurement obligation,  
754 respectively, the department shall notify the electric distribution  
755 company and the Renewable Energy Investments Board of the  
756 shortfall. Unless, upon petition by the electric distribution company,  
757 the department grants the distribution company an extension not to  
758 exceed ninety days to correct this deficiency, the Renewable Energy  
759 Investments Board shall issue one or more requests for proposals to  
760 address the shortfall. The board shall perform an initial review of each  
761 proposal, examine the financial and technical viability of each proposal  
762 and analyze project costs and benefits for the purpose of selecting  
763 projects that will promote the provision of long-term solar renewable  
764 energy contracts. Upon selection of the projects, the board shall

765 forward such projects to each electric distribution company for review.  
766 For each project, each electric distribution company shall analyze the  
767 interconnection point and costs related thereto, reliability and other  
768 impacts of such project to determine whether the project will promote  
769 the provision of additional long-term solar renewable energy contracts.  
770 Each electric distribution company shall provide the results of its  
771 analysis to the department, which shall conduct a proceeding to  
772 determine whether to approve or reject each project. The reasonable  
773 administrative costs associated with the procurement of long-term  
774 solar renewable energy contracts shall be collected by the distribution  
775 company, maintained in a separate interest-bearing account and  
776 disbursed to the Renewable Energy Investment Fund on a quarterly  
777 basis.

778 (g) Not later than sixty days after its approval of the distribution  
779 company procurement plans submitted on or before January 1, 2012,  
780 the department shall submit a report to the joint standing committee of  
781 the General Assembly having cognizance of matters relating to energy.  
782 The report shall document for each distribution company procurement  
783 plan: (1) The total number of solar renewable energy credits bid  
784 relative to the number of solar renewable energy credits requested by  
785 the distribution company; (2) the total number of bidders in each  
786 market segment; (3) the number of contracts awarded; and (4) the total  
787 weighted average price of the solar renewable energy credits or energy  
788 so purchased. The department shall not report individual bid  
789 information or other proprietary information.

790 Sec. 12. (NEW) (*Effective from passage*) (a) On or before July 1, 2011,  
791 the Renewable Energy Investment Fund, in consultation with the  
792 Office of Policy and Management and the Department of Public  
793 Works, shall, within available funding, complete, or cause to be  
794 completed by private vendors, a comprehensive solar feasibility  
795 survey of facilities owned or operated by the state with a load of fifty  
796 kilowatts or more. The survey shall rank state-owned or operated  
797 facilities based on their technical feasibility to accommodate solar  
798 photovoltaic generating systems by considering such factors as: (1) On-

799 site energy consumption; (2) building orientation; (3) roof age and  
800 condition; (4) shading and the potential for obstruction to sunlight  
801 over the life of the solar system; (5) structural load capacity; (6)  
802 availability of ancillary facilities, such as parking lots, walkways or  
803 maintenance areas; (7) nonenergy related amenities; and (8) other  
804 factors that the Renewable Energy Investment Fund deems may bear  
805 on the technical feasibility of such solar deployment.

806 (b) The Office of Policy and Management, in consultation with the  
807 Renewable Energy Investment Fund, shall, within available funding,  
808 issue one or more requests for proposals for the deployment of solar  
809 photovoltaic generating systems at state-owned or operated facilities.  
810 Any such request for proposals shall be structured to maximize the  
811 state's ability to secure incentives available from the federal  
812 government or other sources. The Office of Policy and Management  
813 may seek in any request for proposals the services of an entity to  
814 finance, design, construct, own or maintain such solar photovoltaic  
815 system under a long-term solar services agreement. Any such entity  
816 chosen to provide such services shall not be considered a public  
817 service company under section 16-1 of the general statutes.

818 Sec. 13. (NEW) (*Effective from passage*) (a) Each electric distribution  
819 company shall, not later than July 1, 2011, file with the Department of  
820 Public Utility Control for its approval a tariff for production-based  
821 payments to owners or operators of Class I solar renewable energy  
822 source projects located in this state that are not less than one megawatt  
823 and connected directly to the distribution system of an electric  
824 distribution company.

825 (b) Such tariffs shall provide production-based payments for a  
826 period not less than fifteen years from the in-service date of the Class I  
827 solar renewable energy source project at a price that is, at the  
828 determination of the Department of Public Utility Control, a cost-based  
829 payment consisting of the fully allocated cost of constructing and  
830 operating a Class I solar renewable energy source of from one  
831 megawatt to seven and one-half megawatts were such construction

832 and operation to be undertaken or procured by the electric distribution  
833 company itself. In calculating the cost-based tariff, the department  
834 shall consider actual cost data for Class I solar energy sources  
835 constructed and operated by the electric distribution company  
836 pursuant to subsection (e) of this section taking into consideration all  
837 available state and federal incentives.

838 (c) Such tariffs shall include a per project eligibility cap of seven and  
839 one-half megawatts and an aggregate eligibility cap of fifty megawatts,  
840 apportioned among each electric distribution company in proportion  
841 to distribution load.

842 (d) The cost of such tariff payments shall be eligible for inclusion in  
843 any subsequent rates, provided such payments are for projects  
844 operational on or after the effective date of this section, and recovered  
845 through a reconciling component of electric rates as determined by the  
846 department.

847 (e) On and after July 1, 2011, electric distribution companies may  
848 construct, own and operate solar electric generating facilities up to  
849 one-third of their proportional share of the total cap amounts specified  
850 under subsection (c) of this section, provided any such development  
851 shall be phased in over a period of no less than three years. Such  
852 projects shall be located on company-owned properties, brownfields or  
853 other locations identified by the Department of Public Utility Control  
854 for strategic placement of distributed generation. The department, in a  
855 contested case, shall authorize the electric distribution company to  
856 recover in rates its costs to construct, own and operate solar electric  
857 generating facilities, including a reasonable return on its investment, if  
858 such approval would result in a reasonable cost of meeting the solar  
859 energy requirements pursuant to said subsection (c) of this section and  
860 that such investment will not restrict competition or restrict growth in  
861 the state's solar energy industry or unfairly employ in a manner which  
862 would restrict competition in the market for solar energy systems any  
863 financial, marketing, distributing or generating advantage that the  
864 electric distribution company may exercise as a result of its authority

865 to operate as a public service company.

866 (f) Notwithstanding subdivision (1) of subsection (j) of section 16-  
867 244c of the general statutes, the amount of renewable energy produced  
868 from Class I renewable energy sources receiving tariff payments or  
869 included in utility rates under this section shall be applied to reduce  
870 the electric distribution company's Class I renewable energy source  
871 portfolio standard.

872 (g) On or before September 1, 2012, the Department of Public Utility  
873 Control, in consultation with the Office of Consumer Counsel and the  
874 Renewable Energy Investments Board, shall study the operation of  
875 solar renewable energy tariffs and shall report, in accordance with the  
876 provisions of section 11-4a of the general statutes, its findings and  
877 recommendations to the joint standing committee of the General  
878 Assembly having cognizance of matters relating to energy.

879 (h) The department shall suspend the tariff established pursuant to  
880 this section upon the earlier of (1) an electric distribution company  
881 reaching its aggregate cap pursuant to subsection (c) of this section, or  
882 (2) three years from the effective date of the tariff.

883 Sec. 14. (NEW) (*Effective from passage*) The Renewable Energy  
884 Investment Fund and the Conservation and Load Management Fund  
885 shall develop coordinated programs to create a self-sustaining market  
886 for solar thermal systems for electricity, natural gas and fuel oil  
887 customers.

888 Sec. 15. (NEW) (*Effective from passage*) The Renewable Energy  
889 Investment Fund shall provide an additional incentive of up to five per  
890 cent of the then-applicable incentive provided pursuant to sections 8  
891 and 14 of this act for the use of major system components  
892 manufactured or assembled in Connecticut, and another additional  
893 incentive of up to five per cent of the then applicable incentive  
894 provided pursuant to sections 8 and 14 of this act for the use of major  
895 system components manufactured or assembled in a distressed  
896 municipality, as defined in section 32-9p of the general statutes, or a

897 targeted investment community, as defined in section 32-222 of the  
898 general statutes.

899       Sec. 16. (NEW) (*Effective from passage*) (a) For the two-year period  
900 starting January 1, 2011, and ending June 30, 2013, the aggregate net  
901 annual cost recovered for electric ratepayers pursuant to section 8 and  
902 sections 10 to 15, inclusive, of this act and subsection (i) of section 16-  
903 245n of the general statutes, as amended by this act, shall not exceed  
904 one-half of one per cent of total retail electricity sales revenues of each  
905 electric distribution company. For the two-year period starting July 1,  
906 2013, and ending June 30, 2015, the aggregate net annual cost  
907 recovered for electric ratepayers pursuant to section 8 and sections 10  
908 to 15, inclusive, of this act and subsection (i) of section 16-245n of the  
909 general statutes, as amended by this act, shall not exceed three-fourths  
910 of one per cent of total retail electricity sales revenues of each electric  
911 distribution company. For each twelve-month period starting July 1,  
912 2015, and every July first thereafter for the duration of the solar  
913 programs established pursuant to section 8 and sections 10 to 15,  
914 inclusive, of this act and subsection (i) of section 16-245n of the general  
915 statutes, as amended by this act, the aggregate net cost of such  
916 programs recovered for electric ratepayers shall not exceed one per  
917 cent of total retail electricity sales revenues of each electric distribution  
918 company.

919       (b) The Department of Public Utility Control shall net out the  
920 incentives paid by the Renewable Energy Investment Fund pursuant to  
921 section 16-245n of the general statutes, as amended by this act, for solar  
922 deployment programs against the aggregate annual costs identified in  
923 this section.

924       (c) The Department shall report to the joint standing committee of  
925 the General Assembly having cognizance of matters relating to energy  
926 when the annual cost cap is within twenty per cent of being exceeded.  
927 If the department projects that the annual cost cap will be exceeded,  
928 the department may take the following cost mitigation measures: (1)  
929 Delay or modify the development of solar electric generating facilities

930 by electric distribution companies pursuant to subsection (e) of section  
931 13 of this act; (2) temporarily suspend the availability of production-  
932 based incentives to customers not already eligible to receive such  
933 incentives under section 13 of this act; and (3) extend the scheduled  
934 electric distribution company solar renewable energy credit  
935 procurement plans under section 11 of this act. If the department  
936 determines that cost mitigation measures are required, it shall reduce  
937 proportionally the annual funding for the programs identified in  
938 subdivisions (1) to (3), inclusive, of this subsection and only to the  
939 extent required to bring projected annual costs below the cost cap.

940 (d) On or before January 1, 2014, the department shall report to the  
941 joint standing committee of the General Assembly having cognizance  
942 of matters relating to energy on the cost and charges involved in the  
943 implementation of this program, including a cost-benefit analysis.

944 Sec. 17. (NEW) (*Effective July 1, 2010*) For the purposes of this  
945 section, section 16-243h of the general statutes, as amended by this act,  
946 and sections 19 to 22, inclusive, of this act, "eligible combined heat and  
947 power system" means a combined heat and power system installed on  
948 or after the effective date of this section that (1) has a rated electric  
949 generating capacity of no more than one and one-half megawatts, (2)  
950 produces heat to reduce customer fossil fuel usage, including natural  
951 gas or heating oil or both, for space heating or for industrial process  
952 heat requirement, (3) has minimum operating efficiency,  
953 combining operating electrical conversion efficiency plus operating  
954 thermal conversion efficiency, of no less than fifty-five per cent, (4) is  
955 designed to operate at an eighty-five per cent load factor or greater  
956 during the months of November through February, and (5) begins  
957 installation no later than December 31, 2016, and is fully operational by  
958 December 31, 2018. If the system is not intended to be used as a base  
959 load resource from June to September, inclusive, it must be made  
960 available as a resource for the purpose of lowering locational marginal  
961 prices and related system generation charges during such months.

962 Sec. 18. Section 16-243h of the general statutes is repealed and the

963 following is substituted in lieu thereof (*Effective July 1, 2010*):

964 (a) On and after January 1, 2000, each electric supplier or any electric  
965 distribution company providing standard offer, transitional standard  
966 offer, standard service or back-up electric generation service, pursuant  
967 to section 16-244c, shall give a credit for any electricity generated by a  
968 customer from a Class I renewable energy source or a hydropower  
969 facility that has a nameplate capacity rating of two megawatts or less  
970 or an eligible combined heat and power system. The electric  
971 distribution company providing electric distribution services to such a  
972 customer shall make such interconnections necessary to accomplish  
973 such purpose. An electric distribution company, at the request of any  
974 residential customer served by such company and if necessary to  
975 implement the provisions of this section, shall provide for the  
976 installation of metering equipment that (1) measures electricity  
977 consumed by such customer from the facilities of the electric  
978 distribution company, (2) deducts from the measurement the amount  
979 of electricity produced by the customer and not consumed by the  
980 customer, and (3) registers, for each billing period, the net amount of  
981 electricity either (A) consumed and produced by the customer, or (B)  
982 the net amount of electricity produced by the customer. [If] Except as  
983 provided in subsection (b) of this section, in a given monthly billing  
984 period, a customer-generator supplies more electricity to the electric  
985 distribution system than the electric distribution company or electric  
986 supplier delivers to the customer-generator, the electric distribution  
987 company or electric supplier shall credit the customer-generator for  
988 the excess by reducing the customer-generator's bill for the next  
989 monthly billing period to compensate for the excess electricity from the  
990 customer-generator in the previous billing period at a rate of one  
991 kilowatt-hour for one kilowatt-hour produced. The electric distribution  
992 company or electric supplier shall carry over the credits earned from  
993 monthly billing period to monthly billing period, and the credits shall  
994 accumulate until the end of the annualized period. At the end of each  
995 annualized period, the electric distribution company or electric  
996 supplier shall compensate the customer-generator for any excess

997 kilowatt-hours generated, at the avoided cost of wholesale power. A  
998 customer who generates electricity from a generating unit with a  
999 nameplate capacity of more than ten kilowatts of electricity pursuant  
1000 to the provisions of this section shall be assessed for the competitive  
1001 transition assessment, pursuant to section 16-245g and the systems  
1002 benefits charge, pursuant to section 16-245l, based on the amount of  
1003 electricity consumed by the customer from the facilities of the electric  
1004 distribution company without netting any electricity produced by the  
1005 customer. For purposes of this section, "residential customer" means a  
1006 customer of a single-family dwelling or multifamily dwelling  
1007 consisting of two to four units.

1008 (b) In the case of a customer operating an eligible combined heat  
1009 and power system, any excess kWh generated at the end of an annual  
1010 period shall be paid at the average hourly real-time locational marginal  
1011 price for electric generation for all hours during the annual period. Net  
1012 energy billing shall be performed monthly and payments for excess  
1013 sales to the electric distribution company shall be made annually for  
1014 the period from April of each year to March of the following year.

1015 Sec. 19. (NEW) (*Effective July 1, 2010*) The Department of Public  
1016 Utility Control shall develop a program to coordinate the dispatch of  
1017 eligible combined heat and power systems. The department may use a  
1018 third-party entity that has the managerial, technical and financial  
1019 capabilities to operate distributed energy resources for purposes of  
1020 coordinating and managing the ongoing dispatch of these systems for  
1021 market participation. An owner of an eligible combined heat and  
1022 power system who elects to participate in such program who are called  
1023 to dispatch during the months of June through September, shall be  
1024 compensated based on their marginal cost of electricity produced  
1025 during the months of June through September based on the actual  
1026 system input fuel prices paid plus allocated costs of operation and  
1027 maintenance and a return on equity not to exceed that of the electric  
1028 distribution company serving the franchise territory where the system  
1029 is located. All system benefits, including, but not limited to, (1) ISO  
1030 New England load response or price response programs, (2) forward

1031 capacity market payments, (3) reductions in locational marginal price,  
 1032 and (4) reductions in congestion costs for the use of these resources,  
 1033 shall be accrued to the ratepayers of the electric distribution system.

1034       Sec. 20. (NEW) (*Effective July 1, 2010*) The Department of Public  
 1035 Utility Control shall, not later than January 1, 2011, establish a program  
 1036 to grant awards to retail end use customers of electric distribution  
 1037 companies to fund the capital costs of obtaining projects of eligible  
 1038 combined heat and power systems, as defined in section 17 of this act.  
 1039 Any project shall receive a one-time, nonrecurring award in an amount  
 1040 of two hundred dollars per kilowatt of capacity for such system,  
 1041 recoverable from federally mandated congestion charges.

1042       Sec. 21. (NEW) (*Effective July 1, 2010*) On or before January 1, 2011,  
 1043 each electric distribution company shall institute a program to rebate  
 1044 to its customers with projects that use natural gas, which projects are  
 1045 eligible combined heat and power systems, as defined in section 17 of  
 1046 this act, an amount equivalent to the customer's retail delivery charge  
 1047 for transporting natural gas from the customer's local gas company to  
 1048 such customer's project. Costs of such a rebate shall be recoverable by  
 1049 the electric distribution company from the federally mandated  
 1050 congestion charges, as defined in section 16-1 of the general statutes, as  
 1051 amended by this act.

1052       Sec. 22. (NEW) (*Effective July 1, 2010*) The owner of an eligible  
 1053 combined heat and power system, as defined in section 17 of this act,  
 1054 shall (1) be exempt from electric distribution companies for standby  
 1055 and backup service and from that part of the demand charge that  
 1056 reflect prior peak demand, and (2) retain any renewable energy credits  
 1057 generated by the system.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	New section
Sec. 2	<i>from passage</i>	16-245a
Sec. 3	<i>from passage</i>	16-243i

Sec. 4	<i>from passage</i>	16-1(a)(44)
Sec. 5	<i>from passage</i>	16-243q(a)
Sec. 6	<i>from passage</i>	New section
Sec. 7	<i>from passage</i>	New section
Sec. 8	<i>from passage</i>	New section
Sec. 9	<i>from passage</i>	16-245n
Sec. 10	<i>from passage</i>	New section
Sec. 11	<i>from passage</i>	New section
Sec. 12	<i>from passage</i>	New section
Sec. 13	<i>from passage</i>	New section
Sec. 14	<i>from passage</i>	New section
Sec. 15	<i>from passage</i>	New section
Sec. 16	<i>from passage</i>	New section
Sec. 17	<i>July 1, 2010</i>	New section
Sec. 18	<i>July 1, 2010</i>	16-243h
Sec. 19	<i>July 1, 2010</i>	New section
Sec. 20	<i>July 1, 2010</i>	New section
Sec. 21	<i>July 1, 2010</i>	New section
Sec. 22	<i>July 1, 2010</i>	New section

**ET**            *Joint Favorable Subst.*

**APP**          *Joint Favorable*