



# Senate

General Assembly

**File No. 299**

February Session, 2010

Senate Bill No. 324

*Senate, April 6, 2010*

The Committee on Commerce reported through SEN. LEBEAU of the 3rd Dist., Chairperson of the Committee on the part of the Senate, that the bill ought to pass.

## ***AN ACT CONCERNING ENERGY AND THE STATE'S ECONOMY.***

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

1 Section 1. Section 16-243v of the general statutes is repealed and the  
2 following is substituted in lieu thereof (*Effective from passage*):

3 (a) For purposes of this section:

4 (1) "Connecticut electric efficiency partner program" means the  
5 coordinated effort among the Department of Public Utility Control, the  
6 Connecticut Center for Advanced Technology, the Renewable Energy  
7 Investment Fund, electric distribution companies, the Institute for  
8 Sustainable Energy, persons and entities providing enhanced demand-  
9 side management technologies, and electric consumers to conserve  
10 electricity, use electricity more efficiently and reduce demand in  
11 Connecticut through the purchase and deployment of energy efficient  
12 technologies and to promote the development and use of Class I  
13 renewable energy sources, as defined in section 16-1;

14 (2) ["enhanced demand-side management technologies"] "Enhanced  
15 demand-side management technologies" means demand-side  
16 management solutions, customer-side emergency dispatchable  
17 generation resources, customer-side renewable energy generation, load  
18 shifting technologies, [and] conservation and load management  
19 technologies that reduce electric distribution company customers'  
20 electric demand or natural gas or oil consumption, technologies that  
21 manage, optimize or improve the efficiency of electricity usage or the  
22 ability to procure energy more effectively relative to a customer's  
23 specific load characteristics or improve the efficiency or performance  
24 of the electric system, combined heat and power systems, solar thermal  
25 and geothermal systems, Class I renewable sources connected on the  
26 customer side of the meter, and high efficiency natural gas and oil  
27 boilers and furnaces; [and]

28 (3) "Connecticut electric efficiency partner" means an electric  
29 distribution company customer who acquires an enhanced demand-  
30 side management technology or a person, [other than] including an  
31 electric distribution company, that provides enhanced demand-side  
32 management technologies to electric distribution company customers;  
33 and

34 (4) "Energy Innovation Council" means the council established  
35 pursuant to subsection (h) of this section.

36 (b) [The] Until June 1, 2010, the Energy Conservation Management  
37 Board, in consultation with the Renewable Energy Investments  
38 Advisory Committee, shall evaluate and approve enhanced demand-  
39 side management technologies that can be deployed by Connecticut  
40 electric efficiency partners to reduce electric distribution company  
41 customers' electric demand. Such evaluation shall include an  
42 examination of the potential to reduce customers' demand, federally  
43 mandated congestion charges and other electric costs. On or before  
44 October 15, 2007, the Energy Conservation Management Board shall  
45 file such evaluation with the Department of Public Utility Control for  
46 the department to review and approve or to review, modify and

47 approve on or before October 15, 2007.

48 (c) Not later than October 15, 2007, the Energy Conservation  
49 Management Board shall file with the department, for the department  
50 to review and approve or to review, modify and approve, an analysis  
51 of the state's electric demand, peak electric demand and growth  
52 forecasts for electric demand and peak electric demand. Such analysis  
53 shall identify the principal drivers of electric demand and peak electric  
54 demand, associated electric charges tied to electric demand and peak  
55 electric demand growth, including, but not limited to, federally  
56 mandated congestion charges and other electric costs, and any other  
57 information the department deems appropriate. The analysis shall  
58 include, but not be limited to, an evaluation of the costs and benefits of  
59 the enhanced demand-side management technologies approved  
60 pursuant to subsection (b) of this section and establishing suggested  
61 funding levels for said individual technologies.

62 (d) Commencing April 1, 2008, and continuing until the effective  
63 date of this section, any person may apply to the department for  
64 certification and funding as a Connecticut electric efficiency partner.  
65 Such application shall include the technologies that the applicant shall  
66 purchase or provide and that have been approved pursuant to  
67 subsection (b) of this section. In evaluating the application, the  
68 department shall (1) consider the applicant's potential to reduce  
69 customers' electric demand, including peak electric demand, and  
70 associated electric charges tied to electric demand and peak electric  
71 demand growth, (2) determine the portion of the total cost of each  
72 project that shall be paid for by the customer participating in this  
73 program and the portion of the total cost of each project that shall be  
74 paid for by all electric ratepayers and collected pursuant to subsection  
75 (h) of this section. In making such determination, the department shall  
76 ensure that all ratepayer investments maintain a minimum two-to-one  
77 payback ratio, and (3) specify that participating Connecticut electric  
78 efficiency partners shall maintain the technology for a period sufficient  
79 to achieve such investment payback ratio. The annual ratepayer  
80 contribution for projects approved pursuant to this section shall not

81 exceed sixty million dollars. Not less than seventy-five per cent of such  
82 annual ratepayer investment shall be used for the technologies  
83 themselves. No person shall receive electric ratepayer funding  
84 pursuant to this subsection if such person has received or is receiving  
85 funding from the Energy Conservation and Load Management Funds  
86 for the projects included in said person's application. No person shall  
87 receive electric ratepayer funding without receiving a certificate of  
88 public convenience and necessity as a Connecticut electric efficiency  
89 partner by the department. The department may grant an applicant a  
90 certificate of public convenience if it possesses and demonstrates  
91 adequate financial resources, managerial ability and technical  
92 competency. The department may conduct additional requests for  
93 proposals from time to time as it deems appropriate. The department  
94 shall specify the manner in which a Connecticut electric efficiency  
95 partner shall address measures of effectiveness and shall include  
96 performance milestones.

97 [(e) Beginning February 1, 2010, a certified Connecticut electric  
98 efficiency partner may only receive funding if selected in a request for  
99 proposal developed, issued and evaluated by the department. In  
100 evaluating a proposal, the department shall take into consideration the  
101 potential to reduce customers' electric demand including peak electric  
102 demand, and associated electric charges tied to electric demand and  
103 peak electric demand growth, including, but not limited to, federally  
104 mandated congestion charges and other electric costs, and shall utilize  
105 a cost benefit test established pursuant to subsection (c) of this section  
106 to rank responses for selection. The department shall determine the  
107 portion of the total cost of each project that shall be paid by the  
108 customer participating in this program and the portion of the total cost  
109 of each project that shall be paid by all electric ratepayers and collected  
110 pursuant to the provisions of this subsection. In making such  
111 determination, the department shall (1) ensure that all ratepayer  
112 investments maintain a minimum two-to-one payback ratio, and (2)  
113 specify that participating Connecticut electric efficiency partners shall  
114 maintain the technology for a period sufficient to achieve such  
115 investment payback ratio. The annual ratepayer contribution shall not

116 exceed sixty million dollars. Not less than seventy-five per cent of such  
117 annual ratepayer investment shall be used for the technologies  
118 themselves. No Connecticut electric efficiency partner shall receive  
119 funding pursuant to this subsection if such partner has received or is  
120 receiving funding from the Energy Conservation and Load  
121 Management Funds for such technology. The department may conduct  
122 additional requests for proposals from time to time as it deems  
123 appropriate. The department shall specify the manner in which a  
124 Connecticut electric efficiency partner shall address measures of  
125 effectiveness and shall include performance milestones.]

126 (e) On and after the effective date of this section, any person may  
127 apply to the department for a certificate of public convenience and  
128 necessity as a Connecticut electric efficiency partner. Such application  
129 shall include the technologies that the applicant shall provide pursuant  
130 to subsection (i) of this section. The department shall act on any  
131 application not later than thirty days after receipt, and may grant an  
132 applicant a certificate of public convenience if the applicant possesses  
133 and demonstrates adequate financial resources, managerial ability and  
134 technical competency. The department may, with the consent of the  
135 applicant, extend the time for decision on the application by an  
136 additional thirty days if necessary to obtain additional information  
137 regarding the applicant or the technologies. The department may  
138 conduct additional requests for proposals from time to time. No  
139 Connecticut electric efficiency partner shall receive electric ratepayer  
140 funding without receiving a certificate of public convenience and  
141 necessity as a Connecticut electric efficiency partner by the department  
142 pursuant to subsection (d) of this section.

143 (f) [The] Until the effective date of this section, the department may  
144 retain the services of a third party entity with expertise in areas such as  
145 demand-side management solutions, customer-side renewable energy  
146 generation, customer-side distributed generation resources, customer-  
147 side emergency dispatchable generation resources, load shifting  
148 technologies and conservation and load management investments to  
149 assist in the development and operation of the Connecticut electric

150 efficiency partner program. The costs for obtaining third party services  
151 pursuant to this subsection shall be recoverable through the systems  
152 benefits charge.

153 (g) [The] Until the effective date of this section, the department shall  
154 develop a long-term low-interest loan program to assist certified  
155 Connecticut electric efficiency partners in financing the customer  
156 portion of the capital costs of approved enhanced demand-side  
157 management technologies. The department may establish such  
158 financing mechanism by the use of one or more of the following  
159 strategies: (1) Modifying the existing long-term customer-side  
160 distributed generation financing mechanism established pursuant to  
161 section 16-243j, (2) negotiating and entering into an agreement with the  
162 Connecticut Development Authority to establish a credit facility or to  
163 utilize grants, loans or loan guarantees for the purposes of this section  
164 upon such terms and conditions as the authority may prescribe  
165 including provisions regarding the rights and remedies available to the  
166 authority in case of default, or (3) selecting by competitive bid one or  
167 more entities that can provide such long-term financing.

168 (h) Not later than July 1, 2010, the department shall establish an  
169 Energy Innovation Council, which shall have the following members:  
170 (1) The executive director of the Connecticut Center for Advanced  
171 Technology; (2) the director of the Renewable Energy Investment  
172 Fund; (3) the chairman of the Institute for Sustainable Energy; and (4) a  
173 commissioner of the Public Utilities Control Authority or staff  
174 designee of the department. The council's objective shall be to expedite  
175 the commercialization and impact of enhanced energy management  
176 technologies. The council shall provide oversight to the Connecticut  
177 electric efficiency partner program established pursuant to the  
178 provisions of this section. The council shall confer at least monthly and  
179 provide written record of its meetings and actions. Each electric  
180 distribution company shall appoint a representative to serve in an  
181 advisory capacity to the council and facilitate council communication  
182 with the company.

183 (i) On and after the effective date of this section, the Energy  
184 Innovation Council shall evaluate and approve not more than ninety  
185 days after submittal, new applications from Connecticut electric  
186 efficiency partners for projects and grants for enhanced demand-side  
187 management technologies as part of the Connecticut electric efficiency  
188 partner program, provided any such application is consistent with this  
189 section and demonstrates for the proposed project that there is either  
190 (1) an electric system benefit-to-cost ratio of at least one and one-half to  
191 one for the project; or (2) an electric system benefit-to-cost ratio of at  
192 least one to one and the project integrates Class I renewable energy  
193 sources or produces natural gas or oil savings. All Connecticut electric  
194 efficiency partner applications for projects seeking a grant shall  
195 indicate that the participating customer will pay for at least fifty per  
196 cent of the installed costs, provided such customer share may be offset  
197 with applicable tax credits, energy value or other savings. The council  
198 shall award grants on an individual application basis. The council shall  
199 also specify that participating Connecticut electric efficiency partners  
200 shall maintain the technology for a period sufficient to achieve the  
201 expected benefits. To assist a Connecticut electric efficiency partner in  
202 developing its application for submittal to the council and before  
203 submitting such application, an applicant may request written  
204 verification from the council that its proposed project is sufficiently  
205 and reasonably defined. Not later than thirty days after such request, if  
206 the council so determines, a written validation shall be released. After  
207 such verification and with the affected customer or customers' written  
208 permission, the Connecticut electric efficiency partner may request  
209 billing and usage data on behalf of such customer or customers from  
210 an electric distribution company, which shall provide the requested  
211 information within thirty days from receipt of the request.

212 (j) Connecticut electric efficiency partner projects approved  
213 pursuant to subsection (i) of this section may receive a one-time grant,  
214 not to exceed fifty per cent of the total installed cost of the project. The  
215 council shall determine the size of grants on an individual application  
216 basis and shall adjust the size of the grant based on (1) economics of  
217 the specific project; (2) whether the project preserves or creates jobs in

218 Connecticut; (3) environmental benefits realized as a result of the  
219 project; (4) the project's ancillary electric market or system benefits;  
220 and (5) the degree of technology integration and innovation. Such  
221 grants shall be funded directly through the Connecticut electric  
222 efficiency partner program. On and after the effective date of this  
223 section, the annual ratepayer contribution for projects approved  
224 pursuant to this section shall not exceed sixty million dollars, provided  
225 any one technology cannot use more than one-third of the annual  
226 funding of grants for the electric efficiency partner program. An  
227 electric distribution company shall recover its costs and investment in  
228 its Connecticut electric efficiency partner project, as described in its  
229 application, through the systems benefits charge, provided, if actual or  
230 projected costs of all projects exceed sixty million dollars in one year,  
231 the electric distribution company may defer such excess, with a return,  
232 for future recovery, and further provided the council shall adjust  
233 future grants and projects to assure that any such excess beyond sixty  
234 million dollars of annual costs are minimized. Notwithstanding any  
235 provision of the general statutes, an electric distribution company may  
236 develop, purchase, own and operate renewable energy source  
237 generation pursuant to this section.

238 (k) For each project or program supported by ratepayer  
239 contribution, the council shall require the applicable Connecticut  
240 electric efficiency partner to submit data sufficient to enable the  
241 department and an electric distribution company to determine annual  
242 revenue requirements on a forecasted and actual basis and to enable  
243 the council to monitor the efficacy and cost-effectiveness of such  
244 project or program at least annually, commencing in the year after the  
245 project or program has become operational. In conducting such  
246 monitoring, the council may work in conjunction with the Energy  
247 Conservation Management Board or may use a third-party consultant,  
248 provided the costs of monitoring shall be included as recoverable costs  
249 pursuant to subsection (l) of this section. The council shall review the  
250 results of the monitoring and shall issue a report, in accordance with  
251 the provisions of section 11-4a, to the joint standing committees of the  
252 General Assembly having cognizance of matters relating to energy and

253 commerce. If the council determines that a project or program has not  
254 provided or will not provide the benefits that formed the basis for the  
255 grant or other ratepayer contribution, the council may suspend further  
256 grants for the project or program, provided any grants or costs  
257 awarded shall continue to be recovered by the electric distribution  
258 company.

259 [(h)] (l) The department [shall] and the council may provide for the  
260 payment of [electric ratepayers'] a participating electric customer's  
261 portion of the costs of deploying enhanced demand-side management  
262 technologies by implementing a contractual financing agreement with  
263 the Connecticut Development Authority or a private financing entity  
264 selected through an appropriate open competitive selection process,  
265 through loans available from the Renewable Energy Investment Fund  
266 or through a financing agreement with an electric distribution  
267 company. The department and council shall provide for the payment  
268 of electric ratepayers' portion of the costs of deploying enhanced  
269 demand-side management technologies by allowing an electric  
270 distribution company to recover any remaining costs of participation  
271 through the systems benefits charge. The electric distribution  
272 companies may earn a return on investment in any enhanced demand-  
273 side technologies equal to that allowed for a generation project  
274 proposed in whole or in part by an electric distribution company  
275 approved by the department pursuant to section 16-243u. Such costs  
276 and return may be recovered over time by establishing a regulatory  
277 asset, with electric distribution company recovery through the systems  
278 benefits charge over an amortization period to be established by the  
279 department based upon the expected useful life of the projects and  
280 programs. Section 16-43 shall not apply to any loan or financing  
281 arrangement made by an electric distribution company pursuant to  
282 this section. No contractual financing agreements entered into with the  
283 Connecticut Development Authority shall exceed ten million dollars.  
284 Any electric ratepayer costs resulting from such financing agreement  
285 shall be recovered from all electric ratepayers through the systems  
286 benefits charge.

287 [(i)] (m) On or before [February 15, 2009, and annually thereafter,  
288 the department] July 1, 2011, the council shall report to the joint  
289 standing [committee] committees of the General Assembly having  
290 cognizance of matters relating to energy and commerce regarding the  
291 effectiveness of the Connecticut electric efficiency partner program  
292 established pursuant to this section. Said report shall include, but not  
293 be limited to, an accounting of all benefits and costs to ratepayers, a  
294 description of the approved technologies, the payback ratio of all  
295 investments, the number of programs deployed and a list of proposed  
296 projects compared to approved projects and reasons for not being  
297 approved.

298 [(j)] (n) On or [before] after April 1, [2011] 2013, the Department of  
299 Public Utility Control shall initiate a proceeding to review the  
300 effectiveness of the program and perform a ratepayer cost-benefit  
301 analysis. Based upon the department's findings in the proceeding, [the  
302 department may modify or discontinue] the council may recommend  
303 to the joint standing committees of the General Assembly having  
304 cognizance of matters relating to energy and commerce that the  
305 partnership program established pursuant to this section be modified  
306 or discontinued.

307 (o) On or before August 1, 2010, the electric distribution companies  
308 and the council shall determine the scope of an energy intensity study  
309 of customers for which energy is a material part of their cost structure  
310 and shall complete such study by September 30, 2010. The electric  
311 distribution companies shall contact customers identified in such  
312 study that appear to have energy characteristics that may benefit from  
313 participation in the electric efficiency partner program and seek their  
314 permission to be identified to entities that may offer solutions to such  
315 customers through a solicitation process administered by the council.  
316 The council shall include information on this process in its annual  
317 reports to the General Assembly.

318 (p) (1) Electric distribution companies may own and operate Class I  
319 renewable generation facilities within the state. An electric distribution

320 company shall work with in-state equipment manufacturers and craft  
321 workers in developing and constructing such facilities, provided (A)  
322 such facilities are connected to its distribution system; (B) the  
323 equipment for such facilities are manufactured or assembled by  
324 companies within the state to the extent practicable; (C) the facilities  
325 are installed and maintained by workers employed within the state;  
326 and (D) the council approves the technologies used in the project. The  
327 cumulative ownership of Class I renewable energy sources by electric  
328 distribution companies pursuant to this subsection shall not exceed  
329 thirty megawatts of capacity by December 31, 2011, sixty-five  
330 megawatts by December 31, 2012, and one hundred megawatts by  
331 December 31, 2013. The council shall review the program by February  
332 15, 2013, and recommend to the joint standing committees of the  
333 General Assembly having cognizance of matters relating to energy and  
334 commerce whether to extend and expand this program beyond 2013.

335 (2) An electric distribution company shall recover its costs for  
336 facilities it owns and operates pursuant to this subsection based on a  
337 reconciling formula that provides for full recovery of any incurred  
338 costs, including a return on investment established as described in  
339 subsection (l) of this section, based on cost-of-service principles  
340 established pursuant to section 16-19e, provided the department shall  
341 approve such formula after a hearing held in a proceeding or  
342 proceedings separate from other distribution rate proceedings. Such  
343 facilities shall be eligible for any state or federal incentives, grants or  
344 credits, including, but not limited to, those available under programs  
345 administered by the Renewable Energy Investments Board. Any  
346 revenue requirements resulting from this program incurred before  
347 January 1, 2013, shall be recovered through the grants established in  
348 subsection (j) of this section.

349 (3) The Energy Innovation Council, in conjunction with the  
350 participating electric distribution companies and certified Connecticut  
351 electric efficiency partners, shall issue a report, in accordance with the  
352 provisions of section 11-4a, to the joint standing committees of the  
353 General Assembly having cognizance of matters relating to energy and

354 technology, environment and commerce not later than January  
355 fifteenth of 2011, 2012 and 2013. Each report shall describe for the  
356 preceding year (A) the status of the Connecticut electric efficiency  
357 partner program, including the levels and types of participation; (B)  
358 the amount of authorized investment and its cost; (C) the actual and  
359 expected future benefits created by the program, including  
360 contributions to Connecticut jobs and commerce; (D) the improvement  
361 to the commercialization of Class I renewable energy sources and their  
362 integration with the state's power systems and energy markets; and (E)  
363 opportunities to improve the effectiveness of the program. The 2013  
364 report shall also include a summary of such information for 2011, 2012  
365 and 2013, and recommendations for further use of the program. The  
366 council shall retain an independent consulting firm from a list of firms  
367 developed by the department, in consultation with the Office of  
368 Consumer Counsel, to audit the council's records and the program  
369 operations and project results, and the report from such firm shall be  
370 included in the council's annual report to the General Assembly.

371 (4) Not later than September 1, 2010, the council and electric  
372 distribution companies, working together, shall identify no less than  
373 two studies to determine optimal locations and characteristics for  
374 installing Class I renewable energy sources under the program  
375 established pursuant to this section. Not later than September 1, 2010,  
376 the council shall provide electric distribution companies with an  
377 assessment of key issues pertinent to the commercialization of fuel  
378 cells and their integration with the state's electric systems and energy  
379 markets, including lessons learned from previously proposed or  
380 completed projects. The electric distribution companies shall work in  
381 conjunction with staff from the council or its members' staffs to issue,  
382 not later than December 31, 2010, the findings of the two studies. The  
383 findings shall provide guidance to the investments made under the  
384 purview of the program established pursuant to this section.

385 Sec. 2. Subsection (a) of section 16-50k of the general statutes is  
386 repealed and the following is substituted in lieu thereof (*Effective July*  
387 *1, 2010*):

388 (a) Except as provided in subsection (b) of section 16-50z, no person  
 389 shall exercise any right of eminent domain in contemplation of,  
 390 commence the preparation of the site for, commence the construction  
 391 or supplying of a facility, or commence any modification of a facility,  
 392 that may, as determined by the council, have a substantial adverse  
 393 environmental effect in the state without having first obtained a  
 394 certificate of environmental compatibility and public need, hereinafter  
 395 referred to as a "certificate", issued with respect to such facility or  
 396 modification by the council. Certificates shall not be required for (1)  
 397 fuel cells built within the state with a generating capacity of two  
 398 hundred fifty kilowatts or less, or (2) fuel cells built out of state with a  
 399 generating capacity of ten kilowatts or less. Any facility with respect to  
 400 which a certificate is required shall thereafter be built, maintained and  
 401 operated in conformity with such certificate and any terms, limitations  
 402 or conditions contained therein. Notwithstanding the provisions of this  
 403 chapter or title 16a, the council shall, in the exercise of its jurisdiction  
 404 over the siting of generating facilities, approve by declaratory ruling  
 405 (A) the construction of a facility solely for the purpose of generating  
 406 electricity, other than an electric generating facility that uses nuclear  
 407 materials or coal as fuel, at a site where an electric generating facility  
 408 operated prior to July 1, 2004, (B) the construction or location of any  
 409 fuel cell, unless the council finds a substantial adverse environmental  
 410 effect, or of any customer-side distributed resources project or facility  
 411 or grid-side distributed resources project or facility with a capacity of  
 412 not more than sixty-five megawatts, as long as such project meets air  
 413 and water quality standards of the Department of Environmental  
 414 Protection, [and] (C) the siting of temporary generation solicited by the  
 415 Department of Public Utility Control pursuant to section 16-19ss, and  
 416 (D) projects undertaken pursuant to section 16-243v, as amended by  
 417 this act.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	16-243v
Sec. 2	<i>July 1, 2010</i>	16-50k(a)

**CE**      *Joint Favorable*

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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.

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### ***OFA Fiscal Note***

***State Impact:*** None

***Municipal Impact:*** None

### ***Explanation***

The bill allows electric companies to develop, purchase, own and operate certain types of renewable energy source generation. The costs associated can be recovered through the systems benefits charge to electric utility customers. There is currently a cap of \$60 million that electric companies can recover from related programs. The bill retains this cap and includes the costs associated with renewable energy generation.

The bill creates the Energy Innovation Council and gives the Council oversight to the electric efficiency partner program but does not provide any administrative staff or funds.

The bill also makes changes to the Connecticut electric efficiency partner program, which does not result in a fiscal impact.

### ***The Out Years***

***State Impact:*** None

***Municipal Impact:*** None

**OLR Bill Analysis****SB 324*****AN ACT CONCERNING ENERGY AND THE STATE'S ECONOMY.*****SUMMARY:**

This bill broadens the scope of and makes many other changes to the Connecticut electric efficiency partner program. This program provides financial incentives, funded by electric company ratepayers, for various demand-side management (energy efficiency and on-site generation) technologies. Among other things, the bill broadens the entities involved in administering the program and expands the types of technologies that can be funded. It also allows electric companies to participate as partners in the program. Under current law, only technology providers and electric company customers can do so.

The bill changes how the program is administered. Under current law, the Department of Public Utility Control (DPUC) simultaneously reviews an entity's application to be certified as a partner and its application for funding under the program. The bill splits these two reviews between the DPUC and the Energy Innovation Council that it creates. It generally requires DPUC to determine whether an applicant qualifies as a partner within 30 days. It requires the council to approve funding and how the funding is spent. It requires the council to monitor spending under the program and report on it to the Energy and Technology Committee.

The bill changes how projects are funded. Under current law, a participating customer pays half or more of the cost of an approved project and ratepayers pay the remaining costs. The bill allows ratepayer funding under the partner program even if the customer or other partner has received or is receiving funding from the Energy Conservation and Load Management funds for the project. The bill

eliminates a requirement that DPUC develop a program to provide long-term, low-interest loans to finance the customer's share of the costs but provides alternative financing mechanisms. The bill appears to retain a cap of \$60 million that electric companies can recover from ratepayers in any one year for this program. It allows the electric company to earn a return on its costs and investments through the systems benefits charge (SBC), a charge on electric bills that is used to pay various public policy costs.

The bill also broadens the program to allow electric companies to develop, purchase, own, and operate certain types of renewable energy source generation. The companies are allowed to earn a rate of return on these investments. Under the bill, an electric company must recover the costs it incurs before 2012 for Class I generation projects (e.g., solar or fuel cell projects) from the funding provided for partners program as described above. The bill has a separate cost-recovery mechanism for other facilities the company owns and operates. It appears that the \$60 million cap includes the costs associated with the company's renewable generation.

The bill requires electric companies and the council to (1) study the energy intensity of certain customers and (2) determine the best locations and characteristics for installing Class I renewable energy sources under the program.

It requires the Siting Council to approve projects developed under its provisions using a declaratory ruling and expedited process.

EFFECTIVE DATE: July 1, 2010 for the Siting Council provision, upon passage for the remaining provisions.

#### **SCOPE OF THE PROGRAM (1(A))**

Under current law, the purpose of the partner program is to conserve electricity and reduce demand in Connecticut through the purchase and deployment of energy efficient technologies. The bill expands the purpose to include increasing the efficiency of electricity use and promoting the development and use of Class I renewable

energy sources, such as solar and wind energy and fuel cells.

Under current law, the program involves DPUC, persons, and entities providing enhanced demand-side management technologies, and electric consumers. (The technologies include both efficiency measures and certain types of on-site generation.) The bill additionally involves the Connecticut Center for Advanced Technologies (CCAT), the Clean Energy Fund, electric companies, and the Institute of Sustainable Energy at Eastern Connecticut State University.

The bill expands the range of technologies that can be developed under the program. Under current law, enhanced demand-side management technologies are those (1) that reduce electricity consumption; (2) change when electricity is consumed (which can lower costs); or (3) use certain technologies to generate electricity on-site, as well as high-efficiency natural gas and oil boilers and furnaces. The bill expands the range of enhanced demand-side technologies to include:

1. technologies that reduce natural gas or oil consumption;
2. technologies that manage, optimize, or improve the efficiency of electricity use or the ability to procure energy more effectively relative to a customer's specific load characteristics;
3. technologies that improve the efficiency or performance of the electric system;
4. combined heat and power (cogeneration) systems;
5. solar thermal and geothermal systems; and
6. other Class I renewable sources located on the customer's side of the electric meter.

Under current law, the "partners" who can participate in the program are electric company customers who acquire enhanced demand-side management technologies and a person that provides

these technologies to the customer. The bill expands that latter group to include electric companies.

The bill repeals a provision that allows DPUC to retain a consultant with expertise in relevant areas to help develop and operate the program. Under current law, the consultant's costs are recoverable through the SBC.

### **ENERGY INNOVATION COUNCIL ((1)(H))**

The bill requires DPUC to establish an Energy Innovation Council to expedite the commercialization and impact of enhanced energy management technologies and oversee the partners program. Under the bill, the council consists of (1) CCAT's executive director, (2) the director of the Clean Energy Fund, (3) the chairman of the Institute for Sustainable Energy, and (4) a DPUC commissioner or staff designee. The council must confer at least monthly and provide written reports of its meetings and actions. Each member may draw upon expertise from within its entity to support the council's efforts. Each electric company must appoint a representative to advise the council and facilitate its communications with the company.

### **CERTIFICATION OF PARTNERS ((1)(D, E))**

By law, entities that seek to participate in the program must be certified as partners by DPUC. The certificate application must include the technologies that the applicant will purchase or provide that have been approved by DPUC. DPUC may grant a certificate if the applicant possesses and demonstrates adequate financial resources, managerial ability, and technical competency.

The bill requires DPUC to act on any application within 30 days of receiving it. It allows DPUC, with the applicant's consent, to extend this deadline by 30 days if more time is needed to obtain additional information on the applicant or the technologies it seeks to have funded.

### **FUNDING TECHNOLOGIES AND PROJECTS ((1) (D, E, I, J))**

The bill transfers the responsibility for approving funding under the

program from DPUC to the council on the date the bill passes. It does not address what happens to applications pending as of this date.

Under the bill, the council must evaluate and approve, within 90 days of submittal, new applications from partners for projects and grants for enhanced demand-side management technologies as part of the program. The bill does not define “project” but it appears to mean the installation of a technology in a particular setting.

To help partners develop their applications, the bill allows an applicant to seek written verification from the council that its proposed project is sufficiently and reasonably defined. The council must make this determination within 30 days. After this verification and with the written permission of the affected customer or customers, the partner may request billing and usage data on the customer’s behalf from an electric company, which must provide the requested information within 30 days from receipt of the request.

Under the bill, all applications for projects seeking grants must indicate that the participating customer will pay for at least 50% of the installed costs. However, the customer’s share may be offset with applicable tax credit, energy value, or other savings (see COMMENT).

The bill sunsets provisions that require DPUC, in evaluating applications, to (1) consider the applicant’s potential to reduce customers’ electric demand, including peak electric demand, and associated electric charges tied to electric demand and peak electric demand growth and (2) determine the portions of the total cost of each project that will be paid for by the participating customers and by all electric ratepayers.

The bill requires the council to award grants on an individual application basis. It entitles approved projects to a one-time grant, not to exceed 50% of the project’s total installed cost. The council must adjust the size of the grant based on (1) the project’s economics, (2) whether it preserves or creates jobs in Connecticut, (3) the environmental benefits the project creates, (4) the project’s ancillary

electric market or system benefits, and (5) the degree of technology integration and innovation. The grants must be funded directly through the program.

Under current law, DPUC can approve technologies only if the ratepayer investments in them have at least a two-to-one payback ratio, i.e., the savings to ratepayers as a whole are at least twice as much as the ratepayer contributions toward the technology. The bill instead requires the applicant to demonstrate that a proposed project will have (1) an electric system benefit/cost ratio of at least 1.5 to one for the project, or (2) an electric system benefit/cost ratio of at least one-to-one if the project integrates Class I renewable energy sources or produces natural gas or oil savings. It appears that the bill is using payback ratio and benefit/cost ratio as synonyms.

The bill repeals technology approval provisions that specify that a certified partner may receive funding only if selected in a request for proposal developed, issued, and evaluated by DPUC. Under current law, DPUC must use a cost-benefit test to rank responses for selection.

### **LONG-TERM FINANCING ((1)(G)(L))**

The bill sunsets a requirement that DPUC develop a long-term low-interest loan program to help certified partners finance the customer portion of the capital costs of approved technologies using one of three strategies.

Under current law, DPUC must provide for the payment of ratepayers' portion of the costs of deploying enhanced demand-side management technologies by entering into a financing agreement with the Connecticut Development Authority (CDA) or a private financing entity selected through an appropriate open competitive selection process.

The bill instead allows DPUC and the council to provide for the payment of a participating customer's portion of the costs of the technologies through these mechanisms or by (1) loans from the Clean Energy Fund or (2) a financing agreement with an electric company.

Under the bill, DPUC and the council must provide for the payment of the ratepayer's portion of the costs of these technologies by allowing an electric company to recover any remaining costs of participation through the SBC. These costs and return may be recovered over time by establishing a regulatory asset, with the electric company recovering a return through the SBC. (A regulatory asset is essentially an IOU held by a utility that entitles it to future recovery of DPUC-approved costs.) DPUC must set the period over which the company will recover its costs and earn a return based on the expected useful life of the projects and programs. The rate of return may equal that approved by DPUC under a law that allowed the electric companies to build power plants that operate at times of peak demand. The bill exempts these loans and financing arrangements from a DPUC review that takes place when a utility disposes of its assets or merges with another company.

By law, financing agreements entered into with CDA may not exceed \$10 million. Any ratepayer costs resulting from such a financing agreement must be recovered from all ratepayers through the SBC.

#### **RESTRICTIONS ON RATEPAYER CONTRIBUTIONS ((1)(J))**

Under current law, the annual ratepayer contribution for the partner program may not exceed \$60 million. It appears that the bill retains the cap. The bill provides that if actual or projected costs of all projects exceed \$60 million in one year, the electric company may defer the excess, with a return, for future recovery (regulatory assets). The bill provides that in such circumstances, the council must adjust future grants and projects to assure that any such excess beyond \$60 million of annual costs is minimized. It is not clear what happens if the company does not defer the excess. It is also unclear how reducing future expenditures can address a current cost overrun.

The bill limits for one technology to no more than one-third of the total funding.

The bill eliminates provisions of current law that (1) require that at least 75% of the annual ratepayer investment be used for the technologies themselves and (2) bar a partner from receiving funding under the program if it has received or is receiving funding from the Energy Conservation and Load Management Fund for the same technology.

#### **PROGRAM MONITORING ((1)(K))**

Under the bill, for each project or program supported by ratepayer contribution, the council must require the affected partner to submit enough data to allow (1) DPUC and an electric company to determine annual revenue requirements on a forecasted and actual basis and (2) the council to monitor the efficacy and cost-effectiveness of the project or program. The council's monitoring must occur at least annually, starting in the year after the project or program begins operating. The council may work with the Energy Conservation Management Board or use a third-party consultant in conducting the monitoring. The costs of monitoring must be recoverable costs through the SBC.

The council must review the results of the monitoring and issue a report to the Energy and Technology and Commerce committees. If the council determines that a project or program has not provided or will not provide the benefits that formed the basis for the grant or other ratepayer contribution, the council may suspend further grants for the project or program. But any grants or costs awarded must continue to be recovered by the electric company.

#### **OTHER PROGRAM PROVISIONS ((1) (M))**

Under current law, by February 15 of each year, DPUC must report to the Energy and Technology Committee on the program's effectiveness. The bill instead requires the council to issue a single report by July 1, 2011 and requires that a copy of the report go the Commerce Committee. By law, the report must include an accounting of all benefits and costs to ratepayers, a description of the approved technologies, the payback ratio of all investments, the number of programs deployed, and a list of proposed projects compared to

approved projects and reasons for them not being approved.

Under current law, by April 1, 2011, DPUC must initiate a proceeding to review the program's effectiveness and perform a ratepayer cost-benefit analysis. The bill instead requires DPUC to do this no earlier than April 1, 2013. Under current law, based on its findings in the proceeding, DPUC may modify or discontinue the program. The bill instead allows the council, based on DPUC's finding, to recommend to the Energy and Technology Committee that the program be modified or discontinued.

## **ELECTRIC COMPANY OWNERSHIP OF RENEWABLE GENERATION RESOURCES**

### ***Amount of Generation Permitted ((1)(P)(1))***

Current law generally bars electric companies from owning power plants or other generation resources. The bill allows electric companies to develop, purchase, own, and operate certain types of renewable energy source generation. It specifically allows them to own and operate Class I facilities in the state. The companies must work with local equipment manufacturers and craft workers in developing and constructing such facilities, so long as (1) the facilities are connected to the electric company's distribution system, (2) the equipment for the facilities is manufactured or assembled by companies in the state to the extent practicable, (3) the facilities are installed and maintained by workers employed in the state, and (4) the council approves the technologies used in the project.

The cumulative ownership of Class I renewable energy resources by electric companies may not exceed 30 megawatts (MW) of capacity by December 31, 2011, 65 MW by December 31, 2012, and 100 MW by December 31, 2013. (A MW is the amount of power used by 750 to 1,000 homes.) The council must review the program, by February 15, 2013, and recommend to the Energy and Technology and Commerce committees whether to extend and expand it beyond 2013.

The bill appears to allow electric companies to develop, purchase, own, and operate other classes of renewable energy source generation,

so long as they are located on the customer's side of the meter (see § 1(j)).

### ***Electric Company Cost Recovery ((1)(P)(2))***

Under the bill, an electric company must recover the costs it incurs before 2013 for class I projects from the funding provided for the partners program as described above, using the SBC.

The bill establishes a separate cost-recovery mechanism for other generation facilities owned and operated by an electric company. For these facilities, the company must recover its costs based on a formula. Before approving the formula, DPUC must hold a hearing, which must be separate from hearings on the company's distribution rates.

The formula must provide for full recovery of any incurred costs, including a return on investment based on traditional utility cost-of-service principles. The rate of return may equal that approved by DPUC under a law that allowed the electric companies to build power plants that operate at times of peak demand.

The projects are eligible for any state or federal incentives, grants, or credits, including those available under programs administered by the Clean Energy Fund's board.

### **REPORT ((1)(P)(3))**

The bill requires the council, in conjunction with the participating electric companies and certified electric efficiency partners, to issue a report to the Energy and Technology, Environment, and Commerce committees by January 15 in 2011, 2012, and 2013. The report must describe:

1. the status of the program, including the levels and types of participation;
2. the amount of authorized investment and its cost;
3. the actual and expected future benefits created by the program, including contributions to Connecticut jobs and commerce;

4. the improvement to the commercialization of Class I renewable energy sources and their integration with the state's power systems and energy markets; and
5. opportunities to improve the effectiveness of the program.

The 2013 report must also include a summary of all three years and recommendations for the program's further use. The council must retain an independent consulting firm from a list of firms developed by DPUC, in consultation with the Office of Consumer Counsel, to audit the council's records and the program operations and project results. The firm's report must be included in the council's annual report to the legislature.

#### **STUDY OF BEST LOCATIONS FOR RENEWABLE RESOURCES ((1)(P)(4))**

The bill requires the council and electric companies to jointly identify, by September 1, 2010, at least two studies to determine the best locations and characteristics for installing Class I renewable energy sources under the program. Also by September 1, 2010, the council must provide the electric companies with an assessment of key issues pertinent to the commercialization of fuel cells and their integration with the state's electric systems and energy markets, including lessons learned from previously proposed or completed projects.

The electric companies must work with the council's staff (although the bill does not provide for council staff) or the council members' staff to issue, by December 31, 2010, the findings of the two studies, with consideration of the fuel cell assessment. The findings must provide guidance to the investments made under the program.

#### **ENERGY INTENSITY STUDY ((1)(O))**

The bill requires the electric companies and the council to determine, by August 1, 2010, the scope of an energy intensity study of customers for whom energy is a material part of their costs. The companies and council must complete the study by September 30,

2010. The companies must contact customers identified in the study that appear to have the energy characteristics that may benefit from participation in the partners program. The companies must seek their permission to be identified to entities that may offer them solutions through a solicitation process administered by the council. The council must include information on this process in its annual reports to the legislature. (It is unclear to which reports this provision is referring.)

## **BACKGROUND**

### ***Related Bill***

sHB 5365, favorably reported by the Energy and Technology Committee, expands the scope of the partner program. It does so by expanding the entities that can participate in the program and relaxing the funding criteria. The bill appears to require DPUC to approve entities for the program in order to spend the \$60 million in ratepayer funding allowed by law, so long as their proposed projects have at least a one-to-one payback ratio.

## **COMMENT**

### ***Unclear Project Financing Provision***

The bill is unclear how the technology's vendor would recover its full costs under certain circumstances. The bill caps the ratepayer subsidy for approved projects under the program at 50% of installed costs. It requires the customer to pay at least 50% of the installed cost, but allows the customer's share to be offset with applicable tax credit, energy value, or other customer savings. It is unclear how these offsets would help pay the installed cost.

For example, if the installed cost of a technology was \$1 million, the maximum grant would be \$500,000. The customer's share would be at least \$500,000. It is unclear how the vendor would recover its costs if tax credits, energy value, or other savings were counted towards the customer's share, since there is no requirement in the bill that the customer transfer them to the vendor or the electric company.

## **COMMITTEE ACTION**

Commerce Committee

Joint Favorable

Yea 19 Nay 0 (03/18/2010)