

House bill No. 4377, as changed by the committee on Bills in the Third Reading, and as amended and passed to be engrossed by the House. June 8, 2016.

The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court (2015-2016)

An Act to promote energy diversity.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 144 of chapter 164 of the General Laws, as appearing in the 2014
 Official Edition, is hereby amended by striking out subsection (c) and inserting in place thereof
 the following subsection:

4 (c) Upon the undertaking of a significant project that exposes confirmed natural gas 5 infrastructure, including the repair or paving of a public way, the installation, replacement or 6 repair of an underground water or sewer line or underground electrical or other cable, a 7 municipality or the commonwealth or other entity responsible for the aforesaid undertaking may 8 submit written notification of the project to a gas company at least 6 months in advance of such 9 project. Upon commencement of the project, the gas company shall survey the project area for 10 the presence of gas leaks, and all gas leaks shall be repaired by the gas company to the extent 11 such repairs are feasible within the timeframe of the construction project. The gas company shall 12 ensure that any shut off valve in the significant project area has a gate box installed upon it or a 13 reasonable alternative that would otherwise ensure continued public safety and that any critical

14	valve that has not been inspected and tested within the past 12 months is verified to be
15	operational and accessible. If a gas leak cannot be repaired within the timeframe allowed for the
16	construction project, the gas company shall provide the repair and replacement schedule of any
17	gas leaks detected during the survey performed during the project to the municipality or the
18	commonwealth. Gas companies shall coordinate with municipalities to determine which leaks
19	shall be addressed by full replacement of lines and mains. A gas company that has previously
20	submitted plans to the municipality or the commonwealth to replace existing gas lines or mains
21	shall continue to adhere to those plans and the replacement projects therein in addition to any
22	repairs of individual leaks as required by this section.
23	SECTION 1A. Subsection (e) of said section 144 of chapter 164 of the General Laws, as
24	so appearing, is hereby amended by inserting at the end thereof the following sentence:- Gas
25	companies shall also report to the department the total volume of statewide lost or unaccounted
26	for gas attributed to Grade 1, Grade 2, or Grade 3 leaks located within the commonwealth.
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27	SECTION 1B. Chapter 169 of the acts of 2008, as amended by chapter 209 of the acts of
28	2012, is hereby further amended by inserting after section 83A the following 3 sections:-
29	Section 83B. For the purposes of sections 83C and 83D, the following terms shall, unless
30	the context clearly indicates otherwise, have the following meanings:-
31	"Clean energy generation", either: (1) firm service hydroelectric generation from
32	hydroelectric generation alone; or (2) new Class I RPS eligible resources that are firmed up with
33	firm service hydroelectric generation.
34	"Distribution company", a distribution company as defined in section 1 of chapter 164 of

35 the General Laws.

36	"Firm service hydroelectric generation", hydroelectric generation provided without
37	interruption for 1 or more discrete period designated in a long-term contract, including but not
38	limited to multiple hydroelectric run-of-the-river generation units managed in a portfolio that
39	creates firm service though the diversity of multiple units.
40	"Long-term contract", a contract for a period of 15 to 20 years.
41	"New Class I RPS eligible resources", Class I renewable energy generating sources as
42	defined in section 11F of chapter 25A of the General Laws that have not commenced
43	commercial operation prior to the date of execution of a long-term contract or represent the net
44	increase from incremental new generating capacity at an existing facility after the date of
45	execution of a long-term contract.
46	"Offshore wind developer", a provider of electricity developed from an offshore wind
47	energy generation project that is located on the Outer Continental Shelf and for which no turbine
48	is located within 10 miles of any inhabited area.
49	"Offshore wind energy generation", offshore electric generating resources derived from
50	wind that: (1) are Class I renewable energy generating sources, as defined in section 11F of
51	chapter 25A of the General Laws; (2) have a commercial operation date on or after January 1,
52	2018, as verified by the department of energy resources; and (3) operate in a designated wind
53	energy area for which an initial federal lease was issued on a competitive basis after January 1,
54	2012.
55	Section 83C. (a) Notwithstanding any general or special law to the contrary, beginning on
56	or before June 30, 2017, all distribution companies in the commonwealth shall jointly and
57	competitively solicit proposals from offshore wind developers and, provided that reasonable

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58 proposals have been received, shall enter into cost-effective long-term contracts, subject to the 59 approval of the department of public utilities, to facilitate the financing of offshore wind energy 60 generation resources, apportioned among the distribution companies under this section.

61 (b) The timetable and method for solicitations of such contracts shall be proposed jointly 62 by the distribution companies and the department of energy resources using a competitive 63 bidding process, and shall be subject to review and approval by the department of public utilities. 64 Solicitations may be coordinated and issued jointly with other New England states or entities 65 designated by said states. Distribution companies may conduct 1 or more competitive 66 solicitations through a schedule or staggered procurement schedule developed by the distribution 67 companies and the department of energy resources; provided, that distribution companies shall 68 jointly enter into cost-effective long-term contracts for offshore wind energy generation equal to 69 approximately 1,200 megawatts of aggregate nameplate capacity by June 30, 2027. Individual 70 solicitations shall seek proposals for no less than 400 megawatts of aggregate nameplate capacity 71 of offshore wind energy generation resources. Distribution companies shall issue a competitive 72 solicitation under this section no later than June 30, 2017, and subsequent solicitations under a 73 staggered procurement schedule developed by the department of energy resources, if applicable, 74 shall occur within 24 months of a previous solicitation; provided, however that following the 75 first procurement period, the levelized cost of the energy, transmission and; procured pursuant to 76 any long-term contract shall decrease with each additional solicitation and resulting procurement 77 . If the department of public utilities determines that reasonable proposals were not

received pursuant to a solicitation, the department may terminate the solicitation, and may
require additional solicitations to fulfill the requirements of this section.

80 (c) In developing proposed long-term contracts, the distribution companies shall consider 81 long-term contracts for renewable energy certificates, hereinafter referred to as RECs, for energy 82 and for a combination of both RECs and energy. A distribution company may decline to consider 83 contract proposals having terms and conditions that it determines would require the contract 84 obligation to place an unreasonable burden on the distribution company's balance sheet, and may 85 structure its contracts, pricing or administration of the products purchased to mitigate impacts on 86 the balance sheet or income statement of the distribution company or its parent company, subject 87 to the approval of the department of public utilities; provided, that such mitigation shall not 88 increase costs to ratepayers. In the event a distribution company deems all proposals to be 89 unreasonable, the department of public utilities shall initiate a docket to determine the 90 distribution company's rationale for declining said proposals. The department of energy 91 resources may require additional solicitations to fulfill the requirements of this section.

92 The distribution companies shall coordinate with the department of energy resources, and
93 consult with the office of the attorney general, regarding the choice of solicitation methods.

All proposed contracts shall be subject to the review and approval of the department ofpublic utilities.

(d) The department of public utilities and the department of energy resources each shall
adopt regulations consistent with this section. The regulations shall: (1) allow offshore wind
developers of offshore wind energy generation to submit proposals for long-term contracts
consistent with this section; (2) require that contracts executed by the distribution companies
under such proposals are filed with, and approved by, the department of public utilities before
they become effective; (3) provide for an annual remuneration for the contracting distribution

102 company up to 2.75 per cent of the annual payments under the contract to compensate the 103 company for accepting the financial obligation of the long-term contract, such provision to be 104 acted upon by the department of public utilities at the time of contract approval; (4) allow 105 transmission costs to be incorporated into a proposal; provided that, to the extent there are 106 transmission costs included in a bid, the department of public utilities may authorize or require 107 the contracting parties to seek recovery of such transmission costs of the project through federal 108 transmission rates, consistent with policies and tariffs of the Federal Energy Regulatory 109 Commission, to the extent the department finds such recovery is in the public interest; and (5) require that offshore wind energy generating resources to be used by a developer under the 110 111 proposal meet the following criteria: (i) provide enhanced electricity reliability within the 112 commonwealth; (ii) contribute to reducing winter electricity price spikes; (iii) be cost effective to 113 Massachusetts electric ratepayers over the term of the contract; (iv) avoid line loss and mitigate 114 transmission costs to the extent possible; (v) adequately demonstrate project viability in a 115 commercially reasonable timeframe; (vi) provide reliability, price, economic and environmental 116 benefits that outweigh any costs to ratepayers; (vii) where possible, mitigate any environmental 117 impacts; and (viii) where feasible, create additional employment and economic development in 118 the commonwealth.

(e) As part of its approval process, the department of public utilities shall consider the attorney general's recommendations, which shall be submitted to the department of public utilities within 45 days following the filing of such contracts with the department of public utilities. The department of public utilities shall consider both the potential costs and benefits of such contracts and shall approve a contract only upon a finding that it is a cost effective 124 mechanism for procuring reliable renewable energy on a long-term basis, taking into account the 125 factors outlined in this section.

126 (f) The department of energy resources and the attorney general shall jointly select an 127 independent evaluator to monitor and report on the solicitation and bid selection process in order 128 to assist the department of public utilities in its consideration of any resulting long-term contracts 129 filed for approval. To ensure an open, fair and transparent solicitation and bid selection process, 130 the independent evaluator shall: (1) issue a report to the department of energy resources 131 analyzing the solicitation process proposed under subsection (b) of this section, including 132 recommendations for improving the process, if any; and (2) within 45 days following the filing 133 of a long-term contract for a winning bid proposal, file a report with the department of public 134 utilities summarizing and analyzing the solicitation and the bid selection process, and providing 135 its independent assessment of whether all bids were evaluated in a fair and non-discriminatory 136 manner. The independent evaluator shall have access to all information and data related to the 137 competitive solicitation and bid selection process necessary to fulfill the purposes of this 138 subsection, but shall ensure all proprietary information remains confidential. The department of 139 public utilities shall consider the findings of the independent evaluator and may adopt 140 recommendations made by the independent evaluator as a condition for approval. If the 141 independent evaluator concludes in the findings that the solicitation and bid selection of a long-142 term contract was not fair and objective, the department of public utilities may reject the 143 contract.

(g) If distribution companies are unable to agree on a winning bid under a solicitation
under this section, the matter shall be submitted to the department of energy resources for a final,
binding determination of the winning bid. Electric distribution companies shall each enter into a

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147 contract with the winning bidders for their apportioned share of the market products being
148 purchased from the project. The apportioned share shall be calculated and based upon the total
149 energy demand from all distribution customers in each service territory of the distribution
150 companies.

151 (h) A distribution company may elect to use any energy purchased under such contracts 152 for resale to its customers, and may elect to retain RECs to meet the applicable annual renewable 153 portfolio standard requirements under said section 11F of said chapter 25A. If the energy and 154 RECs are not so used, such companies shall sell such purchased energy into the wholesale spot 155 market and shall sell such purchased RECs through a competitive bid process. Notwithstanding 156 the previous sentence, the department of energy resources shall conduct periodic reviews to 157 determine the impact on the energy and REC markets of the disposition of energy and RECs 158 under this section. The department of energy resources may issue reports recommending 159 legislative changes if it determines that said disposition adversely affects the energy and REC 160 markets.

(i) If a distribution company sells the purchased energy into the wholesale spot market
and auctions the RECs as described in this section, the distribution company shall net the cost of
payments made to projects under the long-term contracts against the proceeds obtained from the
sale of energy and RECs, and the difference shall be credited or charged to all distribution
customers through a uniform fully reconciling annual factor in distribution rates, subject to
review and approval of the department of public utilities.

(j) Any long-term contracts procured under this section shall contain provisions that
 require an appropriate unit-specific tracking system to enable an accounting of the delivery of
 clean energy generation resources.

(k) If this section is subject to a judicial challenge, the department of public utilities may suspend the applicability of the challenged provision during the pendency of the judicial action until final resolution of the challenge and any appeals and shall issue such orders and take such other actions as are necessary to ensure that the provisions that are not challenged are implemented expeditiously to achieve the public purposes of this section.

175 Section 83D. (a) Notwithstanding any general or special law to the contrary, beginning 176 on January 1, 2017, all distribution companies in the commonwealth shall jointly and 177 competitively solicit proposals from developers of clean energy generation resources to deliver 178 an annual amount of electricity equal to approximately 9,450,000 megawatts-hours, and, 179 provided reasonable proposals have been received, shall enter into either long-term contracts, 180 subject to the approval of the department of public utilities, or delivery commitment agreements, 181 subject to the approval of the Federal Energy Regulatory Commission, to facilitate the financing 182 of clean energy generation resources, apportioned among the distribution companies under this 183 section.

(b) The timetable and method for solicitation of such contracts shall be proposed jointly
by the distribution companies and the department of energy resources using a competitive
bidding process, and shall be subject to review and approval by the department of public utilities.
Solicitations may be coordinated and issued jointly with other New England states or entities
designated by said states. Distribution companies may conduct 1 or more competitive

solicitations through a schedule or staggered procurement schedule developed by the distribution companies and the department of energy resources; provided, however, that distribution companies shall enter into cost-effective long-term contracts for clean energy generation equal to approximately 9,450,000 megawatt-hours by December 31, 2022. If the department of public utilities determines that reasonable proposals were not received pursuant to a solicitation, the department may terminate the solicitation, and may require additional solicitations to fulfill the requirements of this section.

196 (c) In developing proposed long-term contracts, the distribution companies shall consider 197 long-term contracts for renewable energy certificates, hereinafter referred to as RECs, for 198 energy, and for a combination of both RECs and energy, if applicable. A distribution company 199 may decline to consider proposals having terms and conditions that it determines would require 200 the contract obligation to place an unreasonable burden on the distribution company's balance 201 sheet, and may structure its contracts, delivery commitments, pricing or administration of the 202 products purchased to mitigate impacts on the balance sheet or income statement of the 203 distribution company or its parent company, subject to the approval of the department of public 204 utilities; provided, that such mitigation shall not increase costs to ratepayers. In the event a 205 distribution company deems all proposals to be unreasonable, the department of public utilities 206 shall initiate a docket to determine the distribution company's rationale for declining said 207 proposals. The department of energy resources may require additional solicitations to fulfill the 208 requirements of this section. The distribution companies shall consult with the department of 209 energy resources and the attorney general's office regarding the choice of contracting methods 210 and solicitation methods. All proposals shall be subject to the review and approval of the 211 department of public utilities.

212 (d) For the purposes of this section, the term delivery commitment agreement means a 213 contractual commitment by a clean energy developer, which may be included in a tariff filed 214 with the Federal Energy Regulatory Commission, to deliver electricity to the ISO New England 215 Control Area for a term of 15 to 20 years, subject to the rules governing that market as approved 216 by the Federal Energy Regulatory Commission, for a designated number of megawatt-hours per 217 year during designated periods. Such output shall be from clean energy generation, as defined in 218 section 83B of this act. Delivery commitment agreements may be contingent upon a transmission 219 line being constructed, maintained, and placed under the operational control of ISO New 220 England that adds sufficient capacity to the ISO New England transmission system to enable the 221 delivery into the New England market of the electric energy comprising the supplier's delivery 222 commitment. A clean energy generation developer shall be obligated, in the event it fails to meet 223 its delivery commitment agreement in any designated period, to pay liquidated damages or 224 charges under the tariff filed with the Federal Energy Regulatory Commission to the electric 225 distribution company, which in turn shall be returned to ratepayers, or to provide a credit under 226 such tariff, which will be passed on to ratepayers. The department of public utilities, in 227 consultation with the department of energy resources, may promulgate regulations to implement 228 the provisions of this section, subject to the applicable rules, orders and regulations established 229 by the Federal Energy Regulatory Commission.

(e) The department of public utilities and the department of energy resources each shall
adopt regulations consistent with this section. The regulations shall: (1) allow developers of
clean energy generation resources to submit proposals for long-term contracts or delivery
commitment agreements; (2) require that contracts or delivery commitment agreements executed
by the distribution companies under such proposals are filed with, and approved by, the

235 department of public utilities before they become effective; (3) provide for an annual 236 remuneration for the contracting distribution company up to 2.75 per cent of the annual 237 payments under the contract to compensate the company for accepting the financial obligation of 238 the long-term contract, such provision to be acted upon by the department of public utilities at 239 the time of contract approval; (4) allow transmission costs to be incorporated into a proposal; 240 provided that, to the extent there are transmission costs included in a bid, the department of 241 public utilities may authorize or require the relevant parties to seek recovery of such transmission 242 costs of the project through federal transmission rates, consistent with policies and tariffs of the 243 Federal Energy Regulatory Commission, to the extent the department finds such recovery is in 244 the public interest; and (5) require that the clean energy resources to be used by a developer 245 under the proposal meet the following criteria: (i) provide enhanced electricity reliability within 246 the commonwealth; (ii) contribute to reducing winter electricity price spikes; (iii) be cost 247 effective to Massachusetts electric ratepayers over the term of the contract or delivery 248 commitment agreement; (iv) avoid line loss and mitigate transmission costs to the extent 249 possible; (v) allow the long-term contract price to be indexed to the wholesale market prices, as 250 determined by the department of public utilities and decrease in periods of low wholesale prices; 251 (vi) guarantee energy delivery in winter months; (vii) adequately demonstrate project viability in 252 a commercially reasonable timeframe; (viii) provide reliability, price, economic and 253 environmental benefits that outweigh any costs to ratepayers; (ix) give preference for proposals 254 that combine more than 1 renewable energy generating source; (x) where feasible, create 255 additional employment and economic development in the commonwealth.

(f) As part of its approval process, the department of public utilities shall consider theattorney general's recommendations, which shall be submitted to the department of public

utilities within 45 days following the filing of such contracts or delivery commitment agreements
with the department of public utilities. The department of public utilities shall consider both the
potential costs and benefits of such contracts and shall approve a contract or delivery
commitment agreement only upon a finding that it is a cost effective mechanism for procuring
low cost renewable energy on a long-term basis taking into account the factors outlined in this
section.

264 (g) The department of energy resources and the attorney general shall jointly select an 265 independent evaluator to monitor and report on the solicitation and bid selection process in order 266 to assist the department of public utilities in its consideration of any resulting long-term contracts 267 or delivery commitment agreements filed for approval. To ensure an open, fair and transparent 268 solicitation and bid selection process, the independent evaluator shall: (1) issue a report to the 269 department of energy resources analyzing the solicitation process proposed under subsection (b) 270 of this section, including recommendations for improving the process, if any; and (2) within 45 271 days following the filing of a long-term contract for a winning bid proposal, file a report with the 272 department of public utilities summarizing and analyzing the solicitation and the bid selection 273 process, and providing its independent assessment of whether all bids were evaluated in a fair 274 and non-discriminatory manner. The independent evaluator shall have access to all information 275 and data related to the competitive solicitation and bid selection process necessary to fulfill the 276 purposes of this subsection, but shall ensure all proprietary information remains confidential. The 277 department of public utilities shall consider the findings of the independent evaluator and may 278 adopt recommendations made by the independent evaluator as a condition for approval. If the 279 independent evaluator concludes in the findings that the solicitation and bid selection of a longterm contract was not fair and objective, the department of public utilities may reject thecontract.

(h) If distribution companies are unable to agree on a winning bid under a solicitation under this section, the matter shall be submitted to the department of energy resourcesfor a final, binding determination of the winning bid. The electric distribution companies shall each enter into a contract or delivery commitment agreement with the winning bidders for their apportioned share of the market products being purchased from the project. The apportioned share shall be calculated and based upon the total energy demand from all distribution customers in each service territory of the distribution companies.

289 (i) An electric distribution company may elect to use any energy purchased under such 290 contracts or delivery commitments for resale to its customers, and may elect to retain RECs to 291 meet the applicable annual RPS requirements under said section 11F of said chapter 25A. If the 292 energy and RECs are not so used, such companies shall sell such purchased energy into the 293 wholesale spot market and shall sell such purchased RECs through a competitive bid process. 294 Notwithstanding the previous sentence, the department of energy resources shall conduct 295 periodic reviews to determine the impact on the energy and REC markets of the disposition of 296 energy and RECs under this section and may issue reports recommending legislative changes if it 297 determines that actions are being taken that will adversely affect the energy and REC markets.

(j) If a distribution company sells the purchased energy into the wholesale spot market and auctions the RECs as described in this section, the distribution company shall net the cost of payments made to projects under the long-term contracts or delivery commitments against the proceeds obtained from the sale of energy and RECs, and the difference shall be credited or 302 charged to all distribution customers through a uniform fully reconciling annual factor in303 distribution rates, subject to review and approval of the department of public utilities.

304 (k) Any long-term contracts procured under this section shall contain provisions that
 305 require an appropriate unit-specific tracking system to enable an accounting of the delivery of
 306 clean energy generation resources.

307 (1) If this section is subject to a judicial challenge, the department of public utilities may 308 suspend the applicability of the challenged provision during the pendency of the judicial action 309 until final resolution of the challenge and any appeals and shall issue such orders and take such 310 other actions as are necessary to ensure that the provisions that are not challenged are 311 implemented expeditiously to achieve the public purposes of this section.

312 SECTION 2. Subsection (a) of section 11F1/2 of Chapter 25A of the General Laws, as
313 appearing in the 2014 Official Edition, is hereby amended by striking the following words,
314 "practices; or (v)" and inserting in place thereof the following words:- "practices; (v) fuel cells;
315 or (vi)".

316 SECTION 3. Subsection (e) of said section 11F1/2 of Chapter 25A is hereby amended by 317 inserting after the words "may provide that for" the following words:- "fuel cells and" and after 318 the words "new on-site" striking the words "renewable thermal".

319 SECTION 4: The General Laws are hereby amended by adding the following Chapter320 23M:

321 Section 1. As used in this chapter, the following words shall have the following322 meanings, unless the context clearly requires otherwise:

323 "Agency", the Massachusetts Development Finance Agency as established in chapter
324 23G or a special purpose entity created or duly authorized by the agency.

325 "Betterment Assessment", an assessment of a betterment on qualified commercial or 326 industrial property or residential property in relation to commercial energy improvements 327 established under the commercial sustainable energy program, or in relation to residential energy 328 improvements established under the residential sustainable energy program, that has been duly 329 assessed in accordance with chapter 80.

330 "Benefitted property owner", an owner of qualifying commercial or industrial property or
331 residential property who desires to install commercial or residential energy improvements and
332 who provides free and willing consent to the betterment assessment against the qualifying
333 commercial or industrial property or residential property.

334 "Commercial Energy Improvements", (1) any renovation or retrofitting of qualifying 335 commercial or industrial real property to reduce energy consumption or installation to serve 336 qualifying commercial or industrial property, provided such renovation, retrofit or installation is 337 permanently fixed to such qualifying commercial or industrial property, or (2) the construction of 338 an extension of an existing natural gas distribution company line to qualifying commercial or 339 industrial property to enable the qualifying commercial or industrial property to obtain natural 340 gas distribution service to displace utilization of fuel oil, electricity or other conventional energy 341 sources.

342 "Commercial or industrial property", any real property other than a residential dwelling343 containing fewer than five dwelling units.

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344	"Commercial PACE project", with respect to a parcel of qualifying commercial or
345	industrial property, (1) design, procurement, construction, installation and implementation of
346	commercial energy improvements; (2) related energy audits; and (3) measurement and
347	verification reports of the installation and effectiveness of such energy improvements.
348	"Commercial sustainable energy program", a program that facilitates commercial PACE
349	projects and utilizes the betterment assessments authorized by section 3 as the source of both the
350	repayment of and collateral for the financing of commercial PACE projects.
351	"Department", the Department of Energy Resources as established in chapter 25A.
352	"Municipality" a city, town, county, the Devens Regional Enterprise Zone created by
353	Chapter 498 of Acts of 1993 or the Southfield Redevelopment Authority created by Chapter 291
354	of the Acts of 2014.
355	"PACE bonds", bonds, notes or other evidence of indebtedness, in the form of revenue
356	bonds and not general obligation bonds of the commonwealth or the agency, issued by the
357	agency related to the commercial and residential sustainable energy program established by this
358	chapter.
359	"Participating municipality", a municipality that has determined to participate in a
360	commercial sustainable energy program and a residential sustainable energy program.
361	"Program administrator", the agency or another entity assigned responsibility by the
362	agency, which program administrator may be the agency, or one or more private, public or quasi-
363	public third-party administrators, to administer, provide support, and provide financing for the
364	residential sustainable energy program.

365 "Qualifying commercial or industrial property", any commercial or industrial property 366 owned by any person or entity other than a municipality or other governmental entity, that meets 367 the qualifications established for the commercial sustainable energy program in accordance with 368 the program guidelines as established in subsection (c) of section 2 and in subsection (13) of 369 section 6 of chapter 25A.

370 "Residential PACE project", with respect to a residential property, (i) the design, 371 procurement, construction, installation and implementation of energy efficiency or conservation 372 improvements; including the installation of electric vehicle charging stations permanently affixed 373 to the property; (ii) the design, procurement, construction, installation and implementation of 374 water efficiency or conservation improvements and (iii) the design, procurement, construction, 375 and installation including any required feasibility studies.

376 "Residential property", any real property other than a commercial or industrial property
377 with fewer than five dwelling units, provided that the property is owned by any person or entity
378 other than a municipality or other governmental entity.

379 "Residential Energy improvements", any renovation, retrofitting or installation of energy 380 efficiency measures to reduce energy consumption and/or water conservations and savings on a 381 residential property, or installation of electric vehicle charging infrastructure; provided, however, 382 that any such renovation, retrofit or installation shall be permanently fixed to the residential 383 property.

384 "Residential sustainable energy program", a program that facilitates residential PACE 385 projects and utilizes the betterment assessments authorized by section 4 as the source of both the 386 repayment of and collateral for the financing of residential PACE projects. 387 "Special purpose entity", a partnership, limited partnership, association, corporation,
388 limited liability company or other entity established and authorized by the agency to issue PACE
389 bonds, subject to approval by the agency as provided by the agency in its resolution authorizing
390 the special purpose entity to issue PACE bonds.

391 Section 2. Municipal Opt In. Each municipality in the commonwealth shall have the 392 option to participate in the commercial sustainable energy program or the residential sustainable 393 energy program, or both, as a participating municipality by a majority vote of the city or town 394 council, by a majority vote of the board of selectmen or by resolution of its legislative body, as 395 may be appropriate, pursuant to which the municipality shall assess, collect, remit and assign 396 betterment assessments, in return for commercial energy improvements or residential energy 397 improvements for a benefitted property owner located within such municipality and for costs 398 reasonably incurred in performing such acts.

399 Section 3. Commercial Sustainable Energy Program. (a)(1) The agency, in consultation 400 with the department, shall establish a commercial sustainable energy program in the 401 commonwealth, and in furtherance thereof, is authorized to issue PACE bonds, either directly or 402 through a special purpose entity, for the purpose of financing all or a portion of the costs of the 403 activities comprising one or more commercial PACE projects.

404 (2) Upon the approval of a commercial PACE project by the department, the agency may
405 issue PACE bonds. Such PACE bonds shall be issued in accordance with section 8 of chapter
406 23G; provided, however, that the agency shall not be required to make the findings set forth in
407 subsections (a) and (b) of said section 8. PACE bonds issued in furtherance of this section shall
408 not be subject to, or otherwise included in, the principal amount of debt obligations issued under

409 section 29 of chapter 23G. Such PACE bonds may be secured as to both principal and interest by 410 a pledge of revenues to be derived from the commercial sustainable energy program, including 411 revenues from betterment assessments on qualifying commercial or industrial property on which 412 the commercial PACE projects being financed by the issuance of such PACE bonds are levied, 413 as well as any reserve funds or other credit enhancements created in connection with the 414 commercial sustainable energy program.

415 (b) The agency, (1) working in conjunction with the department, shall develop program 416 guidelines governing the terms and conditions under which financing for commercial PACE 417 projects may be made available to the commercial sustainable energy program, which may 418 include standards to encourage property owners to undertake projects where the energy cost 419 savings of the commercial energy improvements over the useful life of the improvements 420 exceeds the costs of the improvements; (2) shall provide information as requested by the 421 department regarding the expected financing costs for commercial PACE projects; (3) may serve 422 as an aggregating entity for the purpose of securing state or private third-party financing for 423 commercial energy improvements pursuant to this section; (4) may establish a loan loss, liquidity 424 reserve or credit enhancement program to support PACE bonds issued under this section; and (5) 425 may use the services of one or more private, public or quasi-public third-party administrators to 426 administer, provide support or obtain financing for commercial PACE projects under the 427 commercial sustainable energy program.

428 (c) If a benefitted property owner requests financing from the agency for commercial429 energy improvements under this section, the agency shall:

430 (1) Refer the project to the department for approval under the guidelines established by
431 subsection (13) of section 6 of chapter 25A;

432 (2) Upon confirmation of project approval by the department, evaluate the project for433 compliance with the financial underwriting guidelines established by the agency;

434 (3) Impose requirements and conditions on the financing in order to ensure timely
435 repayment, including, but not limited to, procedures for placing a lien on a property as security
436 for the repayment of the betterment assessment;

437 (4) Require that the property owner provide a copy of a contract duly executed by the438 contractor performing the commercial energy improvements;

439 (5) Require that the property owner obtain consent from any existing mortgage holder of
440 the property to the intent to finance such commercial energy improvements pursuant to this
441 section; and

(6) If the agency approves financing, require the participating municipality to levy a
betterment assessment in a manner consistent with this section and with chapter 80, insofar as
such provisions may be applicable and consistent with this section, on the qualifying commercial
or industrial property in a principal amount sufficient to pay the costs of the commercial energy
improvements and any associated costs that the agency determines will benefit the qualifying
commercial or industrial property, including costs of the agency.

(d)(1) The agency may enter into a financing and assessment agreement with the property
owner of qualifying commercial or industrial property. The agency may raise funds to supply
the financing under such agreement by issuing PACE bonds. Upon execution of such agreement

and immediately prior to making the funds, which may constitute all or a portion of the proceeds
from the issuance of such PACE bonds, available to the property owner for the commercial
PACE project under the agreement, the agency shall notify the participating municipality and the
participating municipality or its designee shall record the betterment assessment and lien on the
qualifying commercial or industrial property.

456 (2) The agency shall disclose to the property owner the costs associated with participating
457 in the commercial sustainable energy program established by this section, including the effective
458 interest rate of the betterment assessment, any fees charged by the agency to administer the
459 program and any fees charged by third parties such as originators or other intermediaries.

460 (e) At the time the betterment assessment is made, the agency shall set the term and 461 amortization schedule, the fixed or variable rate of interest for the repayment of the betterment 462 assessment amount, and any required closing fees and costs. The amortization schedule shall 463 provide for an amortization period of no longer than the lesser of: (1) the useful life of the 464 longest-lived of the commercial energy improvements comprising the commercial PACE 465 project(s) financed by such betterment assessment; or (2) 20 years. The interest rate, which may 466 be supplemented with state or federal funding, shall be sufficient to pay the principal and interest 467 and shall be calculated to include the agency's fees, financing and administrative costs of the 468 commercial sustainable energy program, including delinquencies.

(f) When the agency has authorized, but not issued, PACE bonds for commercial PACE
projects and other costs of the commercial sustainable energy program, including interest costs
and other costs related to the issuance of PACE bonds, the agency shall require the participating
municipality where the qualifying commercial or industrial property is located, or the program

administrator duly approved by the agency, to record the agreement between the agency and the
property owner as a betterment pursuant to chapter 80, except that such betterment may apply to
a single parcel of qualifying commercial or industrial property, and as a lien against the
qualifying commercial or industrial property benefitted.

477 (g) Betterment assessments levied pursuant to this section and the interest, fees and any 478 penalties thereon shall constitute a lien against the qualifying commercial or industrial real 479 property until they are paid, notwithstanding the provisions of section 12 of chapter 80, and shall 480 continue notwithstanding any alienation or conveyance of the qualifying commercial or 481 industrial real property by one property owner to a new property owner. A new property owner 482 shall take title to the qualifying commercial or industrial property subject to the betterment 483 assessment and related lien. The lien shall be levied and collected in the same manner as the 484 property taxes of the participating municipality on real property, including, in the event of 485 default or delinquency, with respect to any penalties, fees and remedies and lien priorities. Each 486 lien may be continued, recorded and released upon repayment in full of the betterment 487 assessment in the manner provided for property tax liens. Each lien, subject to the consent of 488 existing mortgage holders, shall take precedence over all other liens or encumbrances, except a 489 lien for taxes of the municipality on real property. To the extent betterment assessments are paid 490 in installments and any such installment is not paid when due, the betterment assessment lien 491 may be foreclosed to the extent of any unpaid installment payments and any penalties, interest 492 and fees related thereto. In the event such betterment assessment lien is foreclosed, such lien 493 shall survive the judgment of foreclosure to the extent of any unpaid installment payments of the 494 betterment assessment secured by such lien that were not the subject of such judgment.

495 (h) Any participating municipality shall assign to the agency any and all liens filed by the 496 tax collector, as provided in the written agreement between the participating municipality and the 497 agency. The agency may sell or assign, for consideration, any and all liens received from the 498 participating municipality. The agency and the assignee(s) shall negotiate the consideration 499 received by the agency. The assignee(s) shall have and possess the same powers and rights at law 500 or in equity as the agency and the participating municipality and its tax collector would have had 501 with regard to the precedence and priority of such lien, the accrual of interest and the fees and 502 expenses of collection. The assignee(s) shall have the same rights to enforce such liens as any 503 private party holding a lien on real property, including, but not limited to, foreclosure and a suit 504 on the debt. The assignee(s) shall recover costs and reasonable attorneys' fees incurred as a 505 result of any foreclosure action or other legal proceeding brought pursuant to this section and 506 directly related to the proceeding from those having title to the property subject to the 507 proceedings. Such costs and fees may be collected by the assignee(s) at any time after the 508 assignee(s) have made a demand for payment.

(i) The exercise of the powers granted by this section shall be for the benefit of the people of the commonwealth by increasing energy efficiency in the commonwealth. As the exercise of such powers shall constitute the performance of essential government functions, the agency shall not be required to pay any taxes or assessments upon the property acquired or used by the agency under this section or upon the income derived therefrom. The PACE bonds issued under this section, their transfer and the income derived therefrom, including any profit made on the sale thereof, shall at all times be free of taxation within the commonwealth.

(j) The activities of the commercial sustainable energy program shall be reviewed in the3-year planning process and annual reviews undertaken pursuant to section 21 of chapter 25.

(k) The agency may establish rules and guidelines as are necessary to implement the
purposes of the program, including procedures describing the application process and criteria to
be used in evaluating application for PACE bonds under this section.

521 Section 4. Residential Sustainable Energy Program. (a) The agency, by resolution of its
522 board of directors, and in consultation with the department, shall establish a residential
523 sustainable energy program pursuant to this section.

524 (b) The agency shall have the power and authority to issue PACE bonds to finance all or 525 a portion of the costs of the activities comprising one or more residential PACE projects. Such 526 PACE bonds shall be authorized by a resolution of the board of directors of the agency; 527 provided, however, that the agency shall not be required to make the findings required by 528 subsections (a) and (b) of section 8 of chapter 23G. PACE bonds issued pursuant to this section 529 shall not be subject to or otherwise included in the calculation of any limitation on the incurrence 530 of indebtedness by the agency set forth in any general or special laws. PACE bonds may be 531 secured as to both principal and interest by a pledge of revenues derived from the residential 532 sustainable energy program, including revenues from betterment assessments on residential 533 property on which the residential PACE projects being financed by the issuance of the PACE 534 bonds are located and any reserve funds or other credit enhancements created under the 535 residential sustainable energy program. PACE bonds of each issue may be dated, may bear 536 interest at such rate or rates, may mature or otherwise be payable at such time or times, may be 537 redeemable before maturity, and may be subject to such other terms and conditions as may be 538 provided for by the agency.

539 (c) The agency shall designate one or more program administrators, which may be the 540 agency or one or more other public, private or quasi-public third-parties to administer, provide 541 support and provide financing for the residential sustainable energy program. The program 542 administrator may originate, execute, and finance contracts for residential energy improvements 543 with property owners on behalf of the agency. The program administrator shall, in accordance 544 with guidelines in sections (m) and (n): (i) develop consumer protection features for the 545 residential sustainable energy program; (ii) develop procedures for working with contractors and 546 installers of residential energy improvements for the purposes of facilitating residential energy 547 improvements; (iii) work with the agency to enable efficient and cost-effective financing 548 mechanisms for the residential sustainable energy program; (iv) provide information as requested 549 by the agency regarding the expected financing costs for residential PACE projects; and (v)550 provide ongoing data and reporting to the agency and the department. The agency may: (A) serve 551 as an aggregating entity to secure state or private third-party financing for residential energy 552 improvements pursuant to this chapter; and (B) use the services of one or more private, public or 553 quasi-public third-party administrators to administer, provide support or obtain financing for 554 residential PACE projects under the residential sustainable energy program.

(d) If the owner of a benefitted property requests financing from the agency for
residential energy improvements for a residential PACE project under this section, the agency or
its designated program administrator shall:

(i) evaluate the project for compliance with the technical and financial underwriting
guidelines established for the residential sustainable energy program in sections (m) and (n);

(ii) impose requirements and conditions on the financing to ensure timely repayment
including, but not limited to, procedures for placing a lien on the benefitted property as security
for the payment of the betterment assessment; and

(iii) upon approval of financing, require the participating municipality to levy a betterment assessment in a manner consistent with this section and with chapter 80, as such provisions may be applicable and consistent with this section, on the benefitted property in a principal amount sufficient to pay the costs of the residential energy improvements and any associated costs, including the costs and fees of the program administrator, the agency, the department and the costs of the participating municipality.

569 (e)(1) The agency shall enter into a financing and assessment agreement with the owner 570 of a benefitted property. The agency may raise funds to supply the financing under the agreement 571 by issuing PACE bonds or from other financing sources, including by encouraging third-party 572 capital providers to participate directly or indirectly in the program. Upon execution of the 573 agreement and immediately prior to making the funds, which may constitute all or a portion of 574 the proceeds from the issuance of the PACE bonds or other source of financing, available to the 575 property owner for the residential PACE project under the agreement, the agency or its 576 designated program administrator shall notify the participating municipality and the participating 577 municipality or its designee shall record the betterment assessment and lien on the benefitted 578 property.

(2) The agency or its designated program administrator shall disclose, in written format,
to the property owner the costs associated with participating in the residential sustainable energy
program established by this section, in accordance with the guidelines established in sections (m)

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and (n), including the effective interest rate of the betterment assessment, any fees charged by the agency or the program administrator to administer the program and any fees charged by third parties such as originators or other intermediaries, and the estimated payment schedule. The property owner shall acknowledge receipt of the disclosure.

586 (f) Prior to the betterment assessment being levied, the program administrator shall set 587 the term and amortization schedule, the rate of interest for the repayment of the betterment 588 assessment amount and any required closing fees and costs, and disclose this information to the 589 participating property owner in written format. The term of each financing shall conform with 590 the guidelines established in sections (m) and (n). The assessment contract shall specify that the 591 interest rate shall be fixed, and that payments of principal and interest shall be in roughly equal 592 installments and principal payments shall be fully amortized over the term of the financing. The 593 property owner shall acknowledge receipt of the disclosure.

594 (g) At the time that the residential energy improvement is completed, the participating 595 municipality where the benefitted property is located or the program administrator duly approved 596 by the participating municipality or the agency shall notice and record the agreement between the 597 agency and the property owner as a betterment pursuant to chapter 80 and place a lien on the 598 property according to the terms of the agreement between the property owner and the agency, as 599 security for the PACE bonds or other financing from the agency or other third-party capital 600 providers; provided, however, that the betterment may apply to a single parcel of benefitted 601 property and as a lien against the residential property benefitted.

(h) Notwithstanding section 12 of chapter 80, betterment assessments levied pursuant tothis section and the interest, fees and any penalties on the betterment assessments shall constitute

604 an assessment and a lien against the benefitted property until they are paid and shall continue 605 notwithstanding any alienation or conveyance of the benefitted property by one property owner 606 to a new property owner, including by foreclosure of the right of redemption by a mortgagee, by 607 a municipality for unpaid taxes or otherwise. A new property owner shall take title to the 608 benefitted property subject to the betterment assessment and lien. Only those past due balances 609 of any betterment assessment under this Section shall be considered delinquent and subject to 610 foreclosure. All payments on the betterment assessment that become due after the date of transfer 611 by foreclosure or otherwise shall continue to be secured by a lien on the benefitted property and 612 shall be the responsibility of the transferee. Betterment assessments payable pursuant to this 613 Section shall constitute a covenant that runs with the premises, and that portion of the betterment 614 assessment that is not yet due shall not be accelerated or eliminated by foreclosure of any lien, 615 including a property tax lien. The assessment and lien shall be treated, levied and collected in 616 the same manner as the property taxes of the participating municipality on real property 617 including, in the event of default or delinquency, the manner in which the participating 618 municipality collects any penalties and fees and exercises remedies. Each lien may be continued, 619 recorded and released upon repayment in full of the betterment assessment in the manner 620 provided for property tax liens.

(i) Notwithstanding the provisions of section 12 of chapter 80, a lien on a benefitted
property established pursuant to this section shall be: (i) subordinate to any existing lien against
the benefitted property in existence and properly recorded on the date on which the betterment
assessment is recorded; (ii) subordinate to any subsequent purchase money mortgage or first
deed of trust recorded after the date on which the betterment assessment is recorded, provided,
that the purchase money mortgage or first deed of trust was executed with or obtained from a

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627 mortgage lender licensed to do business in the Commonwealth; and (iii) except as otherwise 628 agreed by the parties to the assessment agreement, superior to any other subsequent lien against 629 the property recorded after the date on which the betterment assessment is recorded. The agency 630 or participating municipality may choose to implement clauses (i) or (ii) above, through contract 631 if convenient and/or necessary; however, at no time shall a betterment lien established pursuant 632 to this chapter be deemed by any court or agency of the Commonwealth to not be subordinate in 633 accordance with the above. This subsection shall not affect the status or priority of any other 634 municipal or statutory lien.

635 (i) The agency may sell or assign any betterment assessment receivables and any and all 636 liens filed by the tax collector as provided in an assessment contract executed pursuant to this 637 chapter. Notwithstanding any general or special law to the contrary, the provisions of Sections 638 2A and 2C of chapter 60 and any regulations promulgated pursuant thereto shall not apply to the 639 assignment or sale of betterment assessment receivables or liens securing such receivables 640 pursuant hereto. The agency and the assignee shall negotiate the consideration received for such 641 assignment. The assignee shall have the same powers and rights at law or in equity as the 642 agency, the participating municipality, and the participating municipality's tax collector would 643 have had with regard to the precedence and priority of the lien, the accrual of interest, and the 644 fees and expenses of collection. The assignee shall have the same rights to enforce the liens as 645 any private party holding a lien on real property including, but not limited to, foreclosure. The 646 assignee shall recover costs and reasonable attorney's fees incurred as a result of any foreclosure 647 action or other legal proceeding brought pursuant to this section and directly related to the 648 proceeding from those having title to the property subject to the proceedings. Such costs and fees 649 may be collected by the assignee at any time after the assignee has made a demand for payment.

(k) The program administrator shall report to the agency and the department on the
activities of the residential sustainable energy program in accordance with the guidelines
established in (m) and (n). Activities of the residential sustainable energy program shall be
reviewed on a periodic basis by the agency and the department as determined by the guidelines
developed in sections (m) and (n).

(1) The agency shall establish rules and guidelines for the residential sustainable energy
program governing eligibility and underwriting guidelines, consumer protection features
including but not limited to contractor participation and standards, underwriting, disclosures and
marketing practices, and criteria to evaluate the applications for PACE bonds under this section.

(m) The agency shall conduct periodic reviews of compliance with these rules andguidelines.

(n) The department shall develop rules and guidelines for the residential sustainable
energy program governing project technical requirements and product eligibility, PACE project
components, consumer protection features including but not limited to contractor participation
and standards, and reporting requirements including the coordination with other clean energy
programs in the Commonwealth. The department shall conduct periodic reviews of compliance
with these rules and guidelines.

667 (o) Betterment assessments established pursuant hereto shall not be subject to Sections
668 20A or 21C of Chapter 59 of the General Laws.

(p) Notwithstanding any general or special law to the contrary, the provisions of any
other general or special law, regulation, ordinance or bylaw providing for the advertising,
bidding awarding of contracts or consultation for the design, construction or improvement of

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672 property shall not apply to the procurement of residential PACE projects financed pursuant673 hereto.

674 SECTION 5. Section 6 of chapter 25A of the General Laws, as appearing in the 2010
675 Official Edition, is hereby amended by striking subsection 12 and inserting in place thereof the
676 following subsections:

(12) intervene and advocate on behalf of small commercial and industrial users before the
department of public utilities in any dispute between such businesses and generation or
distribution companies, as defined pursuant to section 1 of chapter 164; and

(13) plan, develop, oversee and operate the commercial sustainable energy program, with the Massachusetts Development Finance Agency, in accordance with the provisions of chapter 23M. In accordance with this section, the Department shall approve each commercial PACE project prior to the issuance of a PACE bond under chapter 23M and in so doing shall consider whether the energy cost savings of the commercial energy improvements over the useful life of such improvements exceed the costs of such improvements.

686 SECTION 6. Notwithstanding any general or special law, rule, regulation or procedure to 687 the contrary, there is hereby created a small hydro and anaerobic digestion tariff program for 688 small hydropower facilities and anaerobic digestion net metering facilities in the commonwealth. 689 For the purposes of this section the following terms shall mean "Small hydropower facility" shall 690 mean a facility in the commonwealth with a Federal Energy Regulatory Comission-rated 691 capacity of 2 megawatts or less, using water to generate electricity that is connected to a 692 distribution company and an "anaerobic digestion net metering facility" shall mean a Class I, 693 Class II, and Class III anaerobic digestion net metering facility that has begun commercial

694 operation on and after January 1, 2015. The "small hydro and anaerobic digestion tariff" shall 695 mean the default service kilowatt-hour rate of the local distribution company as defined in 696 section 1 of chapter 164 of the General Laws that receives electricity from a small hydropower 697 facility or an anaerobic digestion net metering facility. An electric distribution company shall 698 pay a small hydropower facility or an anaerobic digestion net metering facility monthly for 699 electricity it received from such a facility based on the kilowatt hours of electricity the 700 distribution company received from the facility multiplied by the small hydro and anaerobic 701 digestion tariff. A participating small hydropower facility and anaerobic digestion shall notify a 702 distribution company that it intends to deliver electricity pursuant to the small hydro and 703 anaerobic digestion tariff program and shall comply with the distribution company's applicable 704 reporting and interconnection requirements; provided, however that no more than 50 megawatts 705 of small hydropower and anaerobic digestion aggregate capacity state wide shall be permitted to 706 participate in the small hydro and anaerobic digestion tariff.

SECTION 7. The department of public utilities shall open an investigation to establish specific criteria for identifying the environmental impact of gas leaks which have been classified as Grade 3 pursuant to section 144 of chapter 164 of the General Laws, and to establish a 5-year plan to repair such leaks. The department shall promulgate rules regarding the timeline and acceptable methods for remediation and repair of any Grade 3 leak which is determined to have significant environmental impact.

SECTION 8. Notwithstanding any general or special law to the contrary, the department of energy resources may establish a carbon reduction research center. The carbon reduction research center shall be established to advance the Commonwealth's carbon reduction goals. The carbon reduction research center may include, but not be limited to, any of the following 717 research initiatives: fuel cells; energy storage technology; residential property assessed clean 718 energy programming; commercial property assessed clean energy programming; increased 719 efficiency of existing small domestic energy production; and increased efficiency of and cleaner 720 use of traditional fossil based fuels. The carbon reduction research center shall be located upon a 721 campus within the University of Massachusetts, as defined by section 1, of chapter 75 of the 722 general laws, that meets the following criteria: (1) located within a gateway city; (2) located near 723 the Emerging Technologies and Innovation Center; and (3) has access to academic resources 724 necessary for civil, environmental, and nuclear engineering.